FGF Entrepreneurship-Research Monographien
Band 5

IntEnt92

Internationalizing Entrepreneurship Education and Training

Proceedings of the IntEnt92 Conference
Dortmund, June 23-26, 1992

edited by
Heinz Klandt
Detlef Müller-Böling

Förderkreis Gründungs-Forschung
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Preface and acknowledgements

Economic activities can't be kept back by border and in this way we have to find international solutions and answers. That s a difference to some former industrial waves. And that's the reason why we organized IntEnt as an international worldwide conference.

Borders and walls are falling overnight, many former borders will be reestablished within a matter of days (if we look to Czechoslowakia or Jugoslavia or perhaps to the former Sowjetunion in these days) These are some of the most important events we have recently witnessed in Eastern Europe. But in the Western World the situation is different Here borders and walls only exist - if they do at all - in the minds of the people We believe and hope that this conference-track is going to help to remove some of these imaginary boundaries for the whole world

Our world will have to be considered as what it is in reality: As an entity - as an interdependent economic, ecological and cultural area of many nations. And thus it is logical and consequent to discuss during this conference the actual questions of entrepreneurship with qualified delegates from all over the world

We are convinced that within the coming decades the development of our world will be marked by exceptional progress in many quantitative and qualitative dimensions Interdependent spin-off effects of these changes will reach far into all spheres of living. The world of the future, for example in thirty years, in which we and our children shall live, has not yet reached a concrete shape This is still a vision at the most. But in order to bring this vision into line with reality, we'll have to combine the scientific, technical and economic findings with the vision and bind these together.

The results of scientific work as part of a policy have to be implemented mainly by means of private investment We are convinced, that we get a new wave of expansion in *business start-up* in the next time, not only by the German unification, also in connection with the European development: The effects of 1992 on the internal European market, together with the opening up of markets in Eastern Europe

In recent years the University of Dortmund has followed the patterns of the structural and economic changes in our region. The University of Dortmund was founded in 1968, and at present has 22,000 students, 2,800 of whom are students of business-administration, economics and social sciences - the largest single group Other subjects with large numbers of students are information science, mechanical engineering, electronics, and natural science.

Since 1985 our university has experienced the highest growth rate among the fifteen universities of North Rhine-Westphalia, one of the German federal states This applies to new students as well as to the total university attendance. In both cases we are by far the number one This is quite a success but it also implies great responsibilities towards our students. Therefore this conference will play an important role in our academic life, as we shall integrate the results of the various speeches and discussions into the training and education of our students This is an excellent investment in the future, since qualified and well trained students are always requested in several parts of the economic institutions.

In spite of the importance, business start-ups represent for the economical development only a few institutions in Germany as well as in Europe are engaged in detail with the influence of the founder's character and training on the success of the enterprise The lack of sufficient entrepreneurial training, especially concerning German universities, should be ameliorated by corresponding programmes, as far as possible being supported by a unified curriculum and a consensus of the essential contents Only a small number of universities have got as far as initiating research or offering courses on this topic.

Nor is there as yet a working chair of start-up management or entrepreneurship anywhere to be found at german universities. German management teaching is still structured according to functions (procurement, production, marketing, controlling and so on), or institutions (industry, trade, banking, insurance and so on) Courses specially designed to take account of developmental aspects (founding, mature phase, liquidation) are also lacking.

At the University of Dortmund we intend therefore to combat these deficits by

- initiating a chair in entrepreneurship,
- creating a guest professorship in entrepreneurship for lecturers from abroad,
- building up an extra-mural entrepreneurial education centre.

Our basic idea is to set entrepreneurial education, through teaching and research, on a firm footing within the university. In addition, entrepreneurship education should be vigorously pursued outside the university on a commercial basis for a wide variety of target groups

We are introducing into the faculty of business administration a further specialization in the form of entrepreneurship So far no other german university has such a branch of managerial training The lectures in this new area will be open also to students of engineering and natural science. To this end the university will inaugurate a professorial chair with assistant lecturers and administrative personnel

Over and above the Stadtsparkasse Dortmund, a bank institute together with the Deutsche Sparkassen- und Giroverband, a head bank organisation, will be providing the financial backing for a guest professorship, the so-called 'Schumpeter-Chair' which is intended to be filled by guest teachers from abroad. They will have the opportunity of doing research and teaching in Dortmund for a period of three months to one year

In parallel to the entrepreneurial training about to begin within the university, we intend to set up something similar on an extra-mural basis Since the mid-80s there has been a spate of new firms founded in Dortmund In the technology park around the university numerous firms have gradually settled Altogether they have 3,000 employees.

The Entrepreneurial Education Centre, we plan, will offer courses for the following target groups:

- prospective self-employers
- owners/managers of young businesses
- owners/managers of growing firms
- trainers working in industry or in chambers of commerce
- venture managers.

It still remains to work out curricula geared to each target group In doing this particular attention must be paid to

- educational background (engineering/versus business) and
- professional experience

and the content varied accordingly.

Entrepreneurship education is an idea whose time has come in Europe! If we are indeed about to witness another wave of new firms in Europe we will certainly need it. For besides the political and economic conditions, if a newly business start-up is to prove successful the entrepreneur is of crucial importance He must be

- innovative by nature
- capable of managing the economic and organizational structure of the enterprise and
- expert in his field of business.

The training system we have had up to now has only fulfilled the third requirement - turning out excellent engineers, scientists and information experts. We still train managers largely on the model of the executive in the large established company. Innovative and entrepreneurial aspects are still left completely out of account. This state of affairs dare not persist

Our responsibility to society, to every person trying to set up in business, with all the risks that involves for themselves and their families, demands of us that we provide such people with the best possible qualifications for the job.

Our special thanks go to all contributors of the book especially to stay in the time schedule with their feedbacks We also wish to thank Birgit Sieweke, Dirk Jakobs, Olaf Kurpiers and Hans Urbaniak for their untiring assistence when supporting the extensive layout process of the book with their strong personal engagement

Dortmund, June 1993

Heinz Klandt

Detlef Müller-Böling

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Part A

America

01 Entrepreneurship education: A research agenda

Robert H. Brockhaus

Introduction

Many times I am asked, 'Can you teach someone to be an entrepreneur?' That is a very good question. I usually ask in return, 'Can someone be taught to be an artist?' The response back to me is 'Well yes, they can be taught about colour and about composition And yes, their artistic skills can be improved ' Then I ask, 'But can they be made into another Van Gogh, or Rembrandt, or Picasso?' The answer is 'No, that takes unique skills and creativity.' The same answer is true for teaching entrepreneurship We, as entrepreneurship educators, can teach some skills We can teach about marketing, and about financing a small business, but we can not guarantee that anyone will be a successful entrepreneur. Entrepreneurship education is as important, in my mind, to people who want to be entrepreneurs as an artist's education is to someone who wants to be an artist.

Despite this importance, few have studied entrepreneurship education from a research perspective. Even fewer have done empirical research and very few have compared a group that is receiving the entrepreneurship education to another similarly matched group that is not receiving the education

Who are entrepreneurship students?

Some will be 'current entrepreneurs'-people who currently own their business. There will be those who have started their own business, others who have bought an existing business, still others will have bought a franchise business such as a McDonald's and there are those who have inherited their business from their parents. A fifth group of 'entrepreneurs,' if I can use that term somewhat generically, are people who work for large corporations, but have decisions that they can make in an entrepreneurial fashion. 'Intrapreneurs' are such people who have the authority to be more innovative and creative than the corporation normally would allow.

You may also look at the current entrepreneurs in other ways. For example, is the business a high growth business or a low growth business? Does it require highly skilled people with degrees or are very limited skills all that are needed? What about the level of education? Do these entrepreneurs have a high school diploma? Can they even read? Do they have advanced degrees? What is their education in business? They may have an advanced degree in engineering, but absolutely no formal training in business.

Today it becomes even more complex as we talk about Eastern Europe, the former Soviet Union, and other places around the world that are not as fully developed in the capitalistic system as the Western world is. All of these could be students, sometimes mixed together and sometimes separate and distinct.

I have just described people who currently are entrepreneurs, but we could also have people who are aspiring to be entrepreneurs. They could have very dissimilar backgrounds and intentions for their future businesses. Other students could include managers of intrapreneurs. Some students could be trying to learn more about what their father or mother or brother or sister or spouse are doing in business so they could better appreciate the problems. Attendees may include bankers, insurance agents, and government officials who want to learn more about entrepreneurship in order to provide assistance. There also could be some students who have none of these needs, but simply want to get that 'entrepreneurial spirit' to be more creative and innovative and risk taking in their own jobs.

What are the needs of the students?

Some desire knowledge about the entrepreneurial process. They want to learn more about starting a business and different legal forms of ownership. Others want to learn more about management; they want to learn something about accounting or marketing or personnel management. Still others may wish to develop a skill for a business. In South Africa, I was very intrigued to find that entrepreneurship training was actually teaching women to sew so that they could make garments that they could then sell. Many of us would not think of providing that kind of training, but it is part of entrepreneurship. Programs to be more creative, to be more innovative, to learn how to develop ideas more fully might be another need of a student group.

Who provides this education?

It may be a permanent faculty member or an actual entrepreneur who teaches at the university on a part time basis. It could be a banker, an accountant, an attorney, or someone else who is skilled in a particular area of expertise who conducts programs about that particular area. It may not even be a live person. The instructor may be videoed for the students to watch on television. Or it could be team taught, where there are a variety of people with different resources and abilities that come in and collectively teach the class Perhaps, there is no instructor Students could read the workbooks and send in assignments and have those evaluated and sent back.

How does this all occur?

Entrepreneurship is often taught in a university for credit course at the graduate or undergraduate level. Or perhaps, it is a continuing education course that is not for credit but is open to the general community. It could be a course put on outside of any educational institution but is sponsored by a bank, an accounting firm, or a governmental agency.

How long is the program?

In a university, a student might major in entrepreneurship and spend three to four years studying entrepreneurship. In an academic area of emphasis, the student may just have a few courses in entrepreneurship. It could be an elective course that the person takes for one semester. Sometimes it is a seminar that runs from one day, or part of a day, to several weeks and may be not associated with the university. Maybe the education is provided by simply reading books or journal articles that deal with entrepreneurship

Another aspect of the format is whether it is passive or whether it is experiential Passive would be reading a book, listening to a lecture, watching a video, etc A more experiential format would be responding to written cases. Some students learn by actually working with a small business or by providing consulting services The students involved in experiential learning not only help the business, but they also learn of problems and of different types of solutions. In a business simulation exercise, students compete with each other's 'companies' through the use of computer simulation They make decisions for the business on marketing, production, pricing, etc Sometimes the students write business plans for businesses which they wish to start. They may present the plans to a banker for review. In some cases, the students are actually required to start a business

What are the outcomes?

The last, and perhaps the most important, part of entrepreneurship education is the outcome. What are the desired outcomes and how do we as educators measure them? On the one end are rather immediate teacher evaluations, such as, what do the students think of the teacher? What do they think of the content of the course? Was it an interesting, challenging, and useful format? Feedback in the more traditional form of examination is where educators can see how much knowledge or skill that the students are able to apply. These are immediate feedbacks

What about short term? Short term feedbacks might be the level of student enrolment in the entrepreneurship classes. Is the enrolment going up or is the enrolment going down? Another might be requests for additional courses. On an intermediate basis, what are the intentions of the students to act Are they seeking out information after the course that will help them start a business? Are they going to other seminars, reading additional material, etcetera?

On a longer term basis for evaluation of one to five years, one of the outcomes would be the number of start ups. How many former students start businesses? How many bought businesses? How many still have employee positions but are preparing themselves to start a business. If we wait five to ten years, the outcomes would be the number of start ups, the survival rate, the reputation of the businesses, the growth level in terms of the employees, in terms of sales, profit, etc How creative are they in providing goods and services?

Ten years or more after the course, questions of personal satisfaction are appropriate How satisfied are the entrepreneurs with their careers? Does this career make sense to them? Are they pleased they became entrepreneurs? Did they or their business contribute to society and the economy? Have they brought members of their family into the second generation of the business?

What is needed in entrepreneurship education research?

The research on entrepreneurship education tends to be on teacher, content, and format evaluations; the level of knowledge obtained by the students; the student enrolment, demand for future courses; and comparison of approaches of one semester to another These studies add to our knowledge especially if there are a number of ones done in a similar fashion, but there still are many research needs that exist.

The primary need is for hypothesis testing research. There are some challenges I would like to offer to you and myself. First, I think we need to develop research methodology for measuring entrepreneurial education. There are very few research methodologies that are currently being used. I think that the research methodology should consider the student, the student needs, the type of the instructor, the format, and different outcomes over points in time. Case studies that are linked together to test hypotheses is good Research surveys need to have high validity and reliability. We should establish control groups so that we can compare those that receive the education or a certain aspect of it against those who did not. An attempt must be made to control all extraneous variables. The studies should contain at least pre and post measurements. They should be longitudinal, continued over time to see how long those effects last and to measure other effects that do not come into consideration until many years after the training

We also should examine what is taught to the audiences Do they need management education? Do they need information on entrepreneurial processes? Do they need technical skills? Do they need to be more highly motivated? And if so, at what point in the life cycle of the business? Is the business just starting up, perhaps even preventure, in the early stages of growth or is the business more mature?

The research should also consider who does the teaching Research should attempt to evaluate which ones are the most effective in which situation Perhaps those who have no formal education in entrepreneurship might be better teachers than those with advanced degrees. The impact needs to be measured of courses in entrepreneurship outside of the business school such as law, engineering, medicine, or non-university settings We should examine whether a common body of entrepreneurial knowledge exists And if it does, should all parties be exposed to that?

What is the learning style perspective of people who are interested in entrepreneurship? The format in which they learn most effectively may be different than that of typical students We know that entrepreneurs tend to be autonomous, self-reliant, have self-determination, tend to be flexible as well as unpredictable, and have high energy levels.

Summary

There are many challenges for us as entrepreneurship educators if we truly want to do the best job that we can in educating entrepreneurs. Hopefully, we could improve what we do if we took the effort to conduct entrepreneurship education research Entrepreneurship is of more interest today than probably at any other time And yet, there is very little known about entrepreneurship education from a research perspective. There are theories of education and learning that other fields have developed for us that we can utilize in our own efforts We must combine the knowledge that we have about entrepreneurship with the learning theories in education. With the need for improved entrepreneurship education to meet the high demands of entrepreneurship education around the world, this is an exciting time for all of us. The opportunity to focus our attention on entrepreneurship education must not be missed

02 The state of entrepreneurship education

Karl H. Vesper

Introduction

The purpose of this study was to update an earlier volume on entrepreneurship courses dated 1985. Since that time the number of universities with entrepreneurship courses identified has grown from around 250 to around 370, an increase of 48 per cent The number and variety of courses within schools and of relevant books available have grown New lessons about what works well versus not so well in teaching entrepreneurship have been learned. Highlights of the survey findings will be given in this introduction after a brief description of how the information was compiled.

Fuller results of the survey and descriptions of the courses and programs as well as listings of all the schools will appear in a forthcoming volume on Entrepreneurship Education which is being published by the Entrepreneurship Program at the University of California, Los Angeles Contributors to the volume will automatically receive copies. Others can order them The phone number is (310) 825 2985.

Method

First, deans were polled at 750 business schools and 226 engineering schools. Then follow-up contacts were made with professors who had been identified by deans as most knowledgeable about practices and plans concerning entrepreneurship education in their schools. Several rounds of mailings plus numerous phone calls were used to seek out and rake in the information presented here.

Difficulties in definition surround the topics of entrepreneurship and small business Entrepreneurship here was taken to mean business entry, whether by start-up or acquisition and whether independently or within an established organization Since start-ups invariably begin small there is an inevitable connection between entrepreneurship, as defined here, and small business However, there is a difference between the process of entry into independent business, which is a transient event, and management of an ongoing firm, which is a continuous rather than transient, albeit evolving, activity.

But the line between start-up and ongoing is not sharp, and drawing it requires judgemental choices Inclusion of small business management courses would roughly double the population covered in this study and that would make it both too large to handle with the available resources and much more cumbersome for readers. So choices of exclusion had to be made

These were sometimes difficult. Some courses called 'small business management' are included because their content appeared to concentrate on entry Others with the word 'entrepreneurship' in the title were excluded because their content seemed largely focused on management of going concerns, though typically after some treatment of entry.

Almost all small business management texts and courses include start-up of small firms as one subtopic. Moreover, those schools which offer programs, as opposed to only one or two courses in entrepreneurship, invariably include at least one small business management course as part of those programs, along with courses on various aspects of business entry To depict programs more fully I chose to include small business management courses when they were parts of programs that concentrated on entry Those not part of programs were excluded. Undoubtedly some errors were made. For them I apologize and would welcome suggestions about how improve decisions about inclusion in the future

General findings

Descriptions were obtained and examined of 445 courses offered at 173 four year colleges and universities both inside and outside the United States In addition, another 196 schools indicated on one round or another of the survey that they offered at least one course focused primarily upon business entry. Total growth in entrepreneurship courses over time, depicted in the graph of figure 2.1 following, appears to have continued unabated since 1967, two years before the first survey in this series began

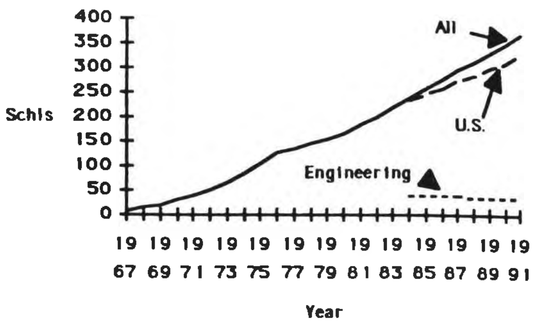

Figure 2 1 Number of schools with entrepreneurship courses versus time

But the balance among nations has shifted because as the growth rate in the U.S. flattened that of other countries rose Of the total, approximately 85 per cent were offered at schools in the U S. and another 7 per cent were at schools in Canada Among the descriptions, however, are also courses offered in Australia (3 schools), Colombia, Finland, France, Germany, Ireland, Korea (3), Norway, Pakistan, Spain (2), Sweden (2), and the UK (3). Among the schools that appear to have courses but did not describe them still other countries are represented, and doubtless there are still other course-offering schools that were not unearthed at all. In the future it seems certain that entrepreneurship courses will crop up in countries discarding communist regimes, so that the future will see considerable further extension of this growth curve in countries abroad

The total of 369 universities includes at least three in liberal arts colleges (Macalester, Mercer and St. Thomas). There are 32 universities with entrepreneurship courses in engineering schools and 17 with such courses in both business and engineering schools. Mechanical engineering appears to be the most common non-business field, followed by industrial engineering Entrepreneurship courses were also found in one department of home economics (Cal State, Chico) and one school of nursing (North-eastern). Since these last two were discovered largely by chance, there are probably other schools outside business and engineering which also offer entrepreneurship not discovered in the survey.

Courses at both engineering and business schools in four universities, Carnegie-Mellon, Michigan, North-western and Stanford, are included among the descriptions In contrast to the growth trend among business schools, that in engineering schools seems to have been the opposite. While the number of business schools with such courses rose from 210 to 351 since 1985, an increase of 67 per cent, the number identified in engineering schools fell 18 per cent from 39 to 32. Only 13 (33 per cent) of the 39 engineering schools listed in 1985 showed up in the 32 found in 1991, whereas 152 (72 per cent) of the 210 business schools listed in 1985 showed up in the 351 of 1991.

Informal inquiry into how this happened seemed to suggest that a few engineering instructors caught enthusiasm for entrepreneurship when the trend of increased interest was new, but in time they found that pursuit of that subject in their schools was not encouraged Some consequently dropped that activity Others continued it until they retired but then it was not picked up by new faculty. No change in this pattern has yet seemed to appear.

The split between undergraduate and graduate offerings in entrepreneurship appears skewed toward the former, with 37.6 per cent offering undergraduate entrepreneurship courses only, 23.7 per cent offering graduate only and the remaining 38.7 per cent offering the courses at both undergraduate level It appears that some schools combine undergraduates and graduate students in the same classes, but not always successfully From the report of one school, the University of Sherbrooke, it appears that a substantially higher fraction of MBA course alumni end up venturing than undergraduate course alumni (9.3 per cent versus 2.6 per cent).

Faculty awareness of new companies spawned directly from universities by students, alumni, faculty or research staff was explored in the survey by asking faculty how many such spin-offs they could identify They typically said from five to twenty in total Most numerous were service start-ups by students Second most common were service start-ups by alumni. Then came service start-ups by faculty and manufacturing start-ups by alumni A few respondents said they knew of very large numbers The Wichita State reply indicated over 700 student start-ups and that of Los Angeles State over 700 alumni start-ups Closest to those were the universities of Western Ontario and Concordia in Canada, which gave estimates for those categories of 40 to 100 start-ups Sherbrooke reported that from over 300 students came 135 projects and 26 start-ups

Participation of faculty themselves in start-ups varied with type of school. Of those at engineering schools 24 6 per cent said they had started a business and another 13.1 per cent said they planned to start one In business schools 47 5 per cent said they had started a business and another 20.4 per cent said they planned to start one Among faculty at both types of schools about 50 per cent said they felt the climate at their schools encouraged such activity and another 30 per cent or more felt the climate was at least neutral to it, while around 15 per cent indicated their schools discouraged it. Deans' responses concerning encouragement were divided in about the same proportions.

Entrepreneurship program schools

Schools which indicated that they offered four or more courses clustered in the area of entrepreneurship and allowed students to take concentrations, majors or degrees in the subject arbitrarily defined in this study as 'Program Schools'. In total there appear to be about 51 of these. Forty of those schools which contributed descriptions of their courses and programs are:

No of Courses	Schools
14	Wichita
13	Swinburne
12	Calgary, DePaul, St.Thomas, UCLA, Wharton
11	North-eastern
10	U of Southern Cal
9	Ball State
8	Babson, Baylor, James Madison, Maryland, Northeastern, Rensselaer
7	Boston Univertsity, Fairleigh Dickinson, Rice
6	Carnegie-Mellon GSIA, Dartmouth, Johns Hopkins, Lakehead,
5	Cal State Hayward, Case-Western, Harvard, Johnson & Wales, McGill, Rutgers, Arizona, Illinois UC, Limerick
4	ESADE, NYU, SMU, Manitoba, Texas Arlington, Wisconsin Oshkosh

Many of these programs also include other activities such as consulting outreach, extension courses, evening programs, speaker programs for the public, workshops, student entrepreneurship clubs, research activities and publications.

More detailed and periodically updated information about some of the entrepreneurship programs can be gained from newsletters they publish Schools with such newsletters include:

Carnegie-Mellon University
Case-Western University
Lyon, France
New York University (Stern)

University of California, Los Angeles (Anderson)
University of Pennsylvania (Wharton)
University of Southern California
Wichita State University

Course variety

The 'standard' entrepreneurship course includes venture plan writing, speakers, readings and cases. Among the courses described herein a total of 103 different books were named by respondents A most common second course to have is one on small business management, followed by further extension of venture planning and possibly corporate venturing Another fairly common type of course is venture financing. Only one school, however, (Rice) splits that topic into two separate courses, bank borrowing and venture capital.

Some departures from these norms include the following Most of the departures occur in program schools, but with some notable exceptions. It appears, for instance, that only one or two schools offer courses on the following topics:

Corporate Creativity.(Chalmers, Harvard)
Entrepreneurial Acquisitions (Rice)
Entrepreneurship and Economic Development (Ajou, Calgary)
Entrepreneurship for Arts and Science Students.(Cal Hayward, Wichita)
Entrepreneurship for Nurses.(North-eastern)
Entrepreneurship in Environment and Energy (Boston U)
Entrepreneurship under Business Policy label (So. Carolina)
Entrepreneurship under Managerial Economics label (So Miss.)
Governmental Entrepreneurship.(Helsinki)
Idea generation. (Bentley)
Internationalizing Ventures (Calgary)
Opportunity Identification.(Calgary)
Patents.(Chalmers)
Product Focus to exclusion of services. (Arizona)
Services Focus to exclusion of products (McGill)

It seemed surprising that relatively few courses on new venture marketing were uncovered in the survey. A program school with such a course was Calgary and a non-program school with one was Hawaii. But most schools in both categories were without them. Venture finance courses, for instance, were much more common though the reason did not seem apparent

Pedagogical variety

Within the courses there are also frequently repeated elements and interesting exceptions Common elements include use of cases, speakers, lectures, texts and particularly the writing of venture plans, both individual and team, often followed by judging panels including outside professionals Also widespread, thanks to the efforts of Wichita State, are student entrepreneurship clubs Less frequent but still common to a number of schools is the use of 'live' cases and videos of entrepreneurs featured in the cases

More exceptional elements, offered by only one or two schools, included the following:

All class ventures set in the same industry.(Dortmund)
Auctioning of student ideas (Georgia Southern)
Business plan contest.(Arizona, Babson)
Computer simulation.(Kennesaw State, Dortmund)
Creative hat contest.(SUNY Albany)
Entire class works on one research monograph (Macalester)
Entrepreneurs offer opportunity ideas to students.(Arizona State)
Entrepreneurs lead discussion of their own cases (Georgetown)
Fourteen students to a venture team.(College of Charleston)
Get rich quick books assigned (Georgia Southern)
Iconoclastic view of cases and business plans.(Carnegie-Mellon, Engrg.)
Incubator and class integrated (Rensselaer)
Mentors assigned to students.(Arizona)
Patent search required of students (Queens)
Physical prototyping required (Queens)
Psychological tests extensively used (SUNY Buffalo)
Risk analysis approach to entrepreneurship.(Massachusetts Amherst)
Series of assignments on entrepreneur interview.(Louisville)
Students work on tech. transfer of university ideas.(So Cal., Baltimore)
Time logs by students (Baylor, St. Michaels, Vermont)
Undergrads and grads combined in one course (Akron)
Videotaping venture negotiations. (Indiana Bloomington)

Exceptional curricular arrangements

Beyond conventional course types are still other arrangements. This study side-steps many by not covering primary and secondary schools, community colleges and vocational schools, among which considerable entrepreneurially-oriented teaching goes on. Extension courses and commercial programs for the public are also left out herein.

Some other unusual teaching activities within four year schools that are included, however, are the following:

Course of US school taught abroad (Baylor)
Entrepreneurship as an EMBA course.(Cal. Irvine, Illinois UC)
Entrepreneurship as capstone course.(New South Wales, SUNY Stonybrook)
Entrepreneurship injected into other courses (Edinburgh, Oregon)
Over 100 speakers per year (So. Cal.)
Sixteen credit lockstep program.(So. Cal.)
Local area TV teaching of entrepreneurship.(Laval)
Remote teaching of entrepreneurship (U of New England)
Teaching entrepreneurs to teach (Price-Babson)

Experimentation

Of the 173 schools describing their courses in response to the survey 102 (60 per cent) gave brief accounts of pedagogical experimentation. Of those 60 (59 per cent) told of things tried that had worked out The other 42 (41 per cent) told of things tried that had not worked out (Bigger risk takers?) as well as things that had. Criteria of success are not often explicitly stated, but sudden satisfaction seems most frequently implicit.

Existent (Rutgers), but especially rare seems to be systematic application of formal analysis to educational experimentation. Tracking of alumni outcomes is somewhat more widespread (Cleveland State, Marquette, Sherbrooke, Harvard, Lakehead, London) but far from universal and unfortunately not standardized so as to permit joint analysis A bibliography on entrepreneurship education appears at the end of the forthcoming volume and despite a fair amount of searching it includes only 37 entries

Other variety

Finally, here are still further examples suggesting the great variety of directions explorations in entrepreneurial studies have been taking

<u>High School Outreach</u>
Summer camp.(Wichita State)
University students mentor high school students.(So Cal.)
(Free enterprise evangelism does this too, but with a propaganda rather than educational emphasis)

<u>Recognition Activities</u>
Recognition of outstanding entrepreneurs (Babson, So. Cal., Wichita)
Young entrepreneur of the year.(Wichita)
Alumni of the year awards.(So. Cal.)
Unusual gifts for speakers.(Cincinnati)

<u>Facilities</u>
Dedicated entrepreneurship building.(Wichita State)
Student entrepreneurship resource centre (Limerick)

<u>Start-up Results</u>
Good count of alumni starts 200/135/26(Sherbrooke)
Six start-ups over $ 5 million (Cleveland State)

<u>Information Clearing House</u>
World-wide centre of student entrepreneurship clubs (Wichita State)

<u>Higher Level Degree Programs</u>
Masters degree in entrepreneurship.(Stirling, Swineburne)
Doctoral program in entrepreneurship.(Barcelona)

<u>Resources</u>
Dues paying advisory board (Brigham Young)
Funding Foundations Mentioned.(Kellogg, Price)
Increasing number of endowed chairs

<u>Periodic Research Conferences</u>
Babson (Annual)
St Louis (Annual)
Ohio State (Every five years)

Looking ahead

In summary, some things, such as the basic entrepreneurship course and the upward growth trend of the field seem to continue largely unchanged over time But others, such as the variety in courses and pedagogy continue to develop new facets, so that the total array of offerings and techniques is now much broader than it was in earlier surveys.

When this study will be updated and in what form is not certain But since the changes seem likely to continue, particularly as entrepreneurship education expands globally, an update should come about at some point To that end, any additions, corrections or suggestions will be welcome.

03 Toward an organization model for entrepreneurship education

Robert D. Hisrich

Introduction

Since 1980 there has been an ever increasing interest on the part of educational institutions, governments, and businesses in the area of entrepreneurship It is no wonder that this interest is occurring as entrepreneurs and the new enterprises they create have a significant impact on the employment and economic development of every economic area It is estimated in the United States that small businesses contribute 90 per cent of all new jobs and 70 per cent of all new products and services According to the U S Census, 97 per cent of all nonfarming businesses are small and these account for 50 per cent of all business employment. Eight out of ten manufacturing companies are small ones and these account for 25 per cent of the total employment in the manufacturing sector.

In 1991, 1.3 million new businesses were started in the United States - a nine per cent increase over the 1.2 million new businesses started in 1980 More than half of these new businesses were 'micro businesses' employing no more than two people Most of these businesses were financed by the entrepreneur (self) then family and friends then the formal risk capital market. Financing is a critical aspect of starting a new enterprise as it takes:

* $ 8,000 to start a home based business,
* $ 50,000 to start the same business in a prime office space;

* $ 200,000 to start a retail establishment such as a bakery, restaurant, or video store; and
* $ 1 million to start a small manufacturing company.

In spite of the high costs of start-up, the large number of new enterprises being created, and the importance of entrepreneurship and new venture creation in the well being of a country, it is estimated that nearly two out of three new businesses fail within the first five years of operation Yet, little has been written on the role of one of the primary factors in supporting successful start ups - the educational institutions Even though academic institutions and their programs have significant impact on the entrepreneurial experience and careers of degree and non degree 'students' and the new venture creation process, little attempt has been made to evaluate various institutional frameworks and to proffer an appropriate organizational model which can be culturized to fit for any educational institutional environment; which is the purpose of this paper.

Research background

While the preparation and cultivation of attitudes and attributes involved in entrepreneurship and enterprise creation should actually commence at the primary and secondary education levels where much individual growth and formation occurs, it is generally the third level - the college and university level - where most of the focus in the entrepreneurial area has occurred even though the effort at this stage may be a mere rescue attempt and one that in many instances is too late. While institutions of higher education should address methods of developing entrepreneurial studies in the formal curriculum, having entrepreneurial events be a part of the extra curricular activities of college life, and stimulating entrepreneurial activities in the leisure and vacation periods of the academic year, even these activities can be problematical Many individuals both within and external to the university feel that entrepreneurship and enterprise creation is an area that is not consistent with the main purpose and focus of the university institution. This view is consistent with the historical view of higher level education - knowledge should be pursued for its own sake and value and the application of that knowledge should be an independent event largely occurring outside the university structure. Programs and areas of study which appear to have too many pragmatic dimensions are often not considered appropriate in an academic environment This has caused professional schools, particularly schools of business and management, to have difficulty in obtaining academic credibility and respectability in some institutional environments. In some institutions today, the recognition is parsimonious.

If the schools of management and business themselves have a problem, consider how big the problem is for the field of entrepreneurship, a field that as yet has no theoretical constructs and a very short life span Entrepreneurship as a field of study not only has problems of appropriateness and credibility within the university community as a whole but within many of the schools of business and management themselves It is no wonder that prior to 1973, the entire area of small business and entrepreneurship was largely absent from university curriculum in the United States The focus of the business and management schools in the country was the large scale enterprise

This focus changed in some schools in 1973 when the U S Small Business Administration began funding colleges and universities to assist small businesses and start-ups through student research and report preparation This Small Business Institute (SBI) Program has grown until today some 450 schools are involved in the program doing between 7,000 - 8,000 cases on individual businesses each year This funding enabled higher education institutions to develop courses and be involved in the small business area when they otherwise would probably not have been engaged in this activity. Even though the establishment of the SBI led to courses and student projects and eventually to an annual meeting of the SBI Directors Association, it was not until the 1980's that the topics of entrepreneurship, new venture creation, and small business came into the limelight. Since that time numerous articles have been written in the field which have tended to concentrate in such areas as: the characteristics of entrepreneurs, new venture funding, and intrapreneurship Limited research has been done in the area of entrepreneurship education. Some of the more definitive studies in this area are indicated in table 3.1 and are discussed below

The first study evaluated student behaviour after exposure to entrepreneurial education in a classroom setting Students enroled in a medium-sized midwestern, urban university class titled 'Your Future in Business' designed to encourage and prepare students for entrepreneurship were the subjects. Data was collected through mail questionnaires and telephone surveys of all students that were enroled in the course from 1978-82. The data collected evaluated the type of students attracted to the course, their career choices following enrolment, the impact on those who subsequently began new ventures, and the contribution of the venture to the economy. Of the 1,855 students enroled, 129 respondents started new ventures subsequent to course enrolment. 76 per cent of these respondents rated the course as having a significant effect on their venture start-up decisions. Although the resulting statistics do not demonstrate a casual relationship, the data does indicate that a relationship exists between entrepreneurial education and creation of new ventures (Clark, Davis and Hornish, 1984).

In another study, measures of preferences, attitudes and intentions were assessed using a large sample of business students. Student profile characteristics and psychological measure of independence were also obtained in an attempt to determine entrepreneurship intentions prior to an actual decision to start up A total of 1,998 undergraduate and graduate business students at two different universities, one public and one private, comprised the sample. A questionnaire was developed, pretested and then randomly distributed by professors or a graduate assistant to classes at the two universities Guidelines for administration were provided and an almost equal number of questionnaires were completed from each university. While a very high level of intention to start a new business was found (52 per cent overall), an even higher level of interest in course work was found (80 per cent) Analysis revealed statistically significant relationships between these high levels reported and student characteristics such as full time students, day students, males, working for a small employer, and being a lower classman Entrepreneurship intentions were also positively related to a measure of independence and perceptions of entrepreneurs (Hills and Welsch, 1986).

A new venture development office was established at the University of Calgary to solicit, evaluate and allocate ventures One hundred fifteen requests for venture assistance were received from local entrepreneurs In their request, applicants had to provide substantial information on their ventures and be willing to trust graduate students working on their venture The experiment was extended to include a much larger number and more varied projects than originally planned due to the economically depressed nature of the Calgary area 89 projects were conducted for 63 ventures through 12 different courses. Also a seed-capital conference was held at the end of 1984 The projects completed were in such areas as: feasibility and product design, marketing research and strategy, new venture planning, and financial planning A follow up telephone study of 50 of the 63 client entrepreneurs was conducted one month after year end Each entrepreneur was asked to evaluate the program on each of the following dimensions:

- time saved or gained
- venture development knowledge gained
- significant new information and analysis added
- contacts gained
- money raised
- employee changes
- changes in strategy
- net benefits gained to date.

Table 3.1
Selected studies on entrepreneurship education (1980-92)

* Clark, Davis and Hornish (1984) - Relationship of education to new venture formation and survival.

* McMullan, Long and Graham (1986) - Economic benefits of entrepreneurial education

* Hills and Welsch (1986) - Student characteristics and approaches and popularity in entrepreneurial courses.

* Cooper and Dunkelberg (1987) - Relationship of education to entrepreneurs career choice, needs and benefits.

* Shuman, Seeger and Teebagy (1987) - Relationship at education to entrepreneurs career choice, needs and educational history.

* Hills (1988) - Entrepreneurship education (objectives, course content and programs

* Sexton and Bowman-Upton (1988) - Teaching approaches to entrepreneurship.

* Block and Stumpf (1992) - Overview and future direction of research in entrepreneurship education.

* Dalton and O'Cinneide (1992) - Aspects of entrepreneurship education in Ireland.

* Vozikis, McFarland, and Mescon (1992) - Focus of entrepreneurship education.

* Vesper (1992) - Aspects of entrepreneurship education in the United States.

* Hisrich and O'Cinneide (1992) - Aspects of entrepreneurship education in Europe

Because the telephone interviews were conducted only one month after project completion, many entrepreneurs indicated they may not have fully realized the effects of the program. On average 31.5 hours of direct contact with students and faculty per client was spent Of the respondents interviewed, 47 provided a dollar estimate of the overall value added which totalled $ 1,751,650 Eliminating the three ventures that accounted for 77 per cent of this total figure, gives an average value added per venture of $ 8,546 Respondents indicated that program involvement also had some influence in increasing employment by 23.6 full time equivalents Also, $ 5,106,000 in capital had been raised in seven deals influenced by the program This experiment illustrates that a small investment can be used to: create a great deal of value added, generate employment, and facilitate generation of capital in community-based entrepreneurial ventures. While other benefits were realized by the students involved, the primary purpose of increasing the quality of entrepreneurial education was accomplished through the projects (McMullen, Long and Graham, 1986)

One article exploring the impact on entrepreneurial experience and careers of students by academic institutions, found that 4,135 undergraduate and 20,250 graduate alumni surveyed from four colleges (Bentley, Babson, Georgetown and Rensselaer) were practising entrepreneurs, ex-entrepreneurs or serious non-starters. While the author recognized that the alumni of each of the four schools were not homogeneous populations, significant differences were found among the graduates of the four schools along all five of the entrepreneurial dimensions measured - demographic factors, entrepreneurial type, entrepreneurial role, career path, and time commitment The differences in entrepreneurial role were less pronounced than differences in the other four factors (Shuman, Seeger and Teebagy, 1987).

Another paper compares the results of previous research studies on the characteristics of entrepreneurs and their previous organizations before launching their venture with the results of a survey of 890 entrepreneurs. The research involved a mail survey to members of the National Federation of Independent Business in 1979. A distinctive profile of an entrepreneur emerged - the entrepreneur usually came from families where parents own a business and usually have a higher level of education. The entrepreneur is no more likely to have foreign parents, leave school early or drift from job to job than a non-entrepreneur Career choices putting the entrepreneurs in particular jobs and giving them particular skills had an influence on becoming an entrepreneur but to a lesser degree than documented by previous research The authors suggest that whenever previous research is cited the nature of the sample should be noted. The authors feel that the field of entrepreneurial research is 'complex, that narrowly-based studies must be interpreted with care and there is still much to learn' (Cooper and Dunkelberg, 1987)

Another paper addresses the issues involved in teaching entrepreneurship by focusing not only on what should be taught but how to teach it effectively The findings of a study replicating a previous study by the authors are presented A profile of the typical entrepreneurship student was developed and incorporated into the unstructured and posed problems which required solutions to be found under conditions of ambiguity and risk. 40 students took the course which occurred at the end of the four course sequence of the entrepreneurship major The course did not have daily assignments, lectures or a detailed structure. Near the end of the semester a Likert type evaluation instrument was used to determine if the course met its objectives. The results indicate that the course met its objectives of being innovative The positive student response to the novel teaching approach in the course indicates a strong student preference for a different learning experience as the course provided a unique, positive, and enhanced learning experience (Sexton and Bowman-Upton, 1988)

Enumerating possible impediments which could explain the lack of acceptance of entrepreneurship courses is the focus of another article It also reports the results of a survey of leading entrepreneurial educators concerning educational objectives, organization issues and course attributes One major impediment noted was that the 'non-industry, non-stage-of-the-business-life-cycle, non-size truths apply to all' thesis does not always apply due to fundamental differences between new ventures and large corporations. Other possible explanations were given concerning items hindering the development of entrepreneurship courses. The second part of the article presents the survey objectives and results. Objectives of the survey were to: 'determine educational objectives upon which entrepreneurship coursework is constructed; explore administrative and program development issues that shape the nature and success of entrepreneurship programs, and measure the perceived importance of various entrepreneurship course attributes.' The factors addressed in the study were hypothesized to affect the effectiveness of efforts in entrepreneurship education. Sixteen educators were queried with fifteen agreeing to participate. Six of the respondents were interviewed personally or by telephone using a qualitative open-ended questionnaire. A structured-response questionnaire was mailed to all respondents. The most important educational objective cited by the respondents was an increase of awareness and understanding of the new venture process by students. There was no consensus on whether an entrepreneurship major should be offered. The course features found (in order of ranking in importance) are: student development of a new venture business plan, inviting guest speakers and role model entrepreneurs; lecture, and assigned readings (Hills, 1988).

The aspects of entrepreneurship education in one European country - Ireland - was the focus of another article. Particular attention was given to the range of activities in the area of entrepreneurship at one Irish University - the University of Limerick - with various aspects of the curriculum, training programs, and research being presented. A history of the development of the program to its present status was given (Dalton and O'Cinneide, 1992).

Another paper examines the field of entrepreneurship education and research. The authors provide a hierarchy of criteria to be used in order to evaluate the educational effectiveness of the area. The hierarchy can also serve as a possible framework for future research. The literature since 1985 was also reviewed for current research interests within the given criteria context. Later in the chapter the challenges unique to entrepreneurship education research are discussed in detail. The area of entrepreneurship education research is also related and compared to the present general state of education research. Research questions were identified and the potential applications of these research findings discussed (Block and Stumpf, 1992).

Entrepreneurial intentionality and competences was the focus of another article. The authors first present a profile of the entrepreneur based on prior research (both normative or empirical) on the attitudinal and behavioural characteristics. Then the unique competencies of a successful entrepreneur in terms of skills (such as introducing ideas, intellectual skills, interpersonal skills, and organizational skills) and styles (characterized as being personal or organizational) are discussed. The article concludes by discussing the need for the entrepreneur to develop unique competencies in light of the social, political, and economic context surrounding enterprise creation (Vozikis, McFarland, Mescon, 1992).

Another article discusses the results of deans of 750 business schools and 226 engineering schools in the United States. A total of 369 universities in the United States had at least one course in entrepreneurship. While most were in the business schools, 3 respondents were in liberal arts colleges (Macalester, Mercer, and St. Thomas), 32 respondents had their entrepreneurship in the engineering schools, and 17 respondents had courses in both the business and engineering schools. Entrepreneurship courses were also in one department of home economics (Cal State) and one school of nursing (Northeastern). While the number of business schools offering at least one course in entrepreneurship increased from 210 in 1985 to 351, a 67 per cent increase, the number of engineering schools decreased from 39 in 1985 to 32, an 18 per cent decrease These courses were more at the undergraduate than the graduate level with 37.6 per cent of the sample offering undergraduate entrepreneurship courses, 23.7 per cent offering graduate entrepreneurship courses, and 38.7 per cent offering courses at both the graduate and undergraduate level (Vesper, 1992).

A final article presents the results of a survey concerning entrepreneurship education in Europe. Many universities in the twenty four countries surveyed had recently started a program in entrepreneurship. Most universities and associations in the countries did research on entrepreneurship, followed by training courses, and then education courses - courses for which degree credit was given. Very few of the sample were involved in the actual enterprise creation process where the university, faculty, and/or student shared in the sales and profits of the new venture (Hisrich and O'Cinneide, 1992).

Basis for entrepreneurship education

The aspects of entrepreneurship education can in one sense be viewed in terms of what it takes to facilitate the decision to be an entrepreneur as well as the steps in the entrepreneurial process.

The entrepreneurial decision

Entrepreneurship education needs to take into account the way an individual decides to be an entrepreneur and form a new venture versus doing something else A new venture is formed through a very personal human process that, although unique, has some common characteristics. Like all processes, it entails a movement from one thing to something else - a movement from a present life-style to forming a new enterprise - as indicated in table 3 2.

The decision to leave a present career and life-style is not an easy one It takes a great deal of energy to change and create something new While individuals tend to start businesses from many areas, two work environments tend to be particularly good in spawning new enterprises: research and development and marketing Working in technology (research and development), individuals develop new product ideas or processes and leave to form new companies when the new ideas are not accepted by the present employers Similarly, individuals in marketing become familiar with the market and unfilled customers' wants and needs and frequently start new enterprises to fill these needs.

Perhaps even more incentive to leave a present life-style and overcome the inertia by creating something new comes from a negative force - disruption A significant number of companies are formed by people who have retired, who are relocated due to a move by the other member in a dual-career family, or who have been fired There is probably no greater force than personal dislocation to galvanize a person into action

The decision to start a new company versus doing something else occurs when an individual perceives that it is both desirable and possible The perception that starting a new company is desirable results from an individual's culture, subculture, family, teachers, role models, and peers A culture that values an individual who successfully creates a new business will spawn more company formations than one that does not For example, the American culture places a high value on being your own boss, having individual opportunity, being a success, and making money - all aspects of entrepreneurship. Therefore, it is not surprising to find a high rate of company formation in the United States On the other hand, in some countries successfully establishing a new business and making money is not as highly valued and failure is often a disgrace

Table 3.2
The entrepreneurial decision

CHANGE FROM
PRESENT LIFE-STYLE

* Work Environment
* Disruption

→

FORMING A NEW
ENTERPRISE

* Desirable

  1. Culture
  2. Subculture
  3. Family
  4. Teachers
  5. Role Models
  6. Peers

* Possible

  1. Government
  2. Education
  3. Support Mechanisms
  4. Mentors

Source: Adapted from: Hisrich, Robert D and Peters, Michael P., *Entrepreneurship: Starting Developing and Managing a New Enterprise*, Homewood: BPI/Irwin, 2nd edition, 1992

Usually even an entire culture is not totally for or against entrepreneurship Many different subcultures that shape value systems are operant within a cultural framework For example, there are pockets of entrepreneurial subcultures in the United States. While the more widely recognized ones include Route 128 (Boston), Silicon Valley (California), Dallas/Ft Worth, and the North Carolina Triangle, some lesser known but increasingly important entrepreneurial centres are Los Angeles, Denver, Columbus, and Tulsa These subcultures support and even promote entrepreneurship and forming a new company as one of the best occupations. No wonder more individuals actively think about becoming entrepreneurs and forming new enterprises in these supportive environments.

There are of course variations within these subcultures caused by family influences. Studies have indicated that a majority of founders of companies had fathers and/or mothers who valued their independence. The independence achieved by being company owners, professionals, artists, or farmers permeates the entire family life, giving encouragement and value to the company formation activity.

Encouragement to form a company is further stimulated by teachers, who can significantly influence individuals regarding not only business careers but entrepreneurship as one possible career path Schools with exciting courses in entrepreneurship and innovation tend to spawn entrepreneurs and can actually drive the entrepreneurial environment in an economic area. A strong education base is almost always a prerequisite for entrepreneurial activity and company formation in an area

Finally, role models and peers are very important in the decision to form a company. An area with an entrepreneurial pool and meeting place where entrepreneurs meet and discuss ideas, problems, and solutions spawns more new company formation than an area where this does not occur.

While the desire generated from the individual's culture, subculture, family, teachers, role models, and peers must be present before any action is taken, the second part of the equation centres around the question: What makes it possible to form a new company? Several factors - government, education, support mechanisms, and mentors - contribute to the creation of a new venture (see table 3.2). The government contributes by providing the infrastructure to support a new venture. It is no wonder that more companies are formed in the United States given the roads, communication and transportation systems, utilities, and economic stability available versus that available in other countries. Even the tax rate for companies and individuals in the United States is better than in countries such as Ireland or England. Countries having a repressive tax rate, particularly on individuals, can suppress company formation since a significant monetary gain cannot be achieved.

The entrepreneur must also have the education needed to make the company formation possible Knowledge acquired from formal education and previous business experience makes a potential entrepreneur feel capable of forming and managing a new enterprise. While educational systems are important in providing the needed knowledge of business, individuals still tend to start successful businesses in fields in which they have worked In fact, in many cases the idea for the new company occurs while the individual is working in a particular business position Indeed, entrepreneurs are not born - they develop.

Support mechanisms also play a critical role in forming a new company Mechanisms for helping to access a market, to obtain initial financing, and form the appropriate organisational form are important to facilitate new venture creation

Mentors are perhaps one of the most powerful influences making company formation seem possible. To see someone else succeed makes it easier to picture yourself doing a similar activity - better, of course A frequent comment of entrepreneurs when queried about their motivation for starting their new ventures is: 'If that person could do it, so can I!'

The entrepreneurial process

The decision to start your own business should be considered in light of the entrepreneurial process[1]. The entrepreneurial process involves more than just problem solving in a typical management position An entrepreneur must find, evaluate, and develop opportunities by overcoming the strong forces that resist the creation of something new. The actual process itself has four distinct phases: (1) identify and evaluate the opportunity; (2) develop the business plan; (3) determine the resources required, and (4) manage the resulting enterprise created (see table 3.3). While these phases proceed progressively, none is dealt with in isolation or is totally completed before working on factors in a sequential phase.

Identifying and evaluating a good opportunity is a most difficult task Most good business opportunities do not suddenly appear but rather result from an entrepreneur being alert to possibilities or from established mechanisms to identify potential opportunities For example, one entrepreneur asks at every cocktail party if anyone is using a product that does not adequately fulfil its intended purpose This person is constantly looking for a need and opportunity to create a better product Since most entrepreneurs do not have formal mechanisms for identifying business opportunities, some sources such as consumers and business associates, members of the distribution system, and technical people often provide a good idea for a new product or service.

Regardless of whether the opportunity is identified from consumers, business associates, channel members, or technical people, each opportunity must be carefully screened and evaluated. This evaluation of the opportunity is perhaps the most critical element of the entrepreneurial process as it allows the entrepreneur to determine whether the specific product or service has both value to the consumer and to the new venture being created and the returns needed for the resources required. As indicated in table 3.3, this evaluation process involves looking at the length of the opportunity; the market for the opportunity, the competition involved, the value of the opportunity to the market and to the organization; the risks and returns of the opportunity, and whether the opportunity fits the personal goals and capabilities of the entrepreneur

A good business plan must then be developed in order to exploit the opportunity defined This is perhaps the most difficult phase of the entrepreneurial process An entrepreneur has usually not prepared a business plan and often does not have the resources available to prepare a good one. A business plan has three main sections, each of which has its own breakdown as indicated in table 3.3. A good business plan is not only important in assessing and developing the opportunity but is also helpful in determining the resources required and then managing the new enterprise created, the last two steps in the entrepreneurial process

The resources needed to successfully meet the opportunity must carefully be assessed This process starts with determining the resources needed and the existing resources of the entrepreneur and other individuals involved in creating the new venture Care must be taken not to underestimate the amount and variety of resources needed

From this determination, the resources needed (resource gaps) can be delineated and some suppliers of these resources identified. Acquiring the needed resources in a timely manner while giving up as little control as possible is a most difficult step This third stage of the entrepreneurial process requires that the needs and desires of each potential supplier be determined along with the best possible approach for acquiring the needed resources.

The final step in the entrepreneurial process - managing the enterprise - involves implementing the business plan by developing and managing a new enterprise This step requires that the entrepreneur establish a management style and organizational procedures to guide the operation and growth of the venture. A control system needs to be established along with a procedure for identifying the strengths, weaknesses, opportunities and threats to the firm (SWOT) as well as key variables to success on a regular basis.

Table 3.3
Aspects of the entrepreneurial process

Identify and Evaluate the Opportunity	Develop the Business Plan	Determine Resources Required	Manage the Enterprise

* Length of Opportunity
* Market for Opportunity
* Competitive Analysis
* Value of Opportunity to Market and Enterprise
* Risks and Returns of Opportunity
* Match Opportunity with Entrepreneurial Skills and Desires
	* Section 1
	  * Introductory Page
	  * Executive Summary
	  * Table of Contents
	* Section 2
	  1.0 Description of Venture
	  2.0 Industry Analysis
	  3.0 Production Plan
	  4.0 Marketing Plan
	  5.0 Financial Plan
	  6.0 Organizational Plan
	  7.0 Operational Plan
	  8.0 Summary
	* Section 3
	  Appendix A - Resumes of Principles in Venture
	  Appendix B - Market Statistics
	  Appendix C - Market Research Data
	  Appendix D - Competitive Brochures and Information
	  Appendix E - Competitive Price Lists
	  Appendix F - Contracts and Leases
		* Determine Resources Needed
		* Determine Existing Resources
		* Identify Resource Needs
		* Determine Suppliers of Needed Resources
		* Develop Approach to Suppliers
			* Develop Management Style
			* Implement Control System
			* Develop Organizational Procedures
			* Perform SWOT (Strengths, Weaknesses, Opportunities, Treats) Analysis on a Regular Basis
			* Identify Key Variables for Success

Source: Adapted from: Hisrich, Robert D. and Peters, Michael P., *Entrepreneurship: Starting Developing and Managing a New Enterprise*, Homewood: BPI/Irwin, 2nd edition, 1992

Aspects of entrepreneurship education

Generally, entrepreneurship education programs focus on three main areas: education including degree and non-degree courses and training, research, and practical applications.

Education including training

Entrepreneurship education is a fast growing area in colleges and universities in the United States and Europe While many universities offer at least one course in entrepreneurship at the graduate or undergraduate level, a few actually have a major or minor concentration in the area. A sampling of U S colleges and universities offering degrees in small business and ownership (entrepreneurship) is indicated in table 3.4 Since the area is so new the U S. Department of Education has not yet separated entrepreneurship from small business and the statistics associated with entrepreneurship are not as accurate as other educational statistics in more established mature areas

While the courses in entrepreneurship vary by university, there is a great deal of commonality involved particularly in the initial one or two courses in this field of study. These courses tend to reflect the overall objectives for a course in entrepreneurship. Sample course objectives indicated in table 3.5, tend to centre around skill identification and assessment; understanding entrepreneurial decision making and the entrepreneurial process; understanding the characteristics of entrepreneurs and their role in economic development on a domestic and more recently on an international basis; assessing opportunities and coming up with an idea for a new venture, writing and presenting a full scale business plan; knowing how to obtain resources; managing and growing the enterprise; and understanding the role of entrepreneurship in an existing organization - intrapreneurship

The skills required by entrepreneurs can be classified into three main areas: technical skills, business management skills, and personal entrepreneurial skills (see table 3.6). Technical skills involve such things as: writing, listening, oral presentations, organizing, coaching, being a team player, and technical know how.

Business management skills include those areas involved in starting, developing, and managing any enterprise Skills in decision making, marketing, management, financing, accounting, production, control, and negotiation are essential in launching and growing a new venture. The final skill area involves personal entrepreneurial skills. Some of these skills differentiate an entrepreneur from a manager Skills included in this classification are: inner control (discipline), risk taking, being innovative, being change oriented, being persistent, and a visionary leader.

These skills and objectives form the basis of the modular approach to an entrepreneurship curriculum indicated in table 3.7. By laying out modules, a course or sequence of courses can be developed depending on the needs, interests and resources at the particular university. These courses can be on a semester or quarter basis This modular approach helps ensure that the most important areas of the field are covered in the courses offered whether on a quarter or semester basis involving one or a series of courses.

Research

Research in entrepreneurship tends to be either practical or academic in nature Practical research focuses on the more 'how to' aspects of entrepreneurship and appears in many trade journals throughout the world Academic research is more exploratory and focuses on aspects of the entrepreneur and the entrepreneurial and new venture creation processes

These articles appear in academic journals and attempt to expand our understanding of entrepreneurs and the venture creation process with little attempt to offer practical suggestions for immediate use in the field This research area is more prevalent in colleges and universities in the United States and Europe than any other.

Table 3 4
U S. colleges and university degrees in small business management and ownership

1989-90 Academic Year

Institution	Total Degrees	Bachelors Total	Degree M	Degree F	Masters Total	Degree M	Degree F
Denver Technical College (CO)	5	5	0	5	0	0	0
Callaudet University (DC)	2	2	1	1	0	0	0
University of Miami (FL)	5	5	3	2	0	0	0
Buena Vista College (IA)	4	4	0	0	0	0	0
North-eastern University (MA)	21	21	18	3	0	0	0
Ferris State University (MI)	19	19	14	5	0	0	0
University of St. Thomas (MINN)	12	8	7	1	4	2	2
University of Montana (MT)	12	12	8	4	0	0	0
University of Nebraska at Omaha (NE)	2	2	0	2	0	0	0
Marietta College (OH)	2	2	2	0	0	0	0
Waynesburg College (PA)	2	2	1	1	0	0	0
Bryant College (RI)	4	0	0	0	4	3	1
Baylor University (TX)	43	43	39	4	0	0	0
Castleton State College (VT)	1	1	1	0	0	0	0
Lyndon State College (VT)	4	4	4	0	0	0	0
University of Wyoming (WY)	5	5	3	2	0	0	0

No Ph D Degrees Granted in Field

Source: National Centre for Educational Statistics, U S Department of Education, Washington, DC.

Table 3.5
Overall objectives for a course in entrepreneurship

- Understand the role of new and smaller firms in the economy

- Understand the relative strengths and weaknesses of different types of enterprises

- Know the general characteristics of an entrepreneurial person

- Assess the student's own entrepreneurial skills

- Understand the entrepreneurial process and the product planning and development process

- Know alternative methods for identifying and evaluating business opportunities and the factors that support and inhibit creativity

- Develop an ability to form, organize, and work in interdisciplinary teams

- Know the general correlates of success and failure in innovation and new venture creation

- Know the generic entry strategies for new venture creation

- Understand the aspects of and created and presented a new venture business plan

- Know how to identify, evaluate, and obtain resources

- Know the essentials of:
    - marketing planning
    - financial planning
    - operations planning
    - organization planning
    - venture launch planning

- Know how to manage and grow a new venture

- Know the managerial challenges and demands of new venture launch

- Understand the role of entrepreneurship in existing organizations

Table 3.6
Types of skills required in entrepreneurship

Technical Skills
* Writing
* Oral Communication
* Monitoring Environment
* Technical Business Management
* Technology
* Interpersonal
* Listening
* Ability to Organize
* Network Building
* Management Style
* Coaching
* Being a Team Player

Business Management Skills
* Planning and Goal Setting
* Decision Making
* Human Relations
* Marketing
* Finance
* Accounting
* Management
* Control
* Negotiation
* Venture Launch
* Managing Growth

Personal Entrepreneurial Skills
* Inner Control/Disciplined
* Risk Taking
* Innovative
* Change Oriented
* Persistent
* Visionary Leader

Practical

The practical aspects of entrepreneurial education involves a wide variety of activities such as: seminars and guest lectures by entrepreneurs, businesses on campus run by students; small business projects, each defined to help solve the practical needs of a small business, small business development centres involving training and counselling for small businesses; and enterprise development centres covering all aspects of entrepreneurship and new venture creation.

Enterprise Development Centre model

One model for organizing the practical aspects of entrepreneurship education is the Enterprise Development Centre (EDC) operating at The University of Tulsa (Oklahoma, USA). The EDC brings together the public sector (federal, state, and city governments), the university sector (engineering and business schools), the private sector (businesses, venture capital firms, financial institutions, potential investors, and entrepreneurs), and foundations in developing and forming new companies. The EDC has been operating for five years with each of its separate sections - Venture Capital Exchange (VCE), Innovation Centre, Student Education/Entrepreneurial Development (SEED), Incubation Centre, Intrapreneurship Centre, and Small Business Assistance Centre - having its own budget and autonomy (see figure 3.1).

Intrapreneurship Centre

The Intrapreneurship Centre is involved in the process of researching and helping established companies create an intrapreneurial spirit and environment needed to facilitate the formation of new intrapreneurial ventures. Through this effort established businesses have created and nurtured new ventures under the corporate umbrella While established companies have the financial capability, marketing expertise, established distribution system, as well as other assets, their bureaucracy, organizational structure, mission statement, and reporting system often stifle the intrapreneurial process The centre has assisted medium-sized companies and divisions of larger companies in modifying their present activities to create the intrapreneurial environment for new venture launch. This was usually accomplished through initial meetings with top management, obtaining their commitment to the program for the next three years, and their willingness to endorse the activities throughout the organization The next step was delivering seminars to managers in the organization. These seminars introduced the concept and importance of intrapreneurship, the characteristics of the intrapreneur and the intrapreneurial environment, the product planning and development process, and the process for new venture creation that would be implemented Following this information dissemination, teams were formed around viable ideas and the process of developing a business plan and due diligence initiated Then appropriate new ventures were launched.

Venture Capital Exchange

The second aspect of the Enterprise Development Centre, the Venture Capital Exchange, facilitates the provision of the needed seed capital for a new company. Few entrepreneurs who have formed and grown a new venture have not experienced one of the biggest impediments to launching the project-insufficient financial resources While part of this start-up money always comes from personal savings, credit, friends, and relatives, there is almost always a need for more capital to spawn and grow a new company. But where can this extra source of funds be obtained at the lowest possible cost and loss of control?

Start-up capital (frequently called seed capital or first stage financing) is, of course, the financing stage with the highest risk and therefore the need for the highest return on the capital invested.

The largest and best source of seed capital (first-stage financing) is the informal investor market (called angels) who want to invest capital as well as their expertise in new ventures It is estimated that this market is at least $ 50 billion while the formal venture capital industry is about $ 25 billion How do these angels find out about investment opportunities? Usually very unscientifically and haphazardly through informal contacts with friends, lawyers, accountants, and bankers The second aspect of the EDC, the Venture Capital Exchange (VCE), is an international referral service bridging the gap between entrepreneurs seeking risk capital and investors. The VCE: 1) identifies and profiles opportunities for risk capital investment; 2) identifies and profiles active informal investors (angels), and 3) provides a timely, confidential, and objective referral service for both parties In this way the VCE bridges the gap between entrepreneurs who have little guidance in finding their way through a maze of channels leading to informal risk capital and angels who usually rely on very random events to find investment opportunities As such, the VCE provides a confidential computerized information matching service to entrepreneurs and investors

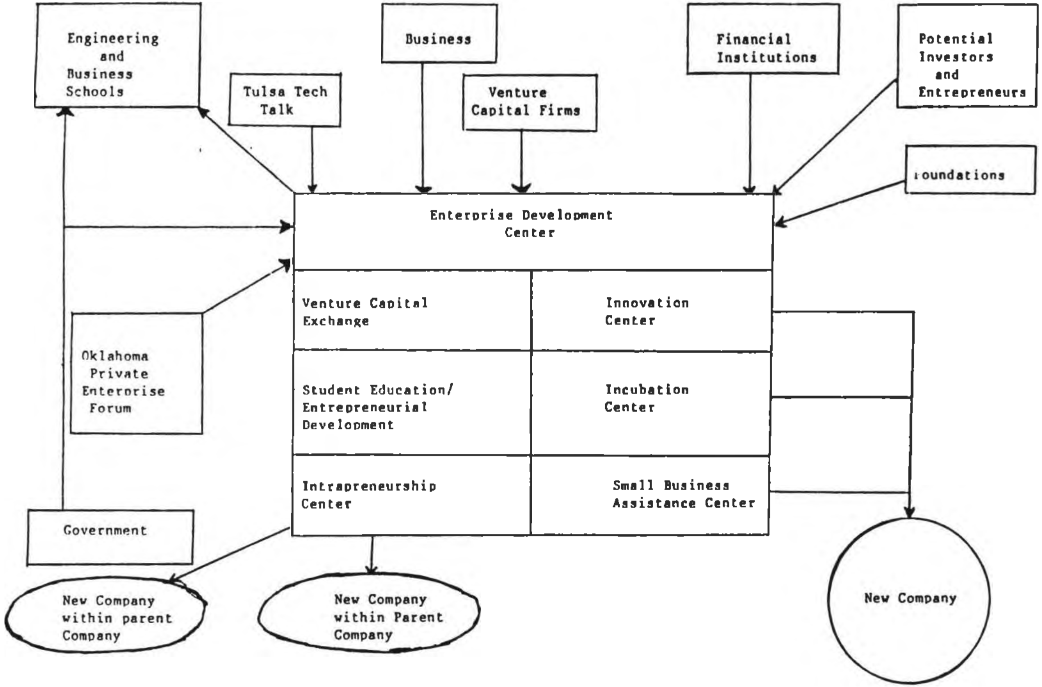

Figure 3 1 Model of practical aspects of entrepreneurial education at The University of Tulsa (USA)

Table 3.7
Modular approach to entrepreneurship curriculum

Module 1:	The Domestic and International Environment of Entrepreneurship
Module 2:	Entrepreneurship: Entrepreneurs and Enterprise Creation
Module 3:	Opportunity Analysis, Creativity, and Strategies for Entry
Module 4:	From Idea to Business - The Enterprise Development Process
Module 5:	Creative Financing and Resource Obtainment
Module 6:	Developing the New Enterprise Business Plan
Module 7:	Launching the New Venture
Module 8:	Managing the New Venture
Module 9:	Growing the New Venture
Module 10:	Exiting the New Venture
Module 11:	Entrepreneurship in Existing Business and Non Business Organizations

Entrepreneurs and investors (angels) register on the system by filling out multiple-choice questionnaires, supplying basic information about themselves and what they seek in a mate, and paying the $ 100 registration fee for being on the system for one year. All of the information supplied is on a strictly confidential basis.

Both profiles are entered into an IBM PC. Once the computer program matches the two profiles, the VCE sends the investor the entrepreneur's outline of his idea, personal background, 8-10 page minibusiness plan, and financial information on a confidential or company identified basis. The process up to this can be completely confidential as there is nothing in the material specifically identifying the entrepreneur or his or her company The names of both the entrepreneurs and investors on the system are never released

If after reading the information the investor wants to proceed further, then the VCE provides both the entrepreneur and the investor with each other's names and information on how contact can easily be made, so that the two can decide if they want to do business together. The interest in the VCE has been significant with 80 informal investors and 400 businesses registered on the system from cities such as Houston, Dallas, Austin, Wichita, Kansas City, Minneapolis, Indianapolis, Tulsa, Oklahoma City, St Louis, Chicago, New York, Albuquerque, and Los Angeles. There have been over 7,500 first stage matches made and equity investments ranging from $ 17,000 to $ 287,000.

Innovation Centre

The Innovation Centre, the third aspect of the EDC, facilitates the creation of new companies by providing both expertise and capital in exchange for an equity position in the venture. This assistance includes technological evaluation, entrepreneurial assessment, commercial feasibility studies, and product development and modification, resulting in a company being formed. The Tulsa Innovation Centre is a privately owned for-profit corporation which assists in the creation of new business and commercializes technology through a university-industry-government partnership.

Funding for the start-up companies selected is provided by two outside private venture capital funds of $ 800,000 and $ 1.2 million which are managed by the board of directors of the Tulsa Innovation Centre. The operation of the innovation centre is funded by a grant from the Tulsa Industrial Authority, a quasi-public entity

The Tulsa Innovation Centre has screened over 1,000 business proposals in various stages of development and has become involved with eight companies to date

Incubation Centre

The fourth aspect of the EDC, the incubation centres, provide an overall environment for a start-up company to survive and grow. A new business incubator is an innovative system designed to assist entrepreneurs in the development of new firms. By providing a variety of services and support to start-up and emerging companies, the incubator seeks to effectively link talent, technology, capital, and know-how to leverage entrepreneurial talent, accelerate the development of new companies, and thus speed up the commercialization of technology.

The new business incubator seeks to give form (structure) and substance (credibility) to start-up or emerging ventures by maintaining controlled conditions to assist in the cultivation of new companies. The 'controlled conditions' include four types of support systems: secretarial support, administrative assistance, facilities support, and business expertise, including management, marketing, accounting, and finance. In addition, the incubator attempts to extend the networking capabilities of the entrepreneur through affiliations with the private sector, universities, government entities, and non-profit institutions. The incubator system in the EDC has resulted in viable tenant companies that generate economic development, technology diversification, job creation, profits, and successful products.

Small Business Assistance Centre

The fifth aspect of the EDC is the Small Business Assistance Centre. Its purpose is to develop and implement programs of management assistance and training designed to improve the equity, profit, sales, and growth potential of existing small businesses and potential new ventures, thereby developing jobs in the private sector. The expertise of the faculty and students of the College of Business Administration and School of Engineering in cooperation with resources from the private and governmental sectors is utilized

Specifically, the Small Business Assistance Centre meets the needs of the small businesses, assists potential entrepreneurs who are deciding whether to begin new ventures; provides start-up assistance to new ventures; provides assistance to existing small firms on specific business problems, such as developing business plans, improving sales, improving production and inventory control, and improving cash flow and profitability. This assistance in management and operations in any small business areas is accomplished through in-depth counselling; transfer of information; provision of learning opportunities; advocacy, and applied research

Student Education/Entrepreneurial Development Centre

The final aspect of the EDC is the Student Education/Entrepreneurial Development Centre (S.E.E.D.). S.E.E.D. is designed to provide student education about the entrepreneurial process while providing an opportunity to earn supportive income by operating a business while attending the University of Tulsa S.E.E.D provides jobs, money, and experience for the students involved in the start-up, management, and operation of business ventures.

The businesses are started and operated by students with the president of each business having bottom line responsibility with compensation being based on the performance of the business. Each student business is carefully monitored with assistance being provided by faculty and staff members.

A percentage of the profits of each business in S.E.E.D. becomes a part of a reserve fund used to: finance growth of existing businesses; start up new businesses, and provide university scholarships in the area of entrepreneurship S.E.E.D has an outside board of advisors composed of four prominent entrepreneurs in the community, the president of the university, the director of the student union where the businesses are located, and the Bovaird Professor of Entrepreneurial Studies and Private Enterprise The board meets twice each year to review company performance and approve new business venture proposals.

Two businesses have been created to date: Hurricopy - a company providing duplicating services for administration, staff, faculty, and students, Hurriclean - a laundry and drycleaning service with the actual cleaning being done by a laundry off campus.

General model

A more general model that can be culturized to operate in any university environment is indicated in figure 3.2. While the education, training, and research parts of the entrepreneurship education program would be operating simultaneously, this model organizes the more difficult part of entrepreneurship education - the practical part. Participants would include inventors, entrepreneurs, business employees, government employees, students, and faculty When an individual brings an idea or skill, the Entrepreneurship Centre would do technical evaluation, commercial feasibility studies, product development and modification, and entrepreneurial assessment as needed using faculty and students of both the business and engineering schools as well as outside organizations.

Good ideas would be the basis for a business plan for the creation of a new venture The business plan would be presented to the established SEED Capital Fund if financing was needed. The university, faculty and students involved with the company formation, as well as the inventor and entrepreneur could all share in the ownership and therefore the sales and profits of the new company. The university would benefit from the potential down stream revenues that could be forthcoming as well as giving students an opportunity to gain experience while helping the impact of the 'local' economy.

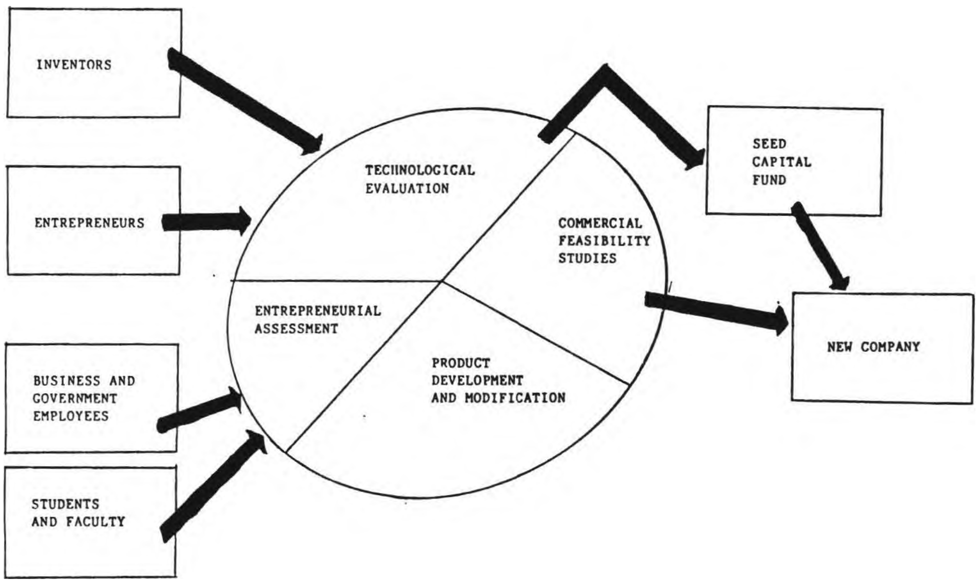

Figure 3.2 Operational model of an entrepreneurship center

Implementing the general model

How can an area develop an entrepreneurship centre for spawning, developing, and growing new companies? While there is no magic formula guaranteeing success, four managerial issues - C_2PE (Culture, Champion, Piecemeal, and Education) - will facilitate the technical system development underlying the formation of an EDC.

Culture

An important aspect of both intrapreneurship and entrepreneurship is the role of networking and the champion Given the diverse individuals and institutions involved in forming an EDC, a champion is extremely important. This champion must feel equally at ease and accepted in the scientific, government, business, and university communities. Given the relative positive position most universities have in an area, the champion (and the EDC as well) is more easily housed there By being a part of a university, some potential turf protection problems can be avoided.

Piecemeal

In establishing anything radically new it is much easier to establish it in parts, achieve success, and then establish other parts. This is particularly the case because funds and support are more easily obtained for parts of a project than the whole This piecemeal formation also allows the champion to demonstrate his/her ability. As one supporter commented, 'There are talkers and there are doers - I need to know that the champion is a doer before I get involved.' The EDC concept in Tulsa started with a foundation funding the Venture Capital Exchange which was then followed by one incubator, the Small Business Assistance Centre, another incubator, the Intrapreneurship Centre, the Innovation Centre, and finally the Student Education/Enterprise Development Centre. The key to any piecemeal formation is the first piece - it must be one which fulfils a recognized need in the community and achieves a great deal of exposure and publicity. The VCE accomplished this nicely in the Tulsa area

Education

Finally, but not of least importance, the community leaders in the public and private sector need to be educated about the EDC concept and how it will serve the needs of the community When something is new, a great deal of education is needed to overcome complacency and the resistance to change Of course, the resistance and risk is somewhat reduced when the concept is developed on a piece by piece basis One event that greatly facilitated the development of the EDC in Tulsa was a seminar sponsored by a local bank which featured presentations by three experts from different parts of the country as well as the champion This seminar helped educate the 120 leaders present by invitation only about the many aspects of the EDC and their impact on creating new companies and the stimulation of economic development. Out of the seminar developed the seeds for the support and funding of the VCE and one incubator Other seminars followed including one featuring six successful well-known entrepreneurs in the city - the entrepreneurial lecture series

While an EDC should not be developed in every area, in many instances it can be an effective model for technology transfer and new company formation. The challenge for the U S as a whole, as well as for each area within the United States, is to transfer technology to the marketplace, creating new ventures enabling businesses and the country as a whole to compete effectively in the hyper competitive international environment of today and the future This can be accomplished in many instances by establishing a centre that facilitates the new venture creation process by having available such aspects, where appropriate, as a Venture Capital Exchange, an Innovation Centre, an Incubator Centre, a Small Business Assistance Centre, a Student Education/Entrepreneurial Development Centre, and an Intrapreneurial Centre Through such an all-encompassing facilitating centre, entrepreneurs can be identified, trained, and provided with the needed financial, marketing, technical, and general business support to successfully create, launch, and grow new business ventures.

Summary and conclusions

In order for entrepreneurship education to have a definitive role in institutions of higher education, colleges and universities must become much more innovative internally These institutions must get closer to the world of business and foster internal interdisciplinary research and teaching The existing boundaries between disciplines and courses are significant barriers to creating a university climate that would stimulate creativity, innovation, and entrepreneurial activity. These activities and all teaching of the subject matter must be of high quality to minimize initial concerns and reactions

Improved linkages need to be developed between the colleges and university and entrepreneurial and non entrepreneurial firms This will allow cross fertilization, the exchange of business and technical knowledge, internships, continuing education, and perhaps maybe even enterprise formation

For successful development of entrepreneurial education at a higher level educational institution, several ingredients are needed First, there needs to be confident, creative, and imaginative students. The area must be attractive enough that the best most capable students choose to study and perhaps make their career in the area.

Second, there must be quality entrepreneurial faculty. These faculty members should have experienced the enterprise creation process and have the research output to demand the respect of colleagues in the business school as well as throughout the university. The potential educators in this emerging field must be found, rewarded, and developed through staff development programs.

Third, more research material, case studies, and curriculum models must be funded and shared Since some traditional learning methods may not be appropriate, new action learning techniques need to be developed

Fourth, a procedure for role models and students networking with existing entrepreneurs should be established. A so called Teaching Entrepreneurship Scheme should be developed whereby some of the high calibre students work on projects under the joint supervision of the entrepreneur and the college professor The student has full access to all company information and capabilities as well as the information and services of the university.

Fifth, a group of entrepreneurs from both large and small businesses and non businesses should be recruited to spend time on the campus The period of time for the entrepreneur in residence could be from 1/2 day to 1 semester depending on the availability and capability of the entrepreneur

Finally, students visiting various types of entrepreneurial enterprises and meeting both successful and not so successful entrepreneurs should be arranged A real partnership with these enterprises should be established and joint projects undertaken whenever possible

There is indeed a formidable challenge facing educators today The formation of new enterprises is vital to the economic development and well being of a country. Yet, to establish a quality entrepreneurship education component and develop an enterprise culture in a college or university requires a new creative imaginative approach that blends education, training projects, and enterprise development in innovative ways

Can this be accomplished given the established norms and thinking processes that have become a part of colleges and universities today? The placement of the discipline of entrepreneurship and enterprise formation within an academic structure presents an unusual situation. The field, to a significant extent is still not well defined There is disagreement on what should be the course objectives and content. And, even those faculty who are interested and involved in the area are not sure about the nature of the discipline and its future Perhaps only through employing the entrepreneurial motto - 'It is easier to beg for forgiveness than to ask for permission' - will success be obtained

Notes

[1] A developed version of this process can be found in Stevenson, H. H., Roberts, M. J and Grousbeck, H. I., *New Business Ventures and the Entrepreneur* (Homewood, IL: Richard D. Irwin, 1985), pp 16-23

References

Block, Z. and Stumpf, S.A. (1992), *Entrepreneurship Education Research: Experience and Challenge in State of the Art of Entrepreneurship*, Chapter 2, pp. 17-42, PWS-Kent Publishing Co., Boston

Clark, B.W., Davis C.H and Hornish, V.C. (1984), 'Do Courses in Entrepreneurship and in New Venture Creation?', *Journal of Small Business Management*, 22(2), pp 26-31

Cooper, A.C and Dunkelberg W.C.E. (1987), 'Entrepreneurship Research: Old Questions, New Answers, and Methodological Issues', *American Journal of Small Business*, 11(3), pp. 11-23

Dalton, J. and O'Cinneide B. (1992), 'Entrepreneurship Training and Education: The Irish Experience', pp. 1-19, *7th Nordic Conference on Small Business*, Turku, Finland

Hills, G.E and Welsch H. (1986), 'Entrepreneurship Behavior Intentions and Student Independence: Characteristics and Experiences', pp 173-23, *Babson Research Conference*

Hills, G.E (1988), 'Variations in University Entrepreneurship Education: An Empirical Study of an Evolving Field', *Journal of Business Venturing*, 3, pp 109-122

Hisrich, R.D and O'Cinneide B (1992), 'The Nature of Entrepreneurship Studies in Europe', *Unpublished Working Paper*, pp 1-24, The University of Limerick, Limerick, Ireland

McMullen, W.E. and Long, W.A and Graham, J.B (1986), 'Assessing Economic Value Added by University-based New Outreach Programs', *Journal of Business Venturing*, 1, pp. 225-240

Sexton, D.L. and Bowman-Upton, N.B (1988), 'Validation of an Innovative Teaching Approach for Entrepreneurship Courses', *American Journal of Small Business*, 12(3), pp 11-18

Shuman, J.C., Seeger, J.A and Teebagy, N.C. (1987), 'Entrepreneurial Activity and Educational Background', pp 590-599, *Babson Research Conference*

Vesper, Karl H., 'The State of Entrepreneurship Education', *International Entrepreneurship Conference Proceedings*, Dortmund, Germany, pp 1-7
Vozikis, G.S , McFarland, R. and Mescon, T S., 'Entrepreneurial Intentionality and Entrepreneurial Competencies: A Primer for International Entrepreneurial Education', pp. 1-19, *7th Nordic Conference on Small Business*, Turku, Finland

04 Entrepreneurship: A definition and research focus

William Naumes, Peter Frangipane and Michael Hudson

Abstract

This paper reports on the responses from participants at the meetings of the International Conference on Entrepreneurship Research and Teaching held at Cambridge, England and of the IntEnt'92 conference at Dortmund, Germany The participants responded similarly to a questionnaire they were given They perceived a difference between entrepreneurship and small business management with much of the difference focusing on growth and creativity. They also felt that the focus for entrepreneurial research should be on the characteristics of the entrepreneur as well as the process by which entrepreneurs make decisions The participants indicated that more research needs to be done on the most effective means by which entrepreneurship should be taught They identified survey questionnaires, case studies and field research as the techniques which generate the most useful forms of research in the field of entrepreneurship.

Introduction

There has been considerable discussion concerning the definition, direction, and focus of entrepreneurial research recently. Several conferences have been held where the topics have revolved around this theme, including the most recent Babson Conference, the Entrepreneurship Division of the Academy of Management, and the Cambridge and Dortmund conferences referred to above. While it is clear that a considerable amount of research is occurring in the areas of small business management and entrepreneurship, it is also clear that there is considerable disagreement as to the direction that this research should take Even the definition of the term 'entrepreneurship' continues to be questioned.

Schumpeter (1934) generally has been credited with bringing the concept of entrepreneurial spirit and decision making to the fore. He credits the French economist, Cantillon, with first coining the term, however. They claimed that the key distinguishing factor of the entrepreneur was the identification and willingness to bear economic risk. This focus was further developed by Broehl when he added that entrepreneurs bring a creative effort to changes in the productive function. Broehl (1982) further added that change and innovation set the entrepreneur apart from other managers. Drucker (1985) further noted that entrepreneurship involves opportunistic activities and vision. While others have used these terms and concepts, it is clear that no single definition has been presented, that somehow combines them in a manner that is acceptable to a wide variety of educators and practitioners. This appears to be a result of an attempt to develop a definition based on the observations of the individual author, as opposed to surveying those involved in the field of entrepreneurship research and teaching.

There have been a variety of definitions of the concept of the entrepreneur, entrepreneurship, and small business management in journals and texts As noted, these have traditionally revolved around the research or teaching focus of the authors involved Rather than attempt to develop a consensus among different authors and researchers, each of the authors has typically tried to put forth a definition that meets the needs of a particular author, style or research focus. The same has been found in the definition of research methods and directions. While there is an extensive research literature dealing with entrepreneurship, most authors have been of the opinion that there approach should take precedence There has been little in the way of attempts to determine from those in the field which methods and directions are more important or helpful than others.

This disagreement has serious consequences for the teaching of entrepreneurship. One questions how the field of entrepreneurship can truly grow and gain academic respectability if those within the field cannot even agree on its definition The first attempt at developing a consensus on the focus and development of entrepreneurship definition and research was made at the conference in Cambridge, England, in 1991 through the development and administration of a questionnaire. That questionnaire has been modified and is being administered to a wider body of people teaching in the area of entrepreneurship The administration and sharing of the results of the questionnaire will help to better define the field and focus research in areas in greatest need of exploration

This paper presents a hypothesis that consensus can be reached on the definition of entrepreneurship It also hypothesizes that a consistent focus on the means and goals of entrepreneurship research can be reached by educators and practitioners. The paper reports on the ongoing efforts to reach consensus on both a definition of the field as well as those areas in greatest need of research.

Questionnaire

A questionnaire was developed and administered to participants of the first annual International Conference on Entrepreneurship Research and Teaching Based on the comments from these respondents, two questions were added to the subsequent questionnaire and on question was slightly reworded to reduce confusion The additional questions are shown as numbers three and six in section two of the questionnaire as presented in appendix.

The questionnaire was two part in nature. The first section consisted of background information from the respondents The second section of the questionnaire consisted of a series of seven questions relating to the definition of entrepreneurship and the effectiveness of entrepreneurship research. The seventh question was an open ended question designed to elicit assistance in the further development of this questionnaire There were very few responses to question seven, other than to add a question dealing directly with entrepreneurial traits and characteristics This was done in the questionnaire administered to the participants of the second conference.

Sample

The sample surveyed consisted of those people attending the first two International Conferences on Entrepreneurship Research and Teaching The first was held in 1991 at Cambridge, England. There were seventy-seven people in attendance at that conference. However, only fifty were still in attendance when the questionnaire was distributed Of these, twenty-three completed the questionnaire. The second conference was held in Dortmund, Germany in 1992. Of the 100 people in attendance, sixty received a copy of the questionnaire. Of these, there were twenty-five returned Two of the returns from the second conference were deemed invalid, since they were not completed in their entirety. The data, therefore, consisted of fourty-six completed and useful questionnaires from a total 110 distributed. This amounts to a response rate of 41 8 per cent.

The population consisted of representatives from the academic, government, and economic development sectors All had expressed an interest in developing the spread of entrepreneurship on a global scale The members of the two conferences represented all parts of the world The largest, single block came from the United States The second largest block of participants came from Western Europe.

Respondents to the questionnaire reflected the diverse nature of the conferences Table 4 1 presents a summary of the country or region of education of the respondents

Table 4 1
Country/ region of education of respondents

Country/ region	Total	% of total
U S A.	15	33
Western Europe	15	33
Eastern Europe	3	6
South Africa	7	15
Australia	5	11
Others	1	2
Total	46	100

Survey Results

The first significant findings of the questionnaire was that the overwhelming majority of the respondents believed that there was a difference between entrepreneurship and small business management Of the fourty-six respondents, thirty-five answered that question in the affirmative Only eight respondents answered negatively. The remaining three respondents noted that they were from the eastern bloc and any small business person had to be an entrepreneur, since all small businesses were new and growing and involved risk taking and/ or creativity. That indicated that 38 or 82.6 per cent of the respondents agreed that there was a difference between entrepreneurship and small business management There was no significant difference between the responses from the two conference groups on the responses to this question

The response of those who answered that there was a difference indicated a clear agreement as to the definition of entrepreneurship. The responses clustered in four combinations of characteristics These were:

- innovation/ creativity
- start-up/ new ventures
- growth/ opportunistic.

The respondents from both conferences agreed three basic areas for entrepreneurship research. These were, in order of preference:

- characteristics/ traits of the entrepreneur
- the entrepreneurial process
- effective teaching of entrepreneurship.

Additionally, the respondents from the second conference, in Dortmund, Germany felt that research should also focus on economic development provided by entrepreneurs This additional topic was felt to be the result of the transformation that had occurred in Eastern Europe, and areas of Africa It was also a result of the larger number of participants from the former Eastern bloc countries and from South Africa, attending the second conference.

The respondents from both conferences agreed on the importance of the types research methods, for the most part. Both groups felt that survey methodology was the most important type of research This form scored 2.3 on the 5 scale This was followed by case research which scored 2.98 on the 5. scale. there was disagreement between the two groups as to the ranking and importance of conceptual research The first group ranked it fifth while the second group ranked it second, closely followed by case research The results listed in table 4.2 represent an average score for this method.

When asked to rank the usefulness of data gathering techniques, the two groups were extremely consistent in the responses Ranked first was interview technique with a score of 1.8 on the 5. scale. This was closely followed by questionnaires with a score of 2.23 on the 5. scale The remaining techniques trailed these two in scores.

The rankings and scores of the responses for this question are presented in table 4.2.

Table 4.2
Usefulness of research methodology and data gathering techniques

Research method	rank	score	data gathering techniques	rank	score
Surveyes	1	2.30	Interviews	1	1.80
Case method	2	2.98	Questionnaires	2	2.23
Observation	3	3.15	Standardized instruments	3	3 04
Experimentation	4	3.18	Secondary sources	4	3.65
Conceptual	5	3.25	Projective tests	5	4.00

The results of the question dealing with the goals of entrepreneurship research were considerably different for the two groups The first group presented no strong differences between the five goals presented The second group did indicate a clustering of responses, however. Moreover, the rankings of the two groups differed for the five goals. The results of the two groups to this question are presented in table 4.3.

Table 4.3
Entrepreneurship research goals

Goal	rank	score	rank	score
Improve dec. mkg. effect.	1	2.74	5	3.72
Enhance econ. dev.	2	2.78	2	2.56
Improve teaching	3	3.00	3	2.97
Understand entrepreneurs	4	3.05	1	2.50
Problem ident.	5	3.25	4	3.64

The responses to questions three and six were elicited only from the Dortmund group since these were the questions that were added after the Cambridge conference. Question 3 was designed to determine which characteristics or traits should be the focus of entrepreneurial research. Question six was designed as a follow-up and reliability test for the second part of question 1.

The responses to question three generally were divided into categories in roughly equal proportions One involved the need to study leadership and management traits and characteristics of entrepreneurs. Another recommended focus involved the ability of entrepreneurs to become involved in creative and innovative activities A third focus involved the issue of attitudes, values, and ethics of entrepreneurs A fourth direction was to study the risk taking characteristics of entrepreneurs While these were the predominant characteristics and traits that were recommended for study, there were also a series of other traits listed by one or two respondents. Interestingly enough, three respondents indicated that there was enough research in this area, already Two other respondents indicated that entrepreneurship process was a more important research topic than traits or characteristics.

The responses to question six followed very closely the pattern of responses to those of part 2 of question 1 from both groups Moreover, these responses were also similar to those from a small subset from the Cambridge conference who added comments at the end of the questionnaire concerning there definition of entrepreneurship These were in response to the open ended question seeking additional comments concerning questions that were missing from or in the questionnaire Once again, these statement contained some combination of the four characteristic combinations referred to above in the analysis of question one.

Summary and conclusion

It is clear from these two samples that there is some consistency in the need for and focus of entrepreneurship research. Respondents represented a broad mix of academicians, administrators, researchers, and economic development specialists. They came from a variety of countries and cultures Overall, however, they agreed on several key issues.

First, it can be seen that the respondents feel that researchers need to get out into the field and relate directly with entrepreneurs. This is evidenced by the overwhelming acceptance of interview and case research techniques. Also, there is a strong feeling that we need to know and understand more about the ability of entrepreneurs to develop and lead in new directions This understanding should, once again, come from direct interaction with entrepreneurs, through interviews and surveys.

There also appears to be a trend towards a convergence of ideas that we, as researchers and teachers, should be trying to help entrepreneurs develop themselves, their businesses and their economies more effectively This may be a response to the need for development of the former eastern bloc and third world countries It may also be a response to the world wide economic malaise.

It is also interesting that, while there is disagreement as to a precise definition of what is entrepreneurship, there is remarkable consensus as to what should go into such a definition From these comments as well as contributions from the literature, it is clear that there is a concept that there is no clear cut distinction between entrepreneurship and small business management Rather, the definition involves more of a continuum, depending on the focus of the research This starts with the conception, creative, and innovation stages through start-up, development, and growth stages to maturation, conservation, and management phases

A definition of entrepreneurship, therefore appears to be 'those activities which combine resources in a creative and innovative manner to develop new or growing organizations to create and improve wealth and value' Moreover, the entrepreneur is defined as someone 'who accomplishes these goals through identification of opportunities in the environment, and is capable of providing direction to others and persevering in his/her endeavours while understanding the acceptable level of risk necessary for success'

This paper has presented an initial attempt to determine the definition of entrepreneurship It has also tried to determine an appropriate focus and methodology for carrying on research in this field. While a statement has been made, it should be made clear that this is a preliminary effort The contribution that we have made is to quantify the views of a small, but significant, group of practitioners, teachers and researchers in the field of entrepreneurship. Instead of simply presenting another prescriptive or normative view of these definitions, we have started the process of developing a true consensus within the field This type of research needs to be continued, casting a wider net for inputs into these critical areas of definition and focus.

References

Broehl (1982), 'Entrepreneurship in the less developed world', in Donald L. Sexton, et al. *Encyclopaedia of Entrepreneurship*, Prentice-Hall, New York, NY

Bygrave, William D and Hofer, C. W. (1991), 'Theorizing about entrepreneurship ', *Entrepreneurship: Theory and Practice*, vol. 16, pp 13-22

Cunningham, J. Barton, and Joe L. (1991), 'Defining entrepreneurship ' *Journal of Small Business Management*, vol 29, pp. 45-61

Drucker, Peter F. (1985), *Innovation and Entrepreneurship: Practice and Principles*, Harper & Row, New York

Gartner, William B (1990), 'What are we talking about when we talk about entrepreneurship?', *Journal of Business Venturing*, vol 5, pp 15-28

Hornaday, Robert W. (1990) 'Dropping the E-words from small business research: An alternative typology.', *Journal of Small Business Management*, vol 28, pp. 22-33

MacMillan, Ian C., and Jerome A. K. (1992), 'Idiosyncratic milieus of entrepreneurial research: The need for comprehensive theories.', *Journal of Business Venturing*, vol. 7, pp. 1-8

Schumpeter, Joseph A. (1934), *The Theory of Economic Development: An Inquiry Into Profits, Capital, Credit, Interest, and the Business Cycle*, translated by Redvers Opie ,Cambridge: Harvard University Press

Smith, Ken G, Gannon M. J. and Sapienza H. J (1989), 'Selecting methodologies for entrepreneurial research: trade-offs and guidelines.', *Entrepreneurship: Theory and Practice*, vol 14, pp 39-49

VanderWerf, Pieter A., and Brush C. G. (1989), 'Achieving empirical progress in an undefined field.', *Entrepreneurship: Theory and Practice*, vol. 14, pp 45-58

Appendix

Information Questionnaire for the Direction of Research at the 1992 Dortmund Research Conference for Small Business/ Entrepreneurship

Section 1 - Demographics

1. Country where you work?
2. Highest academic degree?
3. Country of education?
4. Country of origin?
5. Sex: Male ___ Female

6. Official title/ position
7. Have you ever owned a business?
8. What percent of your time do you spend on the following activities:

    a. Teaching
    b Research
    c University service/administration
    d Service outside university
    e. Business/fee based consultancy
    f. Other (please specify)

    Total to equal 100%

Section 2 - Participant data

1. On research, i.e., is it important to make a distinction between entrepreneurship and small business?

Yes No

If yes, what do you see as the major distinction?

2. What do you consider to be the three most important topics to be researched in entrepreneurship/small business?

a.
b.
c.

3. Which entrepreneurial characteristics or traits do you feel should be researched in order of importance?

1.
2.
3.

4. Please rank the following with regard to their usefulness in entrepreneurship/ small business research? (1 highest, 6 lowest using each number once only)

Research Methods		**Data gathering techniques**	
_	Research survey	_	Questionnaires
_	Research case	_	Standardized instruments
_	Research experimentation	_	Interviews
_	Research observation	_	Secondary data (e.g.: published resources, etc.)
_	Research conceptual	_	Projective test
_	Research other - please specify	_	Other - please specify

5. Please rank the following goals of entrepreneurship/small business research?

_ To improve teaching
_ To enhance economic development
_ To create better understanding of the entrepreneur
_ To improve decision making effectiveness
_ To assist in problem identification
_ Other, please specify

6 Please present your definition of entrepreneurship

7. What items would you have liked to have seen included on this questionnaire?

Please return to either William Naumes or Peter Frangipane before the end of the conference. We will be reporting on the results and comparison of this questionnaire with one completed last year in Cambridge.

05 The Wisconsin Innovation Service Center

Debra Malewicki

Introduction

The purpose of this paper is to describe how the many facets of a university setting can be leveraged in regard to providing non-traditional innovation education for inventors and entrepreneurs; this paper is based on the experiences of the Wisconsin Innovation Service Center (WISC) at the University of Wisconsin-Whitewater.

Since 1980, WISC has assisted independent and small business inventors in estimating the marketability of their new product or service ideas and inventions Since its inception, WISC has evaluated over 3,300 ideas for products and services. Research has been performed for small businesses and independent inventors from across the U S and some foreign countries as well as for university and private programs. As part of the university, the overall role of WISC is to provide education on the innovation process, and thereby encourage the successful commercialization of new product ideas In doing so, WISC focuses on linking university resources to current and aspiring entrepreneurs and inventors

Article

The increasingly important contribution small business makes to job creation and economic well-being is well known and, deservedly, efforts to encourage and assist entrepreneurs appear to be proliferating Yet, some individuals who do not possess nor who always care to develop the entrepreneurial skills necessary for successful business management nonetheless make solid contributions to economic development and warrant encouragement as well. The reference, in this case, is to the independent inventor; not only to the individual involved in university-class research, but also to the one sometimes labelled a workshop tinkerer or kitchen gadgeteer - those in whom creativity, in many instances, seems to have taken precedence over business savvy Independent inventors have historically been credited with the creation of numerous major technological innovations, as widely noted (Hannon, 1987; Port 1990).

It is for these individuals that the Wisconsin Innovation Service Center (WISC), a non-profit program at the University of Wisconsin-Whitewater, was created, offering preliminary analyses of the marketability of new product ideas to allow inventors to make more informed development decisions. Since 1980, WISC has evaluated over 3,300 new product ideas and innovative service concepts Clients from across the U S and from some foreign countries approach WISC for market research assistance with a wide variety of product types.

The purpose of the WISC is to channel investment into commercially viable concepts by encouraging further development among inventors with promising new product ideas, and by dissuading inventors from investment in expensive patents and/or prototypes if the market potential for their particular ideas appears extremely poor According to a study by the U S. National Technical Information Service (1986), on the average at least ninty-five per cent of a product's development costs are incurred after the idea screening stage. By having potential problems identified, and possibly solved, as soon as possible in the commercial development process, subsequent investment, if any, can often be used more efficiently. WISC does not purport to make development decisions for its clients, only to assist them in making more informed choices

WISC-Operation

Market research does not need to be a complicated and expensive project at an early stage of product development. A vast amount of market information that can be extremely useful in assessing the commercial viability of a new product is often available to inventors at little or no cost, a point that WISC reports attempt to communicate The quality of WISC's idea evaluation service lies in access to a network, built up over the years, of technical and specialized consultants with a variety of expertise, as well as maintenance of an in-house staff capable of performing quality secondary market research Reports include preliminary information concerning functional feasibility, degree of current competition, potential level of need, and relevant demographic, societal, and industrial trends

Our perspective on 'Functional feasibility' addresses the question, 'Will this product work as intended?' For simple consumer product ideas, this area may not be a major issue; but for complex products, it can constitute a major obstacle to further development.

In many instances, the workability of a design can be assessed on paper or via computer prior to building a prototype Our service utilizes technical assistance from many sources, including universities, technical schools, federal laboratories, and private consultants Over the years, WISC has built up a network of over 300 outside technical consultants on an ad hoc basis Not surprisingly, consultants with various engineering backgrounds are utilized along with those with expertise in medical and scientific fields We once received a proposal in regard to a new method for moving icebergs from an individual in Milwaukee; having no consultant in this field, we performed a technical literature search and uncovered a professor at the University of Newfoundland with the appropriate expertise who agreed to review the idea The abilities of our outside consultants go beyond the strictly 'technical' in the sense that we also access individuals with 'specialty market' backgrounds; these consultants include those from karate and cosmetology schools, and camping and fishing magazines, for a few examples As a result, outside consultants offer information on not only functional feasibility issues, but on other market factors as well

Functional feasibility can be difficult to assess in instances where the proposed project is technologically complex, or in instances where a human reaction must be predicted For example, a few years ago WISC was presented with a self-defence device for women consisting of a breakable tube, to be pinned on a lapel, containing the pungent odor of skunk The product's alleged viability was based on the theory that if a woman were attacked, she would have only to crack this vial, releasing the odor, which would then throw the attacker off-guard long enough for her to escape Possible, of course, and technically feasible, but basically untestable within the scope of WISC's service (This product was marketed, but apparently achieved extremely limited acceptance.)

Degree of competition

From a competitive standpoint, WISC attempts to define what the substitutes may be for a particular product, in a broad sense. Unfortunately, many inexperienced inventors mistakenly believe immediately that their new product ideas are completely unique and conclude that no competition exist, this is rarely, and perhaps never, the actual situation

In one sense, competition consist of whatever provides similar benefits to the user, the emphasis here is not on product features or configurations, but on customer needs An old marketing axiom states that 'if you're selling drills, don't misled yourself into believing your customers need drill, what they need are hole,' and any other current or potential methods of fulfilling this need constitute competition.

As many inventors know, most inventions are intended to solve problems or, in some cases, provide recreational enjoyment for the user. A competitive analysis can begin with investigating what other products or services are oriented to solving the problem or, as mentioned, what else provides similar benefits For most of our products, businesses student researchers are used to perform the legwork research required to gather this information.

If the product idea is oriented to consumers, WISC's initial competitive analysis may consist simply of visiting or contacting appropriate retailers and scanning relevant catalogues, noting the product features, packaging, display, pricing, and manufacturer of similar products. Information on the competition is also gleaned through literature searches and/or contacting competitive manufacturers and trade associations, such as the National Sporting Goods Association

The result of this type of research is WISC begins to learn the competition's strengths and weaknesses and can better assess the client's product relative to the existing market. From one perspective, a certain degree of competition may not be a negative factor; substitutes may demonstrate that a market for the type of product does exist, and it does address a viable problem For example, the market for consumer recycling products is expected to grow to accommodate many product variations

Level of need

If the client's product appears to be unique and the competition seems to be extremely limited, one possibility is that the degree of need for such products in not strong Assessing the level of need in a detailed fashion is not possible with a preliminary, low cost evaluation; one difficulty we face is that most of our products are kept in confidence, so

WISC staff can not question potential users directly about possible interest Most of our clients' products and services, however, are intended to solve a problem, so we can direct research efforts toward assessing the extent of the relevant problem Although outside consultants can contribute to information on this, we also ask potential customers if the problem the product intends to solve exists and, if so, if it exists to the extent they would be willing to pay for a solution We may also contact retailers and wholesalers for insight into the problem. We have found that discussing the details of a product or exposing proprietary information is not always necessary at the preliminary research stage; interest in the product can often be partially assessed by discussing it in terms of benefits and, as noted, by the severity of the problem it addresses

Current and anticipated trends

Different types of market environment trends, be they industrial, demographic, or societal, affect product demand to varying degrees. Although little can usually be done about them, research into the relevant current and predicted trends can help forecast the level of product acceptance.

Outside of a literature search, other sources for trend information used by our service include government publications and trade association statistics and reports We collect information from the Automotive Information Council, the Electronics Industries Association, the National Sporting Goods Association, and the National Gardening Association, to name a few. We use market projections from those groups and apply them to our client's inventions.

Understanding the status of an industry assists is assessing the risk involved with pursuing particular types of products. If a client is developing a new solar energy product for home heating, for example, knowledge of current industry conditions would help in anticipating and addressing potential customers' concerns. Sales of solar heating devices have declined drastically since 1985 as a result of a number of factors, including relatively low oil prices, the loss of tax credits, reduced federal research funds, and negative consumer perceptions about the industry due to charges of fraud, high prices, and poor quality Obviously, even a tremendous individual innovation in this product area will have to address these concerns to be commercially viable The long-term picture for solar energy is somewhat more promising, given discussions on an energy policy at the federal level, resulting partially from the Gulf War and well-publicized oil spills Other positive factors include the points that global demand for energy is rising, the supply of recoverable fossil fuel is diminishing, and concern about the safety of nuclear energy is expected to continue Unfortunately it can be difficult to convince the marketplace to think in the long-term.

Demographic trends also generally impact product demand and are usually fairly easy to predict for the short-term Obviously, as the baby boomers age, a disproportionate segment of the population will be elderly, this in turn would imply increased demand for the types of recreational activities We caution our clients not to interpret demographic trends too simplistic ally. Although birth rates have been relatively low recently for American women (birth rate is the number per 1,000 women of child-bearing age), this statistic is not completely gloomy for manufacturers of baby items, given that the absolute number of births has been relatively high; it is important to note that babies born in recent years were spread out over a greater number of households, the average number of children per U S household was three for most of the 50's and 60's, but was about 1.7 in the 80's (U S. Census, 1989). This is good news for manufacturers of high chairs, cribs, and other baby items that tended to be passed down from child to child in one family.

We hope that our clients will be able to 'leverage' the information our reports provide in that our research will suggest additional avenues to pursue for market insight As a result of initial research, our goal is to help the client develop a feel for the level of need for the product in the market and decide whether proceeding with the next stages of development involves an acceptable level of risk.

Definition of success

As mentioned, the goal of WISC is to encourage inventors to take the next step in the development process or to encourage a reassessment of the product if commercial viability appears poor. The success of WISC, therefore, is contingent upon the client's satisfaction with the service and the credibility of the research report. We track satisfaction and development activities immediately after receipt of the report and one year later; based on our feedback, over ninety per cent of our clients are satisfied with their reports; those with favourable evaluations are usually encouraged to proceed and those with unfavourable reports usually pursue alternative ideas

The vast majority of our clients, including those with potentially viable ideas, of course, quickly find that the birth of the idea is certainly not close to half the battle. At WISC, however, we can offer information only in regard to idea, and cannot judge the tenacity of clients to pursue it, which is the most important criteria for success, but we are also interested in saving an individual's money if further investment in a particular invention may not be wise This separates the WISC from many other private, as well as many other public programs, in that we offer information as to why the invention may not warrant development, rather than just offer rejections Of course, it is often not cost-effective for investors and businesses to explain their lack of interest in certain products, but it is part of WISC's role. Many inventions WISC has reviewed have reached the market, of course, with varying degrees of success. A Florida scientist joined with a larger California firm to successfully marked an improved time-of-flight mass spectrometer, a podiatrist licensed his new shoe design idea to Reebok; a Wisconsin inventor is profitably marketing a new snow removal device.

As note, WISC has evaluated a wide range of inventions, from sophisticated technology to simple kitchen gadgets Submissions to our service, as would be expected, follow societal concerns and events to a certain degree When energy conservation is a popular issue, we receive a proportionately great number of energy saving devices, the overwhelming success of Trivial Pursuit inspired many game developers (This is an inventor's 'dream story' in the sense that the game was supposedly rejected by the major industry players, forcing the inventors to raise capital from friends and relatives and market the game themselves before their licensee finally took an interest, since the inventors have also supposedly collected millions of dollars in royalties, the story has a very happy ending.) The current concern with AIDS has caused many proposals for 'safer' needles to be submitted to our service, and the nation-wide interest in recycling has spawned a wide variety of redesigns for kitchen garbage collection.

Sources of inventor assistance

Based on client feedback, WISC's clients are very satisfied with the service, as noted and believe it helped them make a decisions about the development of their inventions; however, inventors with product ideas which appear to be commercially viable require assistance beyond early-stage market research if they are to ultimately introduce their products to the market successfully

Based on WISC's research, there has not yet been an attempt to formally code and organize the vast array of informal and less visible source of assistance for inventors, particularly those available in the private sector.

When the inventors have an opportunity to interact, as they do as part of the WISC's, they share information on a wide variety of areas: Which patent attorney are most receptive to working with independent inventors? What manufacturers will do small runs? Which ones may help with prototype development? What companies consider outside proposals? These questions represent only a small sampling of information inventors need, but even networking at inventor gathering often can not provide the specific information needed when it is most useful.

To address inventors' information needs, WISC is developing a comprehensive electronic database, funded by the U.S. Department of Energy, with search capabilities by geographic region and by product category/industry. It will target both public and private resources capable of, and interested in, working with individual and small business inventors. Private resources are excepted to include not one intellectual property attorneys and various manufacturers, but also other inventors, distributors, and consultants. Quick access to this information is expected to reduce an inventor's product development time, an increasingly critical issue as product life cycles grow ever shorter, as well as reduce frustration levels. Updated information would be added weekly, with a complete overhaul scheduled on an annual basis.

Although this database would be beveloped initially for Wisconsin, DOE expects the information aquires over the course of development and testing, such as data collection methods and types of information it include, to be valuable for similar development in other areas and to minimize time required for such efforts.

In contrast to efforts to assist inventors, our organization is painfully aware of numerous 'idea brokers' operating across the United States, which offer product evaluations to individuals, then entice them into paying additional exorbitant fees with the promise of marketing their inventions. Typically, the inventor pays theses companies from $400 to $600 and up for an initial evaluation, which is rarely valid and nearly always very favourable, the companies then offers to proceed with development for anywhere from $3,000 to $5,000 or more. After the second payment is received, little is usually done by these organizations. Our Program recently worked with the Wisconsin Department of Justice to inhibit the activities of these companies in Wisconsin; unfortunately, however, fraudulent invention development firms seem in no danger of becoming extinct in the near future, although the increasing activism of inventor organizations is making profitable operations of these companies more difficult.

Many prestigious commentators have noted recently that the age of the technological breakthrough stemming from the independent inventor has long since passed, and invention has become entirely too complex for any single person to accomplish (Smith, 1981; Russel, 1984). The director of the Patent and Trademark Office during the 19th century is quoted (repeatedly) as stating, 'Everything that can be invented has been, so the patent office, should be closed.' In 1956 in American Capitalism, John Kenneth Galbraith wrote, 'There is no more pleasant fiction than that technical change is the product of the matchless ingeunity of the small man forced by competition to employ his wits to better his neighbour. Unhappily, it is a fiction. Technological development has long since become the preserve of the scientist and the engineer. Most of the cheap and simple inventions have, to put it bluntly and unpersuasively, been made.'

According to a recent 'Products of the Year' article in Fortune magazine (1985), however, inventions still pop out of garages and attics enough to keep the spirit of Alexander Graham Bell alive.' Not always 'high-tech' breakthroughs, certainly, but solid contributions to job creation or retention.

As noted, WISC has performed invention evaluation for small business and independent inventors from across the U S. and some foreign countries, as well as for university- and private programs. Interest in the Wisconsin Innovation Service Center has increased steadily over the past several years, and nationally, the number of independent inventor organizations and networks has risen dramatically. Based on our experience, the spirit of independent invention remains strong, and the university has a role in seeing that it continues

References

Censusu Bureau, U.S. Dept. of Commerce (1989)
Hannon (1987), *Forbes*, vol. 14, December
National Technical Information Service, U.S. Dept. of Commercee (1986), 'Evaluating R&D and New Product Development Ventures'
Port (1990), 'Call him Mr chips', *Business Week*, vol 10, September
Russel (1984), 'Inventors come of age', *Venture*, December
Smith (1981), 'Big vision', *Fortune*, vol. 29, June

06 Emerging global opportunities for entrepreneurs

Alfred J. Hagan, Edward Sanford, Sheldon C. Snow and Terry W. Young

Article

There is a world-wide restructuring of growth policies in third world (TW) and command economies (CEs) Current growth strategies stress market-driven goals rather than political ideology. Countries are changing the structure of their political and economic philosophies to accommodate new industrial policies. The current problem facing these nations is how to foster, but more importantly, to sustain viable economic growth.

Privatization, though a potent catalyst, is insufficient to guarantee the internal development necessary to sustain free-market economics in these TW & CE nations. These nations are faced with the problem of how to fuse long-term economic growth with a current desire for expanded entrepreneurial activity.

Originally, multinational corporations (MNCs) often sought resources overseas. Today, a method for TW or CEs to begin their drive to sustained growth is to entice those MNCs with sufficient resources to join in a co-operative effort with local entrepreneurs and privatized state businesses in free markets. What this opens up is the opportunity for establishing new strategic alliances between government, local entrepreneurs and MNCs

A new formula is emerging in these alliances:

- governments have the opportunity to reduce unemployment and improve their world-wide competitive trade positions
- local entrepreneurs can secure expanded market opportunities and access to international capital markets through joint venturing with MNCs while courting the approval of the local governments.

- MNCs can be guaranteed improved security of their assets through political stability. There is also the option of increased access to local markets with the potential for higher returns through a more amicable legal and statutory commercial framework.

These new strategic alliances can form a platform for the successful emergence of a new industrial policy with privatized state enterprises. Privatization, per se, will not guarantee this type of joint co-operation A recent study provides insight into the attitudes of US MNCs.

It is clear from our recent survey of US MNCs, that if MNCs cannot secure the political stability and legal framework necessary to reasonably protect the resources these firms risk in joint-venturing, they will not participate

Many mainstream economists have been sceptical about the concept of privatization as a solution to the problems of TW and CEs. This lack of enthusiasm by economists is not based on a preference for centralized economic planning or nationalization of industries. It is based on the belief that competition, not ownership, is what is needed in industrial policies to promote and sustain growth.

The simple global rush toward privatization is not an economic solution to ex-Communist institutional inefficiency as the inertia of developing countries. It has proven insufficient to generate the desired growth. There is increasing concern for the introduction of new legal forms of ownership to replace failing forms of bureaucracy. Many view the change from state bureaucracy to corporate bureaucracy as offering no significant improvement. Private, personal ownership on the other hand injects entrepreneurial enthusiasm into the firm and promotes sustainable growth.

It is true that there has been a rise in the popularity of private ownership. This has not only been the case in the economic reforms of China, the defunct Soviet Union, and Eastern Europe. It has also been the case among the developing nations of Latin America such as Mexico and Brazil, as well as in industrialized nations like the UK.

In a rigidly controlled centralized market, there are no incentives to either conserve resources, minimize cost or maximize profits. Enterprises become mere appendages of the outreach of government bureaucracies. These state enterprises were restricted in their decisions concerning production, sales and prices Their primary task was simply to meet the social and production goals set by state planning agencies.

The whole privatization concept and its goals are a completely alien idea to the governments of CEs. In recent years however, they have begun to manifest an appreciation for the fact that private ownership, by its very nature, is conducive to growth in their economies They have begun to manifest the Schumpeterian appreciation for entrepreneurial ownership as an absolutely necessary catalyst of economic growth

These governments may still uphold some public ownership as a mainstay of some economic institutions However, they also encourage the simultaneous development of private activity in urban as well as rural settings This type of privatization process is tantamount to fostering the political and social goals of the government in providing public goods through private production systems This new synthesis has energized the development of a new industrial policy that promotes sustainable growth.

The means by which this type of privatization takes place is accomplished through joint ventures of established local business and entrepreneurs with MNCs attempting to expand their global markets. In this way, there is a coincidence of goals between private and public interests. Many governments, in attempting to speed up their development now understand that unless managers, like entrepreneurs, have a direct personal stake in the profitability of their enterprises, that national economic growth is not sustainable Price reforms are not enough.

Under a free market system, the government usually initiates privatization through some form of enlightened distribution or sale of existing state enterprises On the other hand, since very few people in ex-Communist countries have the financial resources to buy or subscribe to the securities of state-owned enterprises auctioned for sale, these governments have exercised options such as:

- Sales to foreign MNCs or other investors groups This can bring the country at issue: scarce foreign exchange that can be utilized, idle resources for domestic investment, and, the increase of domestic consumption
- Mass distribution of some form of vouchers or certificates, as in the case of Czechoslovakia and Poland.
- Handing over the enterprise to existing management and workers. Though this has some appeal as a form of democratic capitalism, it can suffer from the fact that, in many cases, it means handing the enterprise over to former Communist appointees or, in the case of the Soviet Union, to the nomenclatura

An emerging link between privatization and competitive private enterprise is the tactic of joint venturing local entrepreneurs with multinationals seeking market expansion.

A recent study of US-based MNCs provides support and additional insights into the attitudes of US MNCs toward Foreign Direct Investment (FDI) as it relates to changes in a nation's industrial policy. The results of the study evidence a continuing interest in investing in Western European countries, as well as a willingness to increase investment in Asian and Latin American countries under appropriate conditions. It also demonstrates an interest in increasing participation in Asian and Latin American countries (figure 6.1).

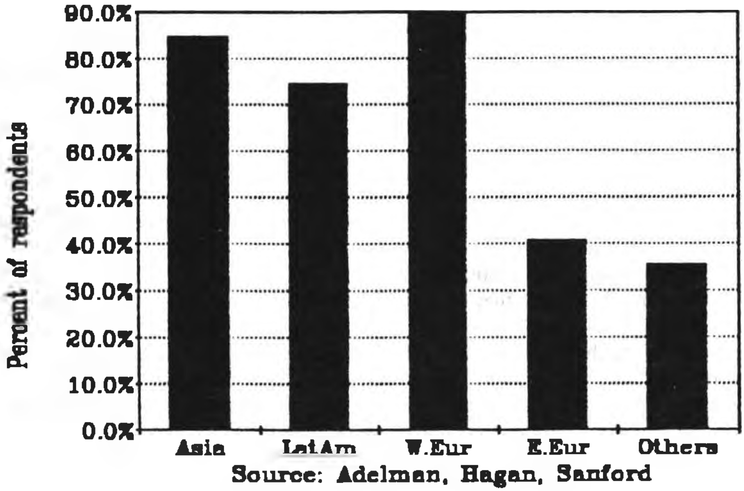

Figure 6.1 Regions of interest for US MNCs

Perlmutter's theory on managerial attitudes would suggest that these firms tend to be geocentric in their view of the world as a mere extension of their own domestic operations

Our survey indicated that for the next ten years, the companies that have previously invested in Latin American and Western Europe, not only plan to maintain their traditional footholds in these regions, but also plan to increase their current levels of investment Asia and Eastern Europe are being looked at as primary new arenas for FDI by most of the respondents. This seems to be motivated by the possibility of opening up of new markets.

The strategic objectives for investment abroad have changed dramatically for these firms Earlier concerns about low cost production (see figure 6.2) have been replaced by new interest in market expansion and improved rate of return on their investment capital. (see figures 6.3 and 6.4)

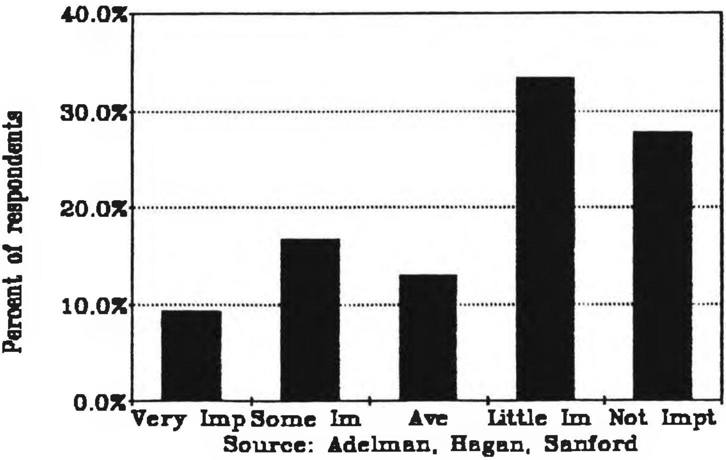

Figure 6.2 Rating of cost reduction as strategic objective in FDI

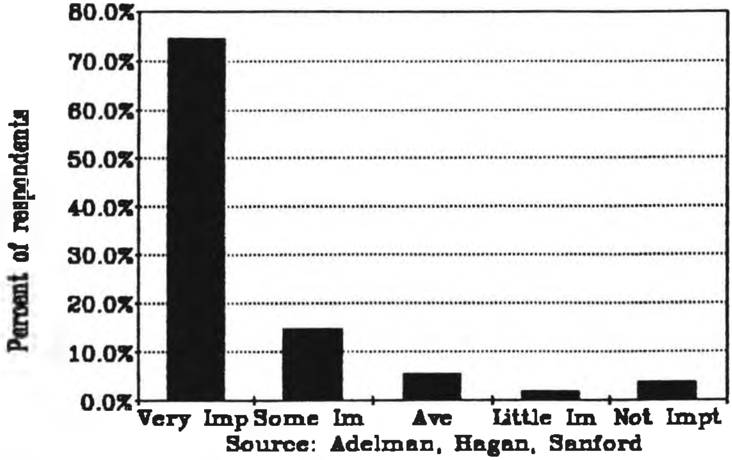

Figure 6.3 Rating of market expansion as strategic objective in FDI

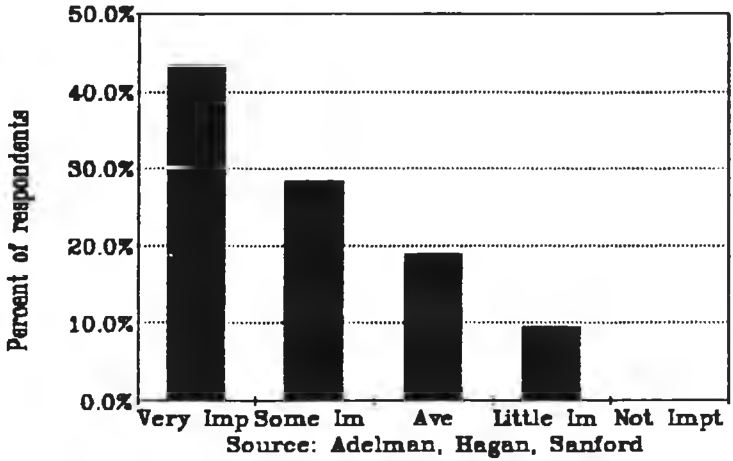

Figure 6 4 Rating of ROI as strategic objective in FDI

Several economic factors were identified as reasons for increased FDI by the US MNCs. Politico-legal environments strongly affect multinational investments Firms are only willing to invest in a country where there is a strong perception of political stability. This is partly due to the demise of the old 'gun-boat diplomacy' mentality, where governments were accustomed to using political and military pressure to protect the interests of the MNCs. The US government does not insure its investors' safety abroad. This laissez-faire policy undoubtedly forced MNCs to seek countries where they could minimize their political risks.

The currently improved clarity of foreign ownership laws and the newly relaxed requirements of these laws are important in the decision to invest abroad Firms must be allowed not only to joint-venture, but also to be able to operate as wholly-owned subsidiaries. One of the many incentives for FDI has been greater freedom from governmental constraints To attract new investment, firms must be able to remit or transfer their profits with ease.

The study indicates that globalization of demand rather than cost reduction now provides the primary impetus motivating multinationals to pursue joint ventures with Third World entrepreneurs

The past ten years have demonstrated a substantial increase in foreign investment on the part of firms seeking to reduce costs of manufacturing These investments have taken firms to several Pacific Rim countries As the marginal benefits eroded from these investments, many of these same firms transferred investment or simply expanded investments in Latin American countries with newly relaxed investment guidelines - still seeking lower cost production sites.

More recently the record shows a greater concern for expanding global market share This concern has induced firms to shift their investment interest to potential markets in former TW and CEs whose recent political/economic record indicates a potential for greater marginal growth rates than current markets will offer.

In recent decades, high costs of capital and depressed markets in home countries have forced multinationals to consider new forms of foreign direct investment. Moreover, with the opening up of many TW and CEs, there is an increasing desire to take investment positions in these countries. The MNCs find themselves spread thin in terms of their managerial as well as financial resources.

Traditionally, foreign direct investment by MNCs was in the form of wholly- or majority-owned foreign subsidiaries These investment modes are currently being replaced by new forms of international investment, such as, mixed enterprises, joint equity ventures, and contractual co-operative arrangements The TW and CEs have adopted these non-traditional types of global investment as an integral part of their current growth strategies.

These changes have provided global opportunities for not only the MNC but also the local entrepreneurs. By sharing technology control and profits with local entrepreneurs, the MNCs can benefit from their partners' understanding of: local market conditions; access to local finance, links to the government; and, a willingness to share the risks Thus, if nations will foster industrial policies that will encourage these new strategic alliances with entrepreneurs and MNCs, sustainable growth is achievable

References

Adelman, H., Hagan, J A , Sanford, E. (1992), *Survey of US MNC Investment Objectives*, In progress

Perlmutter, E (1969), 'The tortuous evolution of the multinational corporation' *Columbia Journal of World Business*, Januar-Februar., pp 9-18

07 Attitudinal characteristics of male and female entrepreneurs in the United States and India

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Introduction

A description of entrepreneurs by the identification of clusters of attitudes that they hold in distinction from the attitudes of non-entrepreneurs has been described by Robinson (Robinson, Stimpson, Huefner and Hunt, 1991). This attitude assessment methodology includes the use of a measuring instrument called the Entrepreneurial Attitude Orientation Questionnaire, or EAO The EAO has been validated and found to be useful in the differentiation of entrepreneurs in the United States Specifically, entrepreneurs have been found to have higher scores on the attitude clusters of Innovation, Achievement, self-confidence, and personal control, than non-entrepreneurs The utility of this attitudinal approach to the description of entrepreneurs in preference to approaches based on personality traits or demographic characteristics has been detailed by Stimpson, Robinson, Waranusuntikule and Zheng (1990)

While entrepreneurs and non-entrepreneurs have been found to differ on these four attitude clusters, no attempt has previously been made to examine the possibility of gender differences on these dimensions. The present study addresses that issue by comparing the innovation, achievement, self-confidence and personal control attitudes of male and female entrepreneurs and non-entrepreneurs. Data were selected from male and female entreprenuers and non-entrepreneurs in the United States Additionally, a parallel set of data were obtained in India, to facilitate cross-cultural as well as intra-cultural Comparisons

Research procedures

The EAO Scale (Robinson, et al., 1991) was shortened from seventy-five items to thirty-six items and 'purified' using factor analysis and discriminant analysis. No reduction in Test-retest reliability resulted from this process, and the long and short versions perform virtually identically in measuring the four attitude clusters. This short form of the scale was administered to subjects in a three factor design with culture (Indian or American), gender (male or female), and group (entrepreneur or non-entrepreneur) being the factors

For purposes of this study an entrepreneur was defined as a person who has started a new business within the last five years and who presently is the sole owner of that business. This is consistent with the definition used in earlier studies by Robinson et. al (1991) and Stimpson et al. (1990). The current size of business for the entrepreneur sample ranged from five to thirty-five employees and the economic sectors represented included food services, manufacturing, construction, service, retailing and transportation.

Study 1: United States

In the United States, subjects were identified from lists of business owners obtained from the Chambers of Commerce in several large cities Data were obtained by mail questionnaires which had a return rate of approximately twenty percent The usable sample included forty-six male entrepreneurs, 105 female entrepreneurs, thirty-three male managers and fourteen female managers Data were analyzed using two factor ANOVA S to examine gender and group differences on each of the four attitude clusters.

Results

The results of the analysis of the U S. data appear below in tables 7.1, 7.2, 7.3 and 7.4.

Table 7.1:
Two-factor ANOVA of innovation scores of male and female entrepreneurs and non-entrepreneurs in the United States

Source	df	Sum of Squares	Mean Square	F-Value	P-Value
Group	1	1.395	1.395	5.267	.0228
Gender	1	.748	.748	2.825	.0944
Group * Gender	1	1.591	1.591	6.009	.0151
Residual	194	51.371	.265		

Dependent: Innovation

Table 7.2:
Two-factor ANOVA of achievement scores of male and female entrepreneurs and non-entrepreneurs in the United States

Source	df	Sum of Squares	Mean Square	F-Value	P-Value
Group	1	2.656	2.656	12.930	.0004
Gender	1	3.019	3.019	14.696	.0002
Group * Gender	1	.643	.643	3.126	.0785
Residual	194	39.850	.205		

Dependent: Achievement

Table 7.3:
Two-factor ANOVA of Personal control scores of male and female entrepreneurs and non-entrepreneurs in the United States

Source	df	Sum of Squares	Mean Square	F-Value	P-Value
Group	1	7.132	7.132	32.500	.0001
Gender	1	.183	.183	.836	.3617
Group * Gender	1	.560	.560	2.553	.1117
Residual	194	42.570	.219		

Dependent: Personal Control

Table 7.4:
Two-factor ANOVA of self confidence scores of male and female entrepreneurs and non-entrepreneurs in the United States

Source	df	Sum of Squares	Mean Square	F-Value	P-Value
Group	1	.041	.041	.134	.7151
Gender	1	2.114	2.114	6.912	.0092
Group * Gender	1	.040	.040	.130	.7186
Residual	194	59.338	.306		

Dependent: Self Confidence

There is a significant main effect due to group (entrepreneurs are higher than non-entrepreneurs) for innovation, achievement, and personal control, but not for self confidence. There is a significant main effect due to gender (males higher than females) for achievement, and self confidence, but not for innovation or personal control There is also a significant group by gender interaction for innovation, with female entrepreneurs higher than female non-entrepreneurs These relationships can best be summarized with a graph of means

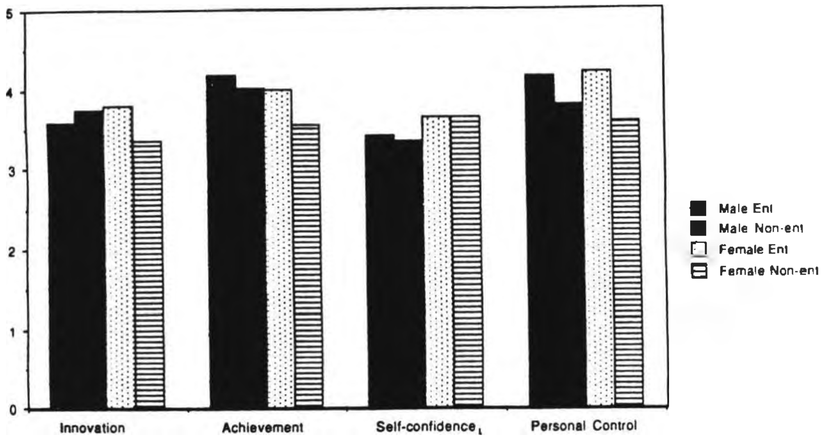


Figure 7.1 Mean scores of male and female entrepreneurs and non-entrepreneurs in the U S A.

The means in figure 7.1 show that entrepreneurs are higher than non-entrepreneurs on innovation ($p < 05$), entrepreneurs are higher than non-entrepreneurs and males are higher than females on achievement ($p < 01$); females are higher than males on self-confidence ($p < 01$); and entrepreneurs are higher than non-entrepreneurs on personal control ($p < 0001$).

Discussion

In the U S., male and female entrepreneurs are similar in that they both have higher scores on innovation, achievement, and personal control than non-entrepreneurs. This affirms the findings of an earlier study (Stimpson, 1990) with regard to males and provides the additional information that females are essentially similar to males on these dimensions.

The discovery that female entrepreneurs and non-entrepreneurs both have higher self confidence scores than their male counterparts is a matter of considerable interest It may be that females in the Unites States need more self confidence than males in order to venture into the business world in either an entrepreneurial or non-entrepreneurial role This is, of course, pure speculation, since these data are correlational, not cause and effect in nature. It is also worth nothing that male entrepreneurs and non-entrepreneurs have higher achievement scores than their female counterparts These gender difference have not previously been reported

Study 2: India

In India, subjects were identified from a list of business owners from the Department of Industries and Commerce, Government of Tamilnadu, India Questionnaires were administered by graduate student from the departments of psychology and sociology at Bharathiar University, Coimbatore, India Data were obtained from forty-four male entrepreneurs, fifty-three female entrepreneurs, fifty-one male white colour workers and fifty female white colour workers. Data were analyzed using two-factor ANOVA`S to examine gender and group differences on each of the four attitude clusters

Results

Results of the analysis of the Indian data appear in tables 7.5, 7 6, 7.7 and 7.8:

Table 7.5:
Two factor ANOVA of innovation scores of male and female entrepreneurs and non-entrepreneurs in India

Source	df	Sum of Squares	Mean Square	F-Value	P-Value
Group	1	.241	.241	2.009	.1579
Gender	1	.132	.132	1.099	.2957
Group * Gender	1	1.233	1.233	10.259	.0016
Residual	204	24.517	.120		

Dependent: Innovation

Table 7.6:
Two factor ANOVA of achievement scores of male and female entrepreneurs and non-entrepreneurs in India

Source	df	Sum of Squares	Mean Square	F-Value	P-Value
Group	1	.024	.024	.151	.6984
Gender	1	.071	.071	.446	.5051
Group * Gender	1	.186	.186	1.170	.2808
Residual	204	32.451	.159		

Dependent: Achievement

Table 7.7:
Two factor ANOVA of self confidence scores of male and female entrepreneurs and non-entrepreneurs in India

Source	df	Sum of Squares	Mean Square	F-Value	P-Value
Group	1	.641	.641	2.488	.1163
Gender	1	.185	.185	.718	.3976
Group * Gender	1	.037	.037	.142	.7068
Residual	204	52.583	.258		

Dependent: Self Confidence

Table 7.8:
Two factor ANOVA of personal control scores of male and female entrepreneurs and non-entrepreneurs in India

Source	df	Sum of Squares	Mean Square	F-Value	P-Value
Group	1	1.657	1.657	7.041	.0086
Gender	1	.363	.363	1.541	.2159
Group * Gender	1	1.375	1.375	5.841	.0165
Residual	204	48.019	.235		

Dependent: Personal Control

These analyses of the Indian data indicate a significant main effect due to group (entrepreneurs are higher than non-entrepreneurs) on personal control, but not on innovation, achievement, or self confidence. There are no significant differences due to gender and there are two significant group by gender interactions: on innovation, female non-entrepreneurs are higher than the other groups, and on personal control, male entrepreneurs are higher than the other groups. A graphic summary of the results appears in figure 7.2.

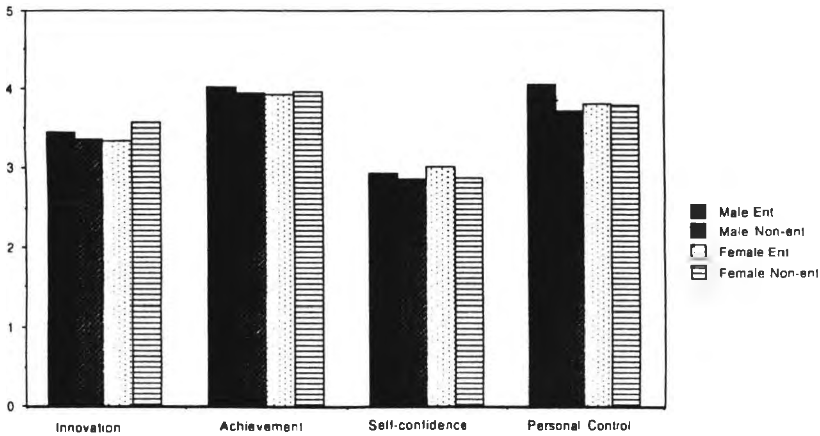


Figure 7.2 Mean scores of male and female entrepreneurs and non-entrepreneurs in India

Figure 7.2, summarizing the Indian data, shows that entrepreneurs are higher than non-entrepreneurs on personal control($p<.02$); female non-entrepreneurs are higher than other groups on Innovation ($p<.001$); and male entrepreneurs are higher than the other groups on personal control ($p<.02$)

Discussion

These findings evidence that the EAO does not provide a particularly useful method for differentiating entrepreneurs from non-entrepreneurs in India Several other studies have recently shown some lack of portability of psychological constructs among cultures Seybolt (1986) found work attitudes and motivation of managers in the PRC and the U S to be quite different. Scheinberg and McMillan (1989) investigating motivation to start a business, rport substantial differences among eleven countries And Danbridge and Ford (1989) have reportet on cultural vatiations in entrepreneurial propensity.

It should prove useful to invest some effort, culture by culture, in the discovery of the attitudinal characteristics that distinguish entrepreneurs (both male and female) from non-entrepreneurs. The education and training of entrepreneurs could profit from the inculcation of attitudes associated with entrepreneurial behaviour.

References

Danbridge, T., C.and Ford, M., A (1987), 'Use of a self-assessment profile to differentiate among professional groups on entrepreneurial characteristics', *Frontiers of Entrepreneurship Research*, pp. 220-236

Robinson, P., B , Stimpson, D., V., Huefner, J., C. and Hunt, H , K (1991), 'An attidude approach to the prediction of entrepreneurship', *Entrepreneurship Theory and Practice*, vol. 15, no 4, pp 13-31

Scheinberg, S and MacMillan, I. (1989), 'An eleven country study of motivations to start a buisness', *Center for Entrepreneurial Studies Research Report*, New York, N.Y., New York University

Seybolt, J , Zhou, N. and Wu, U. (1986), 'A preliminary investigation of the work attitudes and motivation of manages in the People's Republic of China', *Prodoceedings of the 18th annual meeting of the American Institute of Decision Sciences*

Stimpson, D., V., Robinson, R , B., Waranusuntikule, S. and Zheng, R. (1990), 'Attitudinal characteristics of entrepreneus and non-entrepreneurs in the United States, Korea, Thailand and the People's Republic of China', *Entrepreneurship and Regional Development*, no 2, pp 49-55

08 A strategic matrix mechanism for assuring family business continuity

Joe Singer and Jerry Hamilton

Abstract

Perhaps the most critical factor associated with the continued operation or extended life of the family-owned business, is succession planning. Survival could be significantly increased if owners and members of the succeeding generation (family and non-family) had a clear understanding of the main issues related to organizational positioning and continuity in operational planning. This paper will present an alternative way of conceptualizing the strategic planning process that is particularly applicable to the small family-owned firm. Utilizing a matrix network that is based upon the two fundamental drivers of family businesses, their process technology and behavioural values, the author reviews, the dynamics of positioning the firm and its leadership for long-term effective growth

In addition to developing several interrelated aspects of the model for explaining and predicting the efficiency and effectiveness of family-owned business, the paper provides a demonstration appendix illustrating the practical application of the conceptualizing technique. Seven distinct operational strategies are analyzed and policy positions are developed showing the most effective set of operating characteristics out of which should flow a number of leadership planning and management decisions that represent action rather than mere reaction to economic growth and succession planning

Introduction

The process of crafting a long-term plan for the leadership and management transition of a family-owned business, is among the most demanding and difficult business challenges any family firm will ever have to face Fewer than one in three family firms will survive transition from first generation to second; only half of that third will successfully experience the next succession Unless business owners and their families can meet the long-term challenge of developing shared understanding, open planning and communication and thoughtfully envisioning business viability, the successful continuity of their family business may never be achieved.

In today's world of ever increasing numbers of both family-owned firms and greater involvement of family members, the critical underlying need for strategic planning is premised upon a fundamental re-examination of organizational management approach[1]. Organizational theory has long acknowledged the necessary repositioning of the traditional planning and control functions to a more family-participative and employee-centred focus; based clearly upon the challenges of knowledge work and the knowledge worker[2] However, the classical management functions of organizing (or positioning for the family business) and family operational leadership approaches, have received little direct attention in empirical studies Much of the organizational effectiveness literature, like the planning literature, is principally devoted to large and manufacturing centred organizations[3] Research questions regarding the 'One Best Mix' of leadership style and organizational effectiveness, at best, demonstrate minor implications for the small family-owned firm[4].

One model, a 'super-positioning model, developed by Dr. David H. Maister of the Cox Consulting Group, is based upon the recognition of observable categories between 'business' and 'practice' (5). Dr Maister believes that a trade-off between family organizational values and the work delivery technology of the firm can lead to the proper alignment or positioning for success.

When viewing the family firm, one approach that has proven particularly beneficial centres on the relationship between family issues and business objectives (6) Professors Longnecker and Moore observe that while family dynamics and business practice exist for separate reasons, there is clearly an overlap between the nurturing drives of human development within the family and the business economic value goals which must be considered for a profitable enterprise (7). For example, efforts to balance and integrate family and business objectives may not always be easily accomplished There may be conflict between the amount of time one wishes to devote to the family and the amount of time that the 'duties' the business system are taking (8).

What researchers do agree upon, however, is that effective administrative practice is founded on an understanding of all human relationships and family values, as they affect organizational design According to Donnelley, the success of family-owned businesses demonstrates that ignorance of the interrelationships involved, 'and not family participation per se, is the key factor in the success or failure of such firms'[5]. Through a shared understanding of the contribution that family values make to the firm's long-term leadership strengths, analyzing weaknesses in process technology, and implementing plans for achieving balance and continuity, are all aspects of the owner-manager's problem in a family firm

Strategic management planning

Although the growth and development of small family-owned businesses is usually characterized by trial and error, emerging managerial approaches to organizing and operating have been derived from a new understanding of the importance of process technology and family organizational values as drivers in shaping successful service firms[6]. Figure 8 1 illustrates the spectrums of organizational positioning for family firms, both in terms of their special knowledge (process technology) as well as in terms of the family values or organizational vision of the owners. Each of these two factors in combination, has a distinct impact on the structure and operation of successful firms.

(X)
THE SPECTRUM OF FAMILY VALUE

<--->

Family Centered Practice	Family Centered Business	Organization Centered Organization	Business Centered Family	Business Centered Business

(Y)
THE SPECTRUM OF PROCESS TECHNOLOGY

<--->

Research Centered Speciality	Application Centered Research	Service Centered Application	Delivery Centered Service	Specialty Centered Delivery

Figure 8.1 Matrix continuum for organizational positioning

A small family-owned business firm's process technology, in this sense, refers to the particular technical/professional and/or knowledge systems employed in the firm to do its work In a simplistic example, a firm where the owner or family members directly carry out the execution of the work, uses a different technology from a firm where the owners hand the execution of assignments or projects to specialists or work/product/project managers A firm that organizes work or customer service around teams has a different technology from one that passes work along from department to department[7].

Work process technology

When differences in knowledge or technology are analyzed comprehensively, they can be grouped in these basic categories.

Strong Idea firms, whether research or applications centred, are organized to deliver singular expertise or innovation on work projects and consulting service assignments of a unique or one-of-a-kind nature The process technology of Strong Idea firms is usually quite flexible, according to the nature of the client, customer or assignment, and often depends on one or a few outstanding experts or family 'stars' to provide the last word

Strong Service firms are technologically and procedurally organized to deliver experienced reliable 'family name' service, especially on complex, major assignments Their process technology is frequently designed to apply comprehensive multi-discipline services of the family firm to clients or customers who want to be closely involved (quality of the relationship) in the process.

Strong Delivery firms are organized to provide highly efficient service on more routinized customer assistance, product preparation or basic service assignments; often to customers who seek more of a product than a special service. The process technology of a delivery centred firm is designed to repeat prior 'name' solutions over and over again with high product reliability, accompanying technical and personal family service quality, cost and schedule compliance

While there are obvious combined areas where the difference between these process technologies may merge the progression is always the same. New ideas and product innovation in a family service business, profession or knowledge discipline, originate in Strong Idea firms. As they become widely understood or more broadly adopted, they are then applied by Strong Service firms. Eventually, where the solution can be routinized, some or all of the work will move on to Strong Delivery centred or pure delivery firms where repetitive quality product or service are turned out and efficiency is the key[8]

The different process technologies, when they are working best, require notable different family member and employee-centred, operating matrix type organizations, staffing patterns, decision structures, etc.[9]. Technology, in a family-owned firm, influences:

- Choice or work process
- Product or project decision making - staffing at the middle of the firm and below
- Best markets
- The family value attributes of what you sell
- Pricing flexibility
- Best management style

Basic family organizational values

From the above it can be seen that a firm's process technology is the fundamental driver that shapes the family-owned firm. The second driver that shapes the successful organizations is the values of the owner(s) and family members leading the firm Although, as Figure 8 1 illustrates, there are five basic value positions for the organization, in practice there are only two fundamental or effective differences in values:

Family Centred Business Family-owned firms, whether product or service oriented business, see their business experience or calling as 'a way of life'. They typically organize around their specialized understanding and the pure creative discipline they represent

Business Centred Family Family-owned business owners, practice their calling as 'a means of livelihood'. They have as their personal and family objectives more tangible rewards - e.g , what material ends are wanted from what they do.

Successful family-owned firms clearly balance practice values and business values, but it makes an enormous difference which of the two is primary[10]. The choice looks like this:

Table 8 1
The spectrum of family-owned firms

FAMILY CENTERED BUSINESSES ◄------►		BUSINESS CENTERED FAMILY
75%	Family Farming	25%
20%	Accounting Firms	80%
70%	Architectural Firms	30%
20%	Engineering Firms	80%
50%	Interior Design Firms	50%
65%	Retail/Services	35%
75%	Law Firms	25%
80%	Management Consultants	20%
50%	Medical Practitioners	50%
15%	Manufacturing Firms	85%
40%	Wholesale/Distribution	60%

The basic difference in the two is that the bottom line in the Business Centred Family is usually Quantitative and comparable to the bottom line of conventional business; while the bottom line of a Family Centred Business organization is first of all Qualitative - how the family members feel about the work they are doing, as well as the contribution they make to the industry and community.

It must be emphasized that there is nothing noble about either choice of values The choice is an entirely personal, largely selfish one, derived from how each family business owner views their mission in life and what they hope to get out of it, for themselves and their family, now and in the future

Nevertheless, Family Organizational Values, in product or service firms influences:

- Organization structure
- Organization decision-making
- Staffing at the top
- Family and non-family
- How you market
- Best clients or customers
- Marketing organization
- Profit strategy
- Compensation systems
- Leadership style and succession

The different positions - Family Centred Business vs. Business Centred Family will lead to very different choices in each of these areas Either direction can produce quite successful results. What is essential, however, is that the firm's leadership know their values and not try to accommodate too many differences Any effort to compromise values will inevitably weaken some of these choices, and consequently weaken the firm

Positioning the family-owned organization

The essence of this fundamental model for organizing and managing family-owned firms, is recognizing that these factors - process technology and values - form a matrix within which the differences between firms, and the appropriate strategies of different firms, become clear. The matrix produces six basic types of firms each of which will have a very different best strategies for the different considerations described above. (See the demonstration appendix) The matrix looks like this

	Strong Delivery Centered	A	B
	Strong Service Centered	C	D
	Strong Idea Centered	E	F

Family Centered Business	------ Business Centered Family

Figure 8.2 Matrix of family organizational values

Methodology

The demonstration appendix for this exploratory paper was developed through the instructive and consultive efforts of Brian J. Lewis of 'The Cox Group, Inc.,' Philadelphia, Pennsylvania. Empirical testing was conducted over an eight-month period in 1991, utilizing focus groups and advisory panels from 'The Family Business Profit Network' and the 'National Association for Family Business.'

The empirical and experiential perspectives of panel members were incorporated into the seven example sets illustrating the 'best' mix of practical and appropriate strategies for each of the six positions (A through F) illustrated above For purposes of organizational balance and consistency, the family firm's operating strategies (seven) should be consistent for its chosen position.

What can be seen from the model, perhaps for the first time, is a clear picture of why some firms succeed doing things one way, while others can be equally successful doing things quite differently. What is also clear is that it will be very difficult to optimize performance and commitment for any firm that mingles too many of the different strategies

Those family-owned firms that have a clear notion about what they do best (their process technology) and a common set of goals (their family organizational values) have always succeeded best - for their owners, their family and non-family members, and their customers

Conclusion

Strategic management planning has all too often proven to be an impractical academic exercise for the small family-owned firm. Couched in the fundamental theorem of planning control, classical management approaches offer little in the way of understanding or predicting behaviour for today's quality product and service knowledge organization and its family mission A more useful frame of reference for conceptualizing organizational effectiveness must examine the two most critical forces shaping not only the future of small family business firms, but in reality our modern industrial, energy, transportation, communication and municipal system in general.

The principal driving force for the small family-owned business will the process technology it develops and employs. From the Strong Idea firm to the Strong Delivery organization; efficiency will flow from having the proper knowledge and technological focus to serve the customers or clients of the firm.

The modification, enhancement and application of the firm's process technology in the effective realization of organizational commitment will result from having a clear sense of family organizational purpose and value.

Notes

[1] Robinson, R B Jr.(1983), 'Measures of small firm effectiveness for strategic planning research', *Journal of Small Business Management*, p. 23, April

[2] Reich, Robert B (1987) 'Entrepreneurship reconsidered: the team as hero', *Harvard Business Review*, pp 81-82, May-June

[3] Cunningham (1977), 'Approaches to the evaluation of organizational effectiveness', *Academy of Management Review*, pp. 463-474, July, Rhorpade, J. (1972), *Assessment of Organizational Effectiveness: Issues, Analysis, Readings*, (Pacific Palisades Goodyear); Kirchoff, B. (1975) 'Empirical analysis of the strategic factors contributing to return on investment proceedings', *Academy of Management;* Mahoney, T. A. (1969) 'Managerial models of organization effectiveness', *Administrative Science Quarterly*, no 14, pp 357-365; Mott, P. D. (1972), *The Characteristics of Effective Organizations*, (New York: Harper and Row

[4] Hornaday R W and Wheatley, W.J (1986) 'Managerial Characteristics and the financial performance of small business', *Journal of Small Business Management*, p. 7, April

[5] Donnelley, R G (1964) 'The family business', *Harvard Business Review*, vol. 42, no 4, pp 93-105, July/August

[6] Shostack, G L (1984) 'Designing services that deliver', *Harvard Business Review*, pp. 133-139, January-February

[7] Lorsch J W. and Mathias, P F. (1987) 'When professional have to manage', *Harvard Business Review*, pp 78-83, July-August

[8] Shostack, G.L. (1984), 'Designing services that deliver', *Harvard Business Review*, p. 135-136, January-February

[9] Naisbitt, J. (1982), *Megatrends*, (New York,) Warner Books, Publisher, p. 149

[10] Neil, Th. (1986), 'Distinctive competence: a marketing strategy for survival', *Journal of Small Business Management*, pp 19-21, January

References

D'Aprix, R (1982), *Communication for productivity*, Harper & Row publishers, New York

Donnelley, R.G. (1964), 'The family business', *Harvard Business Review*, vol. 42, no 4, pp. 93-105, July/August

Greiner, L.E. and Metzger, O.R. (1983), *Consulting to management*, Prentice-Hall Inc., Englewood Cliffs, New Jersey

Hornaday, R.W., Wheatley, W.J. (1986), 'Managerial characteristics and the financial performance of small business', *Journal of small Business Management*, p 7, April

Lewis, B.J. (1988), 'A new model for successful management of engineering design firms - superpositioning', *Engineering Management International*, vol 5, no 1, pp 31-44

Longenecker, J. and Moore, C. (1991), *An entreprenuerial emphasis*, Southwestern Publishing Co., Cincinnati OH

Lorsch, J.W and Mathias, P F. (1982), 'When professional have to manage', *Harvard Business Review*, pp. 78-83, July-August

Matthews, C.H (1991), 'Strategic planning and the family firms: An SBI consulting perpective', *Journal of Small Business Strategy*, vol 2, no. 1, pp 72-80, February

Naisbett, J. (1982), *Megatrends*, New York, Warner Books Publisher, p 149

Neil, Th (1986), 'Distinctive competence: A marketing strategy for survival', *Journal of Small Business Management*, pp 19-21, January

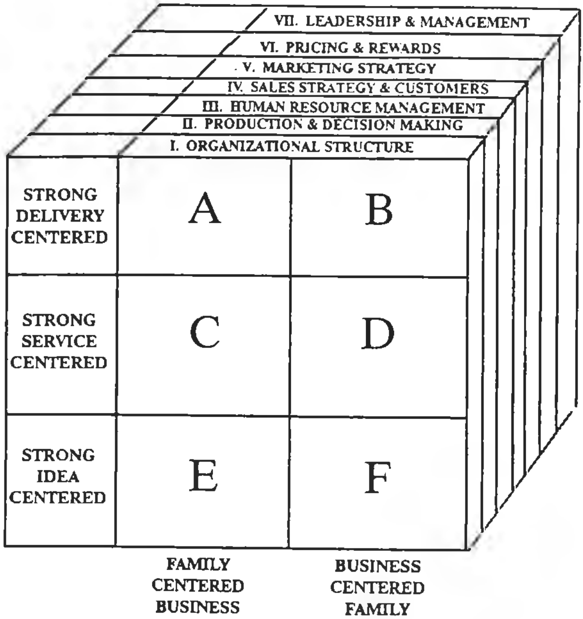
Reich, R.B (1987), 'Entrepmeurship reconsidered: The team as a hero', *Harvard Business Review*, pp 81-82, May-June

Robinson, R.B Jr (1983), 'Measures of small firms effectiveness for strategic planning research', *Journal of Small Business Management*, p 23, April

Rosenblatt, P, Mik, L, Anderson, R and Johnson, P (1985), *The family in business*, Jossey-Bass publishers, San Francisco

Shostack, G.L (1984), 'Designing services that deliver', *Harvard Business Review*, pp. 133-139, January-February

DEMONSTRATION APPENDIX



I. Best Strategies for: ORGANIZATION STRUCTURE AND DECISION MAKING

Strong Delivery Centered	Closely held as a proprietorship or corporation by one or a few family members and siblings who manage a vertical organization. Decision-making tends to be autocratic. Thrives as long as the founder(s) stay closely involved. The Scottish farm or New York Tugboat Captain.	Investors owned by family members and non-family or outsiders who delegate much of the operations and management. Decisions are largely based on a standardized process or S.O.P. Works well so long as the firm's process/product does not become obsolete. Goals are more important than roles-entrepreneurial capitalism.
Strong Service Centered	Broadly owned by family members and structured as a partnership or as a corporation functioning as a partnership. Organization decision making is by consensus. Functions best when owners share similar skill, knowledge, capability and goals.	Closely held family proprietorship, partnership, or corporation with owners making decisions by majority rule. Decisions are clearly oriented toward meeting the long-term goals of the family and their successors. Family culture, norms and team-building dominate. Family holding company with family governance.
Strong Idea Centered	Owned by a single founder/sole proprietor or by partners. Their ideas and creativity in sales and customer/client service drives the firm, and few organization decisions are made.	A proprietorship or small partnership (or closely-held corporation functioning as a partnership). Organization decisions are tailored to maximize the application of one or a few original ideas. Family values and vision create the basis for a clear course of action and credibility.

Family Centered Business FAMILY VALUES Business Centered Family

II. Best Strategies for: CUSTOMER SERVICE AND DECISION MAKING

Strong Delivery Centered	Work is processed through departments or teams, headed by a family or non-family Principal-in-Charge in accordance with standard details and specifications developed through experience. The PIC makes any necessary decisions. Success is achieved by delivering a good product over and over.	Work follows an assembly line process where established standards are critically important. Since the product is standard, the customer may deal with several family or non-family job captains over the course of the project. Quality control is the key to customer satisfaction and is usually ensured by a family member.
Strong Service Centered	Customer orders/service is delivered through project teams or studios centered around the founder or family member (the closer/doer), with a high degree of project decision-making authority. Strong, technically oriented non-family employees provide quality control input, but project success relies on the authority of the closer/doers.	Work assignments are headed by Account Managers and delivered by departments whose family member department heads have quality control and final decision-making authority. Family interests are enhanced by a regular review of customer accounts and product/service benefit to customers. Integrating generalists with fusion of general authority and family governance.
Strong Idea Centered	The firm's product/work process is delivered via personal attention or highly through flexible teams, organized around each job or type of account who take their customer service direction from the idea (founder) principal.	Projects of work products are delivered via stable teams (crew) or studios, often organized around different product or customer types. Founding principal(s) maintains complete authority. Heavy reliance on the bond of family relationships and the integrating of specialists.

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III. Best Strategies for: EMPLOYEE RECRUITMENT AND DEVELOPMENT

Strong Delivery Centered	Recruit experienced specialists who are committed to getting the job done efficiently. Financial compensation - base and bonus, (profit sharing), - tend to be higher than industry norm. Limited job security or advancement over a family member except at top.	Hire and train generalists or para-professionals to do maximum amount of the work via standardized procedures. Invest in training, not salary and benefits, to keep costs low, efficiency high. Factory-like family business culture (associates) culture with compensation by job classification, publishable benefit package and employee stock ownership plans.
Strong Service Centered	Recruit career-oriented specialists with strong sense of commitment to sales and service. Reward via stability of earnings, good benefits, pensions - average or below average salary. Goal is to retain experience via low turnover, possibility of continued advancement and acceptance over and among family members.	Hire experienced generalists comfortable in a family corporate-like structure as business requires. Higher pay, stock options and limited benefits. Family at top are entrenched; less loyalty to non-family in event workload declines. Strong mentoring and leadership development of family members through "operations" board of directors.
Strong Idea Centered	Young bright family and non-family members should be attracted to the firm to be associated with one of the leaders (founding gurus) of the business. Typically receive below market salary, minimal benefits, and move on after a few years unless tapped to the inner family circle.	Recruit young bright individuals: (apprentice) interested in learning from the family. Compensation often below industry norm - attraction is working closely with interesting products or projects. Turnover is encouraged as family members develop experience, credibility and become true socialized successors.

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IV. Best Strategies for: SALES PROMOTION AND TYPE OF CUSTOMER

Strong Delivery Centered	Best clients are volume users and organizations interested in reliable, proven repeat type solutions. Sell the "family's" proven track record and principal(s) knowledge and understanding of how to get things done - "post-bureaucratic." Past clients will return because of the family's rapid response to needs, rapport with the founder(s), and because they receive "undivided attention" and caring.	Best market is occasional or repeat customer unconcerned with originality and/or customers looking only at bottom line. Sell family traditions, proven product, standardized design, assembly line ("it will only take a minute and we'll have it all done"); package deal. "Family tradition creates unquestioned bonds and mutual respect."
Strong Service Centered	Best markets are organizations and individuals with complex needs (JIT) who seek reliable solutions and expect to be involved in the purchase: consultive selling. High repeat business from well-satisfied past customers. Sell closer/doer experience, family member technical skills and commitment to remain on top of the job with personalized, tailored approach, a genuine interest in customer satisfaction.	Best markets are major corporations and agencies with mainstream conservative values where the customer expects to delegate execution of the purchasing after making the selection. Sell proven family business track record, known or demonstrably competent family-business leadership and strength of the organization. Emphasis upon quality, employees (associates), and community roots.
Strong Idea Centered	Best customers are those with unique, "one-of-a-kind" problems, or 'patrons' with individual or corporate egos to satisfy. Customers are always the top decision maker, who may by-pass input from their organization. The sales message is the reputation of the family "guru" leader, and a track record of successful innovation, specialized knowledge and technical, and/or product solutions to uncommon problems.	Best markets are usually customers seeking the ideology and ethic of the family-owned business along with product or service solutions that have been successfully tested by others; e.g., a business community identity among corporations and institutions. They respond to 'sizzle' and messages like "innovation that is cost effective and delivered with genuine caring.'

Family Centered Business FAMILY VALUES Business Centered Family

V. Best Strategies for: MARKETING APPROACH & MARKETING ORGANIZATION

Strong Delivery Centered	Founder(s) sell(s) one-on-one; may frequently proactively take opportunities/solutions to past customers. Effective advertising and public relations campaigns keep the founder(s) and family business name in front of its market. Marketing staff develop a valid legitimizing profile and supports these efforts.	Marketing is carefully planned and managed. Sales representatives find and sometimes close leads. Bidding opportunities are welcomed. Advertising promotes a standard product/willing service. Often rely on heavy entertainment of prospects. Blanket/well-defined coverage of conventions. Profit centers, product group/-delivery teams, headed by family members.
Strong Service Centered	Marketing relies on closer/doer/deliverer founder(s); strong at finding and courting new customers. Facilitative/Consultive Marketing Manager (who may be a non-family member) encourages broad family participation in marketing, produces high quality brochures, publishes a customer newsletter, seeks regular publications in both industry and user-oriented publications. Good record of customer endorsements, particularly by trade or user groups.	Centralized marketing and sale, under a strong Marketing Director (VP), is responsible for preparing the marketing plan. Frequent use of non-family birddogs to find leads, publication of articles/tapes oriented to meeting customer needs, targeted direct mail, customer parties and seminars, some advertising. Sales are closed by family members or non-family principals who hand off work to customer/product service teams. (Family holding company model)
Strong Idea Centered	Marketing is generally unplanned, relies almost entirely on family reputation and traditions; via books and/or articles, professional society awards, entry in premier product competition, frequent speeches, and often a community leadership on political role. Positive (connections) marketing staff, if any, only responds to inquiries ("State of Being").	Marketing is actively shared and planned, particularly in efforts to get to know specific customers, seek publicity and publication of articles in leading trade magazines, produce effective brochures, etc. A marketing coordinator "family rainmaker" will keep the program moving. ("State of Becoming")

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VI. Best Strategies for: PRICING AND REWARDS

Strong Delivery Centered	This family owned business specializes in producing a relatively standard product over and over again. It will do best charging a low fixed price - its profits come from efficiency. Maximizing organizational efficiency - reducing the costs of production - produces high monetary rewards for the founder(s) and non-family members alike. (Performance bonus and stock options).	This family business also seeks high monetary rewards, but achieves them by maximizing volume. Its standardized product and family supported flexible assembly-line process for delivering, thrives on volume. Thus, the firm can often bid low to keep volume up. Lump sum contracts and fixed pricing schedules are essential.
Strong Service Centered	Given the choice, this family business will price all its work hourly, producing steady cash flow with moderate profits. Rewards here relate to family member security, employing many in the firm - increase in salaries, increase in benefits, share in profits, and growth (succession) to ownership. Family togetherness, sharing, and closeness focusing on equity building, individual family member growth and learning.	This firm maximizes return by focusing on a small number of profitable customers with whom they have developed a long-term mutual trust. Genuine caring is provided by family member team leaders (value added). This firm can do well on lump sum/fixed fees, hourly rate service contracts or cost plus fixed fee. Rewards are high monetary returns for the family members at the top-key leadership positions.
Strong Idea Centered	The essential reward for this family-owned business is, simply put, fame. What is most important is wide recognition of the family name and their unique customer service ideas; because fame will bring new opportunities to develop new products/services. Economically, this firm will do best if it charges high rates based on perceived (family) value - not the cost - of the customer satisfaction it delivers.	This firm, having more market centered family business values, will seek monetary rewards as well as fame. It will strive to capitalize monetarily on the innovative ideas it develops via value-added premiums, royalties and the like. It will not consider itself successful unless it creates wealth, as well as builds the family reputation and traditions.

Family Centered Business FAMILY VALUES Business Centered Family

VII. Best Strategies for: LEADERSHIP AND MANAGEMENT

Strong Delivery Centered	Authoritative family monarch owner leads firm (family) and establishes environment that attracts employees and professionals willing to subordinate themselves to the family and implement, defined management practices and policies. Some mentoring but succession leaders developed outside the business.	Family business owner(s) delegate operations authority to managers who structure rigid processes to keep the "assembly line" working. Confidence in future family leader is well communicated and demonstrated to customers and the industry.
Strong Service Centered	Broadly based collaborative management with many equals. Can thrive on weak family leadership as long as all are committed to the goals. Consistent organization management provided by a facilitative family member overseer/delegator.	Owner(s) establish leadership direction and assign strong management authority to a CEO who is likely to be the most influential (or majority owner) among them. Continuity of key family executives is stressed with strong internal leadership development.
Strong Idea Centered	Strong family (sole operator) leadership based on ideas/values precludes the need for structured management, relying rather on administrative support. Family members and non-family members serve an important role (factotum) taking direction from the founding overseer.	Strong consultive leadership based on ability to draw ideas/creativity from others. Management is a coordinating and administrative function. Family members serve a (player-coach) leader/problem solver role, integrating non-family specialists.

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09 Entrepreneurship education in the US: A contents analysis of the material of the SBA's national survey of entrepreneurial education

Uta Neumann and Heinz Klandt

Introduction

Porter and McKibbin[1] identified entrepreneurship as one of the driving forces of the twenty-first-century economy, so one would expect a systematic, empirically based approach to research on entrepreneurship education to be a field of frequent activities But more than entrepreneurship research in general[2], research on entrepreneurship education is still a neglected field[3]

In terms of number of engaged universities the US are leading in academic entrepreneurship-education[4] . As Vesper showed in some studies (1980, 1985 and 1990), from eight in 1967, up to 245 universities and business schools in 1984 established special entrepreneurship-courses or special programs[5] and the number has been grown after that to some 300.

In October 1986 the US Small Business Administration, Center for Research in Vocational Education Institute for Enterprise Advancement as an affiliate of the National Federation of Independent Business published the 'National Survey of Entrepreneurial Education[6] (3rd edition)', a collection of course descriptions, syllabi, and program announcements for selected seminars and conferences from 418 organisation including high schools through two and four year colleges and universities' (see foreword of Louis R. Faoro there).

This unstructured material - around 3000 pages of syllabi, respectively brief descriptions - forms the basis of this study[7] A structured database of all the courses (2,549 courses) described in the six volume documentation was created with a contents analysis With the help of data sheets ninety-eight variables were collected for the courses, transferred to a dbase mask on a PC and analysed with the help of the statistics programme SPSS.

Based on this material in this paper a presentation of the entrepreneurial education in the US is outlined in detail. The institutions offering courses and the courses themselves are evaluated on data sheets and analysed To this subject there are numerous findings existent.

Institutions

The analysis of the data about the suppliers shows that, in fifty US states, a total of 418 organisations offer 2,549[8] courses Table 9.1 lines out the number of institutions and courses, absolute and per million of population

Seen in the absolute the most suppliers can be found in New York (thirty-one suppliers) while the highest number of courses is offered in California (259 courses). Per million of population the most suppliers exist in Colorado and the highest number of courses in Delaware

Course contents

The course contents were classified on the basis of a reference frame for start-up and entrepreneurship research[9]. As a rule a course covers more than one object. The results of the analysis are displayed in table 9.2.

The by far most frequently covered topic is the foundation context, the most important single topic is the macro social environment

Table 9.1
Number of institutions and courses, absolute and per million of population

States	offerers absolute	offerers per mill. of pop.	courses absolute	courses per mill. of pop.
Alabama	6	1.49	29	7.21
Alaska	2	3.84	13	24.95
Arizona	5	1.58	35	11.07
Arkansas	2	0.85	24	10.17
California	26	0.99	259	9.83
Colorado	14	4.33	116	35.89
Connecticut	6	1.89	31	9.76
Delaware	2	3.19	42	67.09
District of Columbia	1	1.61	5	8.03
Florida	18	1.58	87	7.65
Georgia	11	1.84	124	20.75
Hawaii	2	1.90	2	1.90
Idaho	1	1.00	5	4.98
Illinois	20	1.73	131	11.35
Indiana	8	1.45	28	5.09
Iowa	11	3.83	68	23.67
Kansas	4	1.63	81	33.09
Kentucky	4	1.07	14	3.76
Louisiana	9	2.01	43	9.59
Maine	2	1.72	3	2.58
Maryland	13	2.96	95	21.64
Massachusetts	12	2.06	73	12.54
Michigan	19	2.09	126	13.86
Minnesota	12	2.86	112	26.72
Mississippi	2	0.77	2	0.77
Missouri	6	1.19	10	1.99
Montana	2	2.42	13	15.76
Nebraska	5	3.11	10	6.23
Nevada	4	4.26	4	4.26
New Hampshire	1	1.00	1	1.00
New Jersey	7	0.92	51	6.74
New Mexico	2	1.38	4	2.76
New York	31	1.74	174	9.79
North Carolina	9	1.44	75	11.98
North Dakota	2	2.92	6	8.76
Ohio	19	1.76	79	7.33
Oklahoma	9	2.73	44	13.33
Oregon	3	1.12	50	18.60
Pennsylvania	18	1.52	79	6.66
South Carolina	8	2.40	16	4.80
South Dakota	1	1.41	1	1.41
Tennessee	6	1.26	26	5.46
Texas	26	1.59	85	5.19
Utah	2	1.22	4	2.43
Vermont	1	1.87	4	7.48
Virginia	15	2.63	65	11.40
Washington	14	3.18	80	18.15
West Virginia	2	1.03	11	5.68
Wisconsin	12	2.51	107	22.41
Wyoming	1	1.96	2	3.93

Table 9.2[10]
Course contents

Course contents	absolute frequency	frequency in % of cases (n = 1,559)
foundation context	1,523	97.7
macro social environment	1,522	97.6
legal/taxation sphere	1,422	91.2
markets	802	51.4
location/site	265	17.0
technology transfer	172	11.0
foundation potential	148	9.5
educational/training system	46	3.0
R & D environment	37	2.4
natural environment	33	2.1
state of economy	17	1.1
incubators	12	0.8
foundation company	1,513	97.0
information and communication	1,509	96.8
leadership	1,488	93.6
organisational structure	1,460	91.2
capital structure	1,156	74.2
development	1,149	73.7
business purpose	1,070	68.6
branch of trade	1,031	66.1
financing	731	46.9
forms of foundation	375	24.1
innovation	219	14.0
capital	108	6.9
tangible goods	46	3.0
foundation infra structure	721	46.2
foundation assistants	601	38.6
foundation support programmes	584	37.5
foundation instruments	28	1.8
foundation education systems	11	0.7
foundation research	1	0.1
foundation success	469	30.1
foundation activity	427	27.4
surviving the activity	165	10.6
qualified foundation success	125	8.0
misc. foundation problems	466	29.9
foundation planning	448	28.7
venture capital	39	2.5
founding of subsidiaries	2	0.1
founding person	452	29.0
general issues	397	25.5
behaviour of persons	386	24.8
characteristics of persons	370	23.7
micro social environment	86	5.5
founding team	13	0.8

Levels of courses

The integration of the courses into an academic degree is shown in table 9. 3

Table 9.3
Course levels

course level	absolute frequency	frequency in %
graduation	495	31 9
non graduation	274	17.6
without leaving certificate	785	50.5
total	1,554	100.0

Overall time of all lessons

The overall time of all lessons for complete courses could not be established in 558 cases, for this reason only 1,001 valid cases exist. The times range from one hour to 1,100 hours. The mean is 28.5 hours, the median at nine hours and the mode is six hours. Compared with the highest number of hours (1,100 hours) low numbers of hours are more the rule, as one can derive from the statistical measurements

As far as the number of semesters is concerned there exist 1,264 valid cases of which 1,236 take up one semester Usually a course ends after one semester.

Teaching methods

Table 9.4 presents the teaching methods in the sequence of their frequency More than one teaching method per course is common

Table 9.4
Teaching methods

Teaching method	absolute frequency	frequency in % (n = 1,559)
seminar	1,550	99.4
lecture	1,521	97.6
case study on paper	1,307	83.8
role models	1,142	73.3
private study through literature	677	43.4
preparing a paper	493	31 6
management/business games	474	30 4
presentation	468	30.0
computer support	150	9.6
real world case study	145	9.3
working in small groups	133	8.5
role games	130	8.3
practical training	128	8.2
private study with computer	95	6.1
project studying	87	5.6
excursion	71	4.6
multi media teaching systems	68	4.4
video training	6	0.4
experience groups	5	0.3

The most common teaching methods are seminar and lecture. The courses are still conducted in traditional styles.

Number of instructors

As far as the question of instructors is concerned there exist 728 valid cases and 831 missing cases. The statements range from one person up to twenty-one, whereby the latter figure seems extraordinarily high. If one regards the most frequent value, then this is one person in 88.9 per cent of the cases (647 responses) The high numbers result from some courses consisting of a series of lectures held by differing lecturers Usually, though, a course is conducted by one person

Exams

Possible examination requirements consist of a written exam, a paper and an oral exam Of interest is the question, in how many cases exams have to be taken as a set or individually This is displayed in table 9.5.

Table 9 5
Exams

number of exams	absolute frequency	frequency in %
three exams	203	17.2
two exams	142	12.0
one exam	18	1.5
no exam	820	69 3
total	1,183	100.0

In 363 courses out of 1,183 valid cases exams have to be taken at all. The remaining courses end without an exam, and are also identical with those participation courses that end without a degree.

Fees

The height of a fee is only stated in 548 cases Fees range from $ 1 up to $ 968, additionally there are thirty-four courses which are free of charge The mean is $ 93 307, the median $ 27 and the mode $ twenty-five In view of such low values the fees probably represent nominal fees and certainly cannot be considered to be cost covering prices

Participants

The following were defined as possible participant classes (double naming is possible): students, self-employed entrepreneurs, managers, potential entrepreneurs and other participants. Table 9.6 shows the participants in the sequence of the frequency of responses

Table 9.6
Participants

Participants	absolute frequency	frequency in %
self-employed entrepreneurs	894	57.5
students	595	38.3
potential entrepreneurs	579	37.2
managers	564	36.3
other participants	90	5.8

It's worth remarking that the self-employed entrepreneurs form the largest group by far, while students are addressed about as frequently as managers and potential entrepreneurs The majority of courses is targeted at self-employed entrepreneurs

Resumee and conclusions

The rich supply with entrepreneurship-education activities at universities, business schools and other organisations all over the US and the expected leading position of the US in this field - especially if compared with the German academic situation - could be confirmed by the analysis of the material of 'National Survey of Entrepreneurial Education' from 1986: more than 2,500 courses offered by 418 organisations could be identified California leads with 259 courses.

The course contents are defined mostly by aspects of business environment (macro social environment, legal system, taxation) and internal business topics like information & communication, leadership and organisational structure.

An average of 28.5 hours for the overall time of the courses was computed, usually a course ends after one semester Seminars, lectures, case studies and role models are the most typical teaching methods

There is abroad supply, but there seem to be some deficits:

- the number of entrepreneurship and small business courses has been grown up tremendously in the last years and is still growing, but nevertheless there are only a few formal programmes for graduates
- on the one hand a lot of entrepreneurship chairs (about 50) and chairs and positions in similar fields (additional 50) have been installed, but on the other hand an important amount of them are still vacant, as is demonstrated by the contribution of Katz[11].
- so it seems to be important to develop more doctoral programs in entrepreneurship at universities, to get these position occupied by specialized and qualified academics and to professionalize in this way and in the long range the entrepreneurship education industry.

Notes

[1] See Porter, L. W ; McKibbin, L E. (1988), *Management education and development: Drift or thrust into the 21st century?*, New York

[2] See Müller-Böling, D (1984), 'Überlegungen zu Strategien der Gründungsforschung', in: Nathusius, K., Klandt, H., Kirschbaum, G (Ed), *Unternehmungsgründung. Konfrontation von Forschung und Praxis*, p. 20, Bergisch-Gladbach, Germany

[3] See Müller-Böling, D., Klandt, H (1990), 'Bezugsrahmen für die Gründungsforschung mit einigen empirischen Ergebnissen', in: Szyperski, N., Roth, P. (Ed): Entrepreneurship - Innovative Unternehmungsgründung als Aufgabe, p 14, Stuttgart, Germany

[4] See Klandt, H., Münch, G. (1990), 'Gründungsforschung im deutschsprachigen Raum - Ergebnisse einer empirischen Untersuchung', in: Szyperski, N, Roth, P. (Ed): *Entrepreneurship - Innovative Unternehmungsgründung als Aufgabe*, p. 186, Stuttgart, Germany

[6] Solomon, George T. (Ed): *National survey of entrepreneurial education*, 3rd ed , vol. 1-6

[5] For example: Vesper, K.-H (1980), *Entrepreneurship education 1980,* Babson College Center for Entrepreneurial Studies, Wellesley (Mass). Vesper, K -H (1985), *Entrepreneurship education 1985*, Babson College Center for entrepreneurial studies, Wellesley (Mass). Vesper, K -H. (1990), *Summary of entrepreneurship education*

survey, University of Washington, Department of Management and Organization, June

[7] This paper is a short version of a diploma dissertation Uta Neumann, Zur Ausbildung von Unternehmern in den USA - Eine empirische Analyse Universität Dortmund, 1992, Germany

[8] The difference to the total sample can be explained by more than one course being evaluated on one data sheet This is stated in the field 'offered entrepreneurship courses overall'. If this field is empty, then only one course was analysed

[9] Müller-Boling, D , Klandt, H. (1990), 'Bezugsrahmen für die Gründungsforschung mit einigen empirischen Ergebnissen', in Szyperski, N., Roth, P. (Ed), *Entrepreneurship - Innovative Unternehmungsgründung als Aufgabe*, pp 143-170, Stuttgart Müller-Böling, D., Klandt, H. (1993), 'Empirische Gründungsforschung', in: Grün, O., Hauschildt, J. (Ed), *Auf dem Wege zu einer Realtheorie der Unternehmung / Ergebnisse empirischer betriebswirtschaftlicher Forschung*, Stuttgart, Germany

[10] Each of bold printed topics consist of the subtopics below it If a subtopic is referred in a course, it will be count in the topic. Multiple counts are possible.

[11] Katz, J. A.(1991), 'The institution and infrastructure of entrepreneurship, in: *Entrepreneurship Theory and Practice*, vol 15, no. 3, pp 53-67

References

Katz, Jerome A. (1991), 'The institution and infrastructure of entrepreneurship', in: *Entrepreneurship theory and practice*, vol. 15, no 3, pp 53-67

Klandt, H. Münch, G. (1990), 'Gründungsforschung im deutschsprachigen Raum - Ergebnisse einer empirischen Untersuchung', in: Szyperski, Norbert, Roth, Peter (Ed): *Entrepreneurship - Innovative Unternehmungsgründung als Aufgabe*, pp. 171-186, Stuttgart, Germany

Müller-Böling, D. (1984), 'Überlegungen zu Strategien der Gründungsforschung', in: Nathusius, K , Klandt, H., Kirschbaum, G (Ed): *Unternehmungsgründung. Konfrontation von Forschung und Praxis*, pp 17-35, Bergisch-Gladbach, Germany

Müller-Böling, D , Klandt, H (1990), 'Bezugsrahmen für die Gründungsforschung mit einigen empirischen Ergebnissen', in: Szyperski, N., Roth, P (Ed): *Entrepreneurship - Innovative Unternehmungsgründung als Aufgabe*, pp 143-170, Stuttgart, Germany

Müller-Böling, D., Klandt, H (1993), 'Empirische Gründungsforschung', in: Grün, O., Hauschildt, J (Ed): *Auf dem Wege zu einer Realtheorie der Unternehmung / Ergebnisse empirischer betriebswirtschaftlicher Forschung*, Stuttgart, Germany

Porter, L. W.; McKibbin, L. E (1988), *Management education and development: Drift or thrust into the 21st century?*, New York, USA

Solomon, George T., *National survey of entrepreneurial education*, 3rd ed , vol 1-6

Vesper, K.-H. (1980), *Entrepreneurship education 1980*, Babson College Center for Entrepreneurial Studies, Wellesley (Mass), USA

Vesper, K.-H. (1985), *Entrepreneurship education 1985*, Babson College Center for Entrepreneurial Studies, Wellesley (Mass), USA

Vesper, K.-H. (1990), *Summary of entrepreneurship education survey*, University of Washington, Department of Management and Organization, Seattle, USA

Part B

Western Europe

10 Entrepreneurs as learners - Beyond education and training

Bengt Johannisson

Points of departure

Considering the wide variety of definitions of entrepreneurship, any attempt to outline principles of training and education for entrepreneurship must cope with the definitional issue Here entrepreneurship is recognized as the process by which a new-venture concept is realized in the marketplace The entrepreneur is an individual who personifies and orchestrates this genuinely creative process. My definition focuses on how entrepreneurs operate their ventures, not on who they are and why they are in business (cf. Stevenson and Jarillo, 1990)

The emerging venture is mainly an organizing endeavour, implying that the entrepreneur enacts new environments with the help of his or her personal network. This social focus means e g that new (information) technology is of interest not per se but with respect to what new meaning it creates for actors in the marketplace The entrepreneur either upsets that which is taken for granted or which makes sense in ambiguous settings I hereby redefine within a subjectivist paradigm the distinctive competences that Schumpeter and Kirzner have ascribed to entrepreneurs

My definition of entrepreneurship has important implications for the practice and training of entrepreneurship First, contrasting e.g Casson (1982), decisions and choices are judged on the basis of their realization, i.e. the concrete actions Secondly, entrepreneurship to a great extent means recycling of resources into new patterns (cf. Binks and Vale, 1990). This innovative restructuring also includes market preferences. Thirdly, since the creation and communication of meaning is an individual act, holistically integrated with the personal history and contemporary existential conditions of the individual, entrepreneurial competences cannot be acquired through the administration of general knowledge based on calculative rationality The art of entrepreneurship is indeed personal (cf. Polanyi, 1983).

The proposed framework supports the statement, albeit often unreflected, that entrepreneurship and small-scale operations intersect The entrepreneur must expand his or her realm of understanding successively in order to maintain control over the emerging venture. The moment of truth comes when the entrepreneur has to operate his/her business through other managers - a cognitive and emotional filter between the entrepreneur and the environment. First then are the true entrepreneurial competences, the organizing capabilities, revealed. The fact that, at least in Sweden, most owner-managers do not expand their workforce beyond ten employees indicates that their organizing competences are restricted. This also underlines that although entrepreneurial careers take off slowly, not all small owner-managed firms are run by entrepreneurs. E.g. the artisan firm focuses on preserving what is taken for granted, i.e. tradition, within the business world Craftsman entrepreneurs neither can nor want to cope with the liability of tradition.

In recent years a major experiment concerning management training for owner-managers in small firms has been launched in Sweden The concept is to tap academic knowledge by building strategic alliances which include academic institutions and recognized confidants of owner-managers such as bank managers and company accountants Five universities have taken the initiative The training programme itself has, however, been in little demand and it has proven difficult to integrate the bankers and accountants into the activities Besides possible lack of formal competences, bankers and accountants seem to be reluctant to put their trust capital at stake. Experiences gained while running the programme in Växjö, and confirmed in an independent evaluation, suggests that owner-managers appreciate both concrete and abstract programme units, e.g. 'Computer-Based Cost Accounting' and 'Leadership' 'Production Management and Logistics', a domain certainly focused by most course participants in their work, was not well received. A possible explanation is that management techniques impose pre-fabricated cognitive structures on a reality which the entrepreneur wants to tailor to his/her own personality The most appreciated feature of the programme, though, was the spontaneous exchange with course mates. The purpose of this paper is to elaborate upon the implications the above outlined subjectivist approach to entrepreneurship has for training and education In section 2 I present some concepts within an action theory of entrepreneurship, positioning entrepreneurs with reference to artisan owner-managers and professional managers In section 3 I propose some elements in a training strategy for entrepreneurs and in the concluding section I outline some implications of the proposed framework

An action frame of reference

The entrepreneur's distinctive competence is his/her capability of envisaging new realities and making them come true by active real-world experimentation. Such 'experiential learning' is valid for all creative processes, whether in the arts, the scientific community or the market. In this context planning, i.e. optimizing and freezing an action repertoire based on forecasts, becomes dysfunctional for everything but routine issues, whether operative or administrative

Genuine action must be based on commitment. The entrepreneur mobilizes both emotional and cognitive resources when making choices, implying impressionistic decision making (Brunsson, 1985) and 'fluid performance' (Dreyfus & Dreyfus, 1986). By balancing own competences and arising challenges, commitment is optimized and perpetuated - turned into 'flow' (cf. Csikszentmihalyi & Csikszentmihalyi, 1988). This holistic-intuitive logic contrasts the sequential-analytic rationale characterizing professional education.

While others see education and training as a potential for career change, entrepreneurs regard education to be a vehicle for concrete problem solving, intimately associated with the operational activities of the venturing process. While most entrepreneurs have a limited basic education, albeit above the population average, they are keen on focused continuing education. This suggests that training should be organized as close as possible to the natural context of business operations, ideally applied as one dimension of economic exchange. Entrepreneurs learn through reflection-in-action (cf. Pirsig, 1974, Schön, 1983, Kolb et al., 1984, Dreyfus & Dreyfus, 1986, Reuber, 1990.

In order to position the basic assumptions, it seems to be important to elaborate upon the differences between the entrepreneur and both the (traditional artisan) owner-manager and the professional manager. The latter categories have important features in common with entrepreneurs. Owner-managers in small firms can also apply a holistic view in their small-scale operations; practitioners typically reflect-in-action and may acquire genuine expertise. In table 10.1 I position the entrepreneur against the small-business owner-manager and the professional manager with respect to some characteristics which in my mind should influence condition for entrepreneurial learning and training.

To begin with, the entrepreneur has an innate need to launch ventures. This calls for independence in the act of creation as well as social interaction. Inasmuch as ventures sediment over time into an entrepreneurial career the entrepreneur depends on both the environment and own history. In contrast, the owner-manager refrains from growth in order to stay independent and the professional manager accepts the role of administrator solely to pursue the professional career within or between corporations.

Table 10.1
The entrepreneur, the artisan owner-manager and the professional manager - a comparison

	ENTREPRENEUR	ARTISAN OWNER-MANAGER	PROFESSIONAL MANAGER
MISSION	Urge to create	Independence	Company career
LODESTAR	Vision and action	Action	Planning
ENVIRONMENT ORIENTATION	Inter-action	Re-action	Pro-action
RISK ORIENTATION	Ambiguity management	Risk avoidance	Risk reduction
TIME ORIENTATION	Synchronicity	Time as a buffer	Time manage-ment
FOCAL RESOURCES	Social	Physical	Financial
GENERIC COMPETENCE	Intuition	Imitation	Professional experience
EDUCATION/ TRAINING	Organic, quali-fied practice	Formal and practical	Institutional-ized

Running an artisan firm means long working hours albeit repetitive activities dominate Professional managers make, implement and evaluate, plans separated from the substantive production of goods and services. Entrepreneurs combine visionary thinking and concrete action while enacting their revolutionary concept (cf. Mintzberg, 1988).

Changes in the owner-managed firm reflect changes in the commercial or institutional environment. This re-active behaviour contrasts the pro-active ideology characterizing professional management. This is e.g. reflected in the main bulk of literature on strategy making where plans are imposed upon the environment Entrepreneurs cope with their environments by inter-actively redefining those which they deem to be negotiable While e.g. new customers may be identified and technology-in-use radically changed, the legal framework requires adherence

The owner-manager avoids risk taking by staying with familiar technology, products and markets The large corporation copes with environmental uncertainty by attempting to reduce it, e.g. by acquisitions of competitors or by signing long-term contracts The entrepreneur in contrast regards ambiguous settings as options which represent a potential for imposing own ideas upon others (cf. Johannisson, 1992).

As indicated above, the owner-manager sees hours invested in the business as a buffer, when times are bad greater but similar effort has to be put into the operations The professional manager considers time itself to be a precious resource which has to be planned separately The entrepreneur looks upon time as a continuum and the challenge is to synchronize own initiatives with changes in the environment in a favourable way.

Resources appear in different forms (cf. Coleman, 1989) The petty bourgeoisie proprietor is tied to place and with a materialistic perspective vis-à-vis resources while professional managers focus the financial dimension of the enterprise Entrepreneurs combine internal and external resources flexibly through networking and consider financial surplus to be an indicator of capability in the marketplace.

While the generic competence of the artisan owner-managed firm is to contribute to the institutionalization of traditions, the hired manager elaborates professional practices and concepts Thus, the basic functions of the artisan owner-manager and the professional manager by definition are enforced by an institutionalized education system. The generic dimension of entrepreneurship is the ability to mobilize intuitive competences by collecting and trading upon qualified experiences. These are unconsciously refined by both elaborating upon the own identity and by sensitively and critically 'reading' the environment This means on one hand identifying new niches and on the other disobeying established industry recipes, for example Formal training with respect to form and substance may very well counteract entrepreneurial activity.

Using the framework proposed by Argyris and Schön (1978) the differences between (professional) management and entrepreneurial venturing can be further clarified The management perspective suggests that general (normative) management thinking is adopted as an 'espoused theory' by the firm The linkage between this theory and 'theory-in-use' is however often vague, i.e. the normative/espoused framework remains abstract and works mainly symbolically as an instrument to legitimize the way the business is run In the entrepreneurial firm, again, any normative statement is rejected (for good reasons) and the 'theory' of the particular firm is generated out of the dialogue between vision and action. This making of a substantive 'local' theory is a slow and complex process which calls for founder-management or long-term employment.

My conclusion is that the practice of entrepreneurship must also be the generic training ground for entrepreneurship. I propose therefore the following points of departure for an educational strategy for entrepreneurs These issues will be discussed in further detail in the next section.

- Entrepreneurs should be provided with contexts for self-organized learning, not with training programmes which are planned in detail,
- Entrepreneurial training should be integrated with everyday business operations;
- The personal network of the entrepreneur should be mobilized during the learning process;
- Formal education must be actively mediated in order to become an integrated feature of the entrepreneurial company rationale

Contributions towards a training strategy for entrepreneurs

Entrepreneurship is action learning, i.e. qualified practice. Although the notion of action learning has further applications (cf. e g Revans, 1982, Schön, 1983, Lessem, 1984), it is generic to training of entrepreneurs with their involvement in continuous renewal processes in changing environments Artisan owner-managers as administrators of traditions and professional managers with their conceptualized world can absorb formal training and education in addition to learning by doing

Managing training contexts for entrepreneurs

Entrepreneurs should be offered training opportunities which provide experiences close to those in real life This experiential learning should include, among other features, small-scale initiatives and availability of mentors who can help the would-be entrepreneurs to reflect in action Elsewhere I have introduced the notion of 'entrepreneurial context' as the setting which seconds entrepreneurs when they organize their emerging ventures (Johannisson, 1988). The generic function of this context varies according to the actual phase of the venturing process (cf. figure 10 1) These functions are nevertheless the same whether the context is a corporation, a local community or a science/industrial park

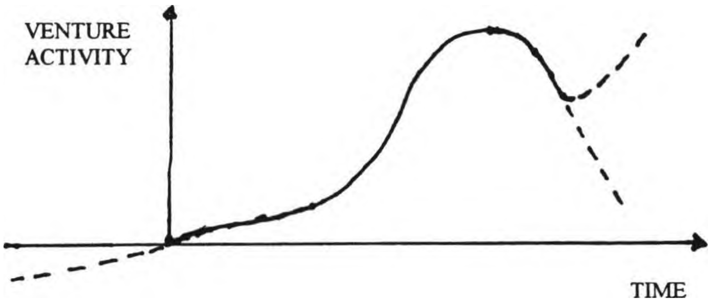
The supportive context must be on the one hand restrictive and on the other permissive. The formal structure is necessary to transmit shared goals and codes of conduct, encouragement must be given to initiatives, which, at least in the long run, may question these formal guidelines The paradox of both order and disorder can be managed by separating the entrepreneurial function in time and space, e g by allowing creative employees to use company resources after closing time or by creating special departments for innovative activities (cf. e g Peters & Waterman, 1982). In industrial districts, where a delicate web of business and social ties provides a tissue that can absorb a wide variety of entrepreneurial activities, the administrative and entrepreneurial logic may operate side by side Established entrepreneurs are expected to adhere to the rules while new entrepreneurs are allowed to disobey them

In a corporate context, hypocrisy is more overt and institionalized, implying that on the one hand the formal system is elaborate, on the other that managers turn a blind eye to employees exploiting social resources in venturing processes (cf. Peters & Waterman, 1882, Quinn, 1988, Starr & McMillan, 1990).

Contextual leadership in support of entrepreneurship obviously calls for special competences, beyond strategic ones for market operations In the innovative corporation engaged in nurturing intrapreneurship there is a need for statesmanship with respect to corporate politics. Within the local community which promotes business venturing, the 'social entrepreneur' operates as a figurehead, e.g. encouraging individual initiative, mediating concrete resources and providing legitimacy for the mobilization effort

Integrating everyday work and training

Entrepreneurs as creators of meaning in ambiguous situations have to apply a holistic approach to business venturing as well as to life in general Their existential motivation means among other things that they, separate, 'bracket', neither roles played nor experiences made in different settings According to the entrepreneurial 'logic', such separation of acquisition and application of knowledge is artificial Learning is integrated with everyday entrepreneurial life, i.e the 'making' of new business.



VENTURE PHASE	Incubation	Take-off	Growth	Maturity	Rejuvenation/ Closure
CRITICAL ISSUES	State the business concept	Establish market linkages	Organize outsour-cing	Refine cost control	Create strategic alliances/ Disinvest
CONTEXT SUPPORT	Business ideas/ Mentors	Legitima-cy and ini-tial market	Production capacity	Colle-gial exchange	Ideas/Second-hand market
TRAINING NEEDS	Creativity	Marketing	Contract and trust	Human Resource Management	Creativity

Figure 10.1 The venturing process and contextual training

Our research into small business suggests that the introduction of new technology or new products is closely related to the basic exchange processes in the entrepreneurial firm. Thus dialogue with the customers appears to be the major source of product development. Suppliers of material, components, and machinery are the ones making the entrepreneur aware of alternative technology and production input.

Owner-managers in general seldom allocate personal time for formal training and education There are of course arguments such as high costs, lack of time and (assumed) indispensability as a leader of the operations However, this behaviour may also reflect an implicit awareness of the need of integrating learning and the complexity of everyday experience in action. Our own research into successful Swedish entrepreneurship suggests that entrepreneurs are excellent listeners and take advantage of all opportunities to test their ideas concretely, not by explicitly asking for advice Their distinctive competence is the ability to organize a permanently chaotic environment into increasingly refined patterns as the entrepreneurial career progresses

That the learning process of entrepreneurs nonetheless is both a social and a technical endeavour has been recognized in e g industrial districts (cf. Pyke, 1990) Knowledge which sometimes is inaccessible in this 'organic' way can turn out to be of vital importance to the firm This situation calls for a more deliberate training strategy, but one which must retain the linkage with everyday business life Many small firms, not the least subcontractors, have large and important customers. Appropriate development programmes should therefore involve both the large and the small firm. Such an approach has two major advantages: the established business-exchange relationship will be enforced and the larger firm's interest and capability in formal training will illustrate how at least some knowledge can be transferred in this manner Of course we also expect the large-firm participants to experience some hands-on learning, which is very much needed in corporate settings (cf. Peters & Waterman, 1982).

Personal networking

Primary competences for entrepreneurship include self-confidence and ability to build and maintain social resources in terms of personal networks. These appear to be indispensable when learning is achieved by trial-and-error. Entrepreneurs, as well as leaders (Bennis, 1984), accept mistakes A very successful Swedish entrepreneur states: 'You learn by mistakes alone, successes only confirm what you already know.' Inappropriate actions appear as 'leftovers' in the experiential learning process and may be recycled as useful experiences in new own projects or communicated to fellow entrepreneurs The personal network of the entrepreneur is in my mind the basic vehicle through which such experiences are coped with. This network actually reflects the way the entrepreneur organizes his or her existence. This argument is illustrated in figure 10.2. The personal network structuring the business concept at time 't1' will be different from the network when the venture is launched and the concept will also have changed when realized at time 't2'. Subsequently the original venture will become obsolete and replaced by a new business concept. The transition is facilitated by actively maintaining the network and recycling the viable resources from the original venture (cf. time 't3').

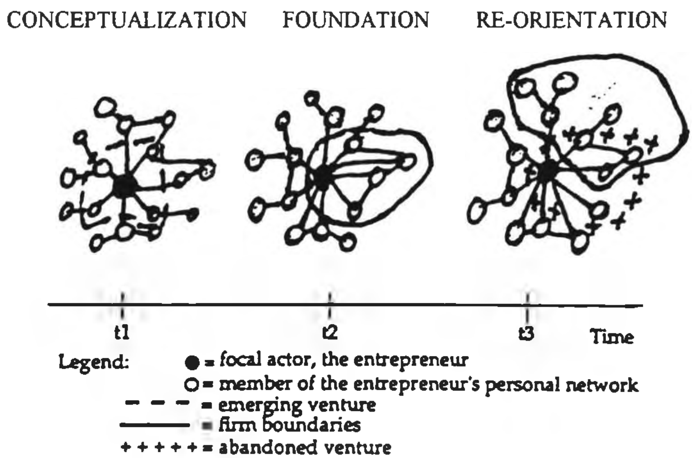


Figure 10 2 Organizing the venturing process by personal networking
Source: Johannisson, 1992, p 168, figure 1.

The entrepreneurial career thus evolves as a set of interlinked ventures where a considerable portion of the resources, including experiences, are re-activated through network management. This image of the entrepreneurial career resembles the notion of 'adhocracy' as described by e g Mintzberg (1973) and the process characteristics are close to those depicted as a 'garbage can' by e g March & Olsen (1976). This organizing metaphor means that venture ideas are serendipitously generated and that resources controlled through ownership and networking are organized into the venture The entrepreneur adds to his or her generic competences by successively expanding the scope of the venture with respect to commitments in space and time (cf. Bjerke, 1989).

Inasmuch as entrepreneurial learning is a social process, the intermediary transferring competences must be legitimate in the eyes of the entrepreneur Colleagues as providers of advice are not surprisingly favoured, these represent or may mediate markets. With these peers entrepreneurs share the same world view and thus feel confident. Established entrepreneurs have a track record i.e. have proven viability in the marketplace. That colleagues also make frank statements, even about own mistakes, makes communication more to the point and more purposeful Exchange with entrepreneurial business colleagues is especially important when there is a need for double-loop learning, i.e changing the values and criteria for making choices (Argyris & Schön, 1978). Colleagues also help the entrepreneur to practice 'deliberated rationality' (Dreyfus & Dreyfus, 1986) and avoid getting stuck in a 'tunnel vision'.

A critical feature in the entrepreneurial (learning) career is then integration with qualified networks. Within an international project, the personal networking of (would-be) entrepreneurs has been studied. The Swedish findings (cf. e g Johannisson, 1990), suggest that:

- In the personal networks of entrepreneurs socially dominated ties are almost as frequent as professional/business linkages;
- Entrepreneurs who are about to launch a venture include more social ties in their networks and spend less time maintaining networks than colleagues already in business;
- Entrepreneurs typically build local networks: eight out of ten personal contacts live within a distance of one hour's drive by car;
- Woman entrepreneurs build more social networks and invest less time in developing new ties than their male counterparts;
- Cosmopolitan entrepreneurs invest relatively little time in network maintenance and relatively much time in developing new linkages,
- Academic entrepreneurs invest above average time in network management and their networks are relatively more social,
- Among new entrepreneurs network resources and business success are not correlated

The findings, on the one hand, enforce the fact that personal networks are generally crucial to emerging firms, and, on the other, underlines that the structure and function of network may vary due to entrepreneurial, venture and context characteristics Network resources seem to provide a necessary but not sufficient condition for entrepreneurial success. Considering the theme pursued in this paper it is interesting to note that even formally trained academic entrepreneurs seem to balance that experience with more socially oriented personal networks

Training complementary supportive management

Obviously the organic learning mode of entrepreneurs makes it difficult to develop measures which imply direct support An alternative strategy, then, is to provide the entrepreneurial firm with supplementary professional management which can mediate and implement the knowledge taught at business schools and in management programmes in general For about fifteen years we at Växjö University have offered a MBA Programme in Entrepreneurship and Business Development, including internship During one-and-a-half years the student spends one or two days a week in a small firm where the general conceptual framework taught is applied to concrete problems as perceived by the company management. The education is to a great extent a joint venture between the university and the individual firm: the lecturers visit each company twice a semester and the Master thesis treats a project defined jointly by the company and the student The university staff during the thesis period participates as a task force providing consulting services on request.

The MBA-Programme has proven it is possible to overcome both the owner-manager's paternalistic leadership style and small-firm hesitance to recruit academics. Many students have become employed in the company where they did internship Others are sons or daughters in family businesses where succession is hereby combined with an upgrading of management. The training strategy means that the entrepreneur can focus on combining vision and action and hand over planning issues to an academically trained manager. During the internship period of the MBA programme we have also tried a 'tandem' model, in which the company's CEO or anybody else in top management parallel joins the training programme presented above in section 1. The evaluation of the experiment is that this double bridge between academia and practice is well worthwhile

Conclusions

The presentation above provides some lessons First, support of new entrepreneurs should not only concern the individual firm but the context and the exchange network of the emerging venture as well. The contents of this support will vary with the basic assumptions underlying firm formation In a recent study of business venturing we have applied four different firm-formation models and found that each can explain regional variations in start-up frequencies, with a small advantage to the market model In table 10.2 below we suggest appropriate support measures related to each model The incentives can all be looked upon as ways of enhancing the level of competences in the emerging firms In some cases the support concerns training incentives explicitly, but all suggestions should be considered inasmuch as training and operative activities must be combined in the entrepreneurial firm. The table points out that direct support is only one approach, and not necessarily the most efficient one Contextual support provides the emerging entrepreneur with needed discretion and the network approach integrates the firm in the market

The discussion above has concerned self-selected entrepreneurs and the conclusion that formal training is inappropriate refers only to this category. The second lesson is then that if people with no entrepreneurial experience whatsoever are going to be brought to the starting-line, a more direct training strategy may very well be adequate In Denmark an explicit educational model for business development has been adopted for unemployed, especially to those with a higher education, often academic (cf. Tetschner et al., 1992). Nevertheless a contextual approach is used, i.e individual training is combined with concrete projects for local economic development While established entrepreneurs have an individualistic approach to learning, this category is well adapted to training through group activities where self-confidence is more easily built up Also, group and project work where both goals and action programmes are kept ambiguous provides training for venture management An overall collective and systematic approach excludes neither individual initiative nor training for ambiguity management in some phases of the learning process.

Table 10.2
Firm formation models and alternative support strategies

Formation Model	Optional support measures with different focuses: FIRM	NETWORK	CONTEXT
MARKET	Encourage local market surveys	Sponsor subcontracting and extrapreneurship	Organize local trade shows and promote privatization
RESOURCE	Subsidize rented premises	Organize private investors' network	Establish collective R&D centre
MILIEU	Encourage immigrant internships	Stimulate local organizational activities	Invest in leisure and cultural infrastructure
CAREER	Establish a 'marriage' agency for partnerships	Create a pool of role models and mentors	Promote an enterprising community in the schools

Source: Johannisson; 1992a

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Lesson three: the timing of environmental influences and training activities in the venturing process is crucial for the making of a successful enterprise We have above presented normative management models, industry recipes and laws and regulations and how theses combine into a straight-jacket for genuine entrepreneurs. In other words, while owner-managers and professionals accept environmental restrictions and appreciate available management tools to 'administer' challenges, entrepreneurs have to create their venture anarchistically First when the entrepreneurial venture has been designed should it be confronted with environmental restrictions and the need for minimum planning and further management technology. The contrasting approaches are outlined in figure 10 3.

The different logics have important implications In Sweden e.g. the training of founder-managers is based on the administrative logic, i.e. the would-be businessmen are impregnated with rules and principles (cf. figure 10 3 a). The major effect of many such courses on 'How to start your own firm' is that a good number of the participants have come to realize that they are not suited for a career as independent owner-managers If in contrast entrepreneurs with a unique and mature venture concept are trained (cf. figure 10.3 b), the ventures may very well be somewhat under-managed with respect to administrative routines while industry recipes and competitors' positions are generally disregarded.

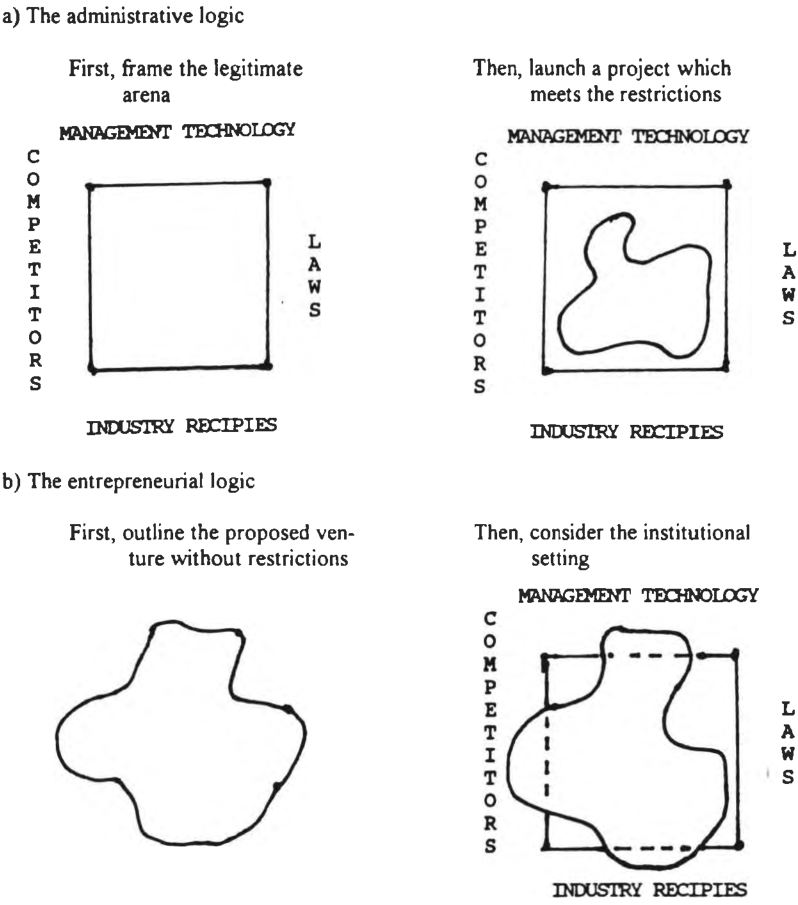

Figure 10.3 Principles of learning - contrasting logics

A fourth conclusion is that any entrepreneurial training, just like the entrepreneurial process, must choose form and contents according to the personal characteristics of the participants and their evolving ventures. My own experiences while trying to carefully plan educational pro-grammes for business as well as for social entrepreneurs have taught me that it is impossible to a priori design the training in any detail at all. By the time of the actual implementation of the plans, most entrepreneurs will have advanced to a different context. Indeed it is an ungrateful task to try to register both 'objective' educational needs and stated perceived subjective demands for training The lesson is that planning must be replaced by extreme flexibility over the course period

A fifth and final lesson is that public measures should promote a great variety of small-scale new ventures. An initial minute scale offers the emerging entrepreneur an opportunity to grow with his/her firm Individuals must be given a chance to learn by doing The major threat to entrepreneurship is the favouring of size and growth in the economy and society at large. This 'ideology' is counterproductive if the aim is to create an indigenous entrepreneurial corps. The contemporary public industrial policy in Sweden is dominated by measures with financial implications alone, including raising venture capital for small firms. However, in a follow up of a study covering very successful Swedish owner-managers after 15 years, those family businesses where the original business concept had been pursued and where ownership control stayed within the family proved to be the most successful firms. The entrepreneurs have invested the time needed to build the theory of each particular firm. The making of entrepreneurial expertise is a comprehensive, indeed a life-long endeavour.

References

Argyris, C. & Schön, D A (1978), *Organizational Learning: A Theory of Action Perspective. Reading*, Ma.: Addison Wesley

Bennis, W. (1984), 'The 4 Competencies of Leadership', *Training and Development Journal*, August, pp 15-19

Binks, M. & Vale, P (1990), *Entrepreneurship and Economic Change*, McGraw-Hill, London

Bjerke, B. (1989), *Att skapa nya affärer* (Creating New Business), Lund: Studentlitteratur

Brunsson, N. (1985) *The Irrational Organization. Irrationality as a Basis for Organizational Action and Change*, Wiley, New York, N Y

Casson, M (1982), *The Entrepreneur*, Robertson, Oxford

Coleman, J. S (1989) 'Social Capital in the Creation of Human Capital', *American Journal of Sociology*, vol 94, Supplement, pp 95-120

Csikszentmihalyi, M. & Csikszentmihalyi, I S. (1988) (Eds), *Optimal Experience - Psychological Studies of Flow in Consciousness*, Cambridge University Press, Cambridge, Mass

Dreyfus, H L & Dreyfus, S. E. (1986), *Mind over Machine*, The Free Press, New York, N.Y.

Johannisson, B (1988), 'Business Formation - A Network Approach', *Scandinavian Journal of Management*, vol 4, no 3/4, pp 83-99

Johannisson, B. (1990), 'Building an Entrepreneurial Career in a Mixed Economy: Need for Social and Business Ties in Personal Networks', Paper presented at the *Academy of Management Annual Meeting*, August 12-15, San Francisco, USA

Johannisson, B (1992) 'Entrepreneurship - The Management of Ambiguity', in Polesie, T & Johansson, I-L (Eds), *Responsibility and Accounting - The Organizational Regulation of Boundary Conditions*, pp 155-179, Lund: Studentlitteratur

Johannisson, B. (1992a), 'Designing Supportive Contexts for Emerging Enterprises', *To be published* at Routledge in a volume edited by Johannisson, B & Karlsson, C & Storey, D

Kolb, D. A & Rubin, I M & McIntyre, J. (1984), *Organizational Psychology - An Experiential Approach*, Third edition, Prentice-Hall, Englewood Cliffs, N.J.

Lessem, R. (1984), 'The Gestalt of Action Learning', in Cox, C. & Beck, J (Eds), *Management Development: Advances in Practice and Theory*, pp. 223-250, Wiley, New York, N.Y.

March, J G & Olsen, J. P (1976), *Ambiguity and Choice in Organizations*, Oslo: Universitetsforlaget

Mintzberg, H. (1973), 'Strategy-Making in Three Modes', *California Management Review*, vol. XVI, no. 2, pp 41-53

Mintzberg, H. (1988), 'The Adhocracy' in Quinn, J. B et al., *The Strategy Process.*, Prentice Hall, pp 607-627, Englewood Cliffs, N. J.

Peters, T. J. & Waterman, R H (1982), *In Search of Excellence*, Warner, New York, NY

Pirsig, R. M (1974), *Zen and the Art of Motorcycle Maintenance*

Polanyi, M (1983, 1966), *The Tacit Dimension*, Peter Smith, Gloucester, Mass

Pyke, F & Becattini, G. & Sengenberger, W. (Eds.) (1990), *Industrial Districts and Inter-Firm Co-operation in Italy*, ILO, Geneva

Quinn, J. B (1988), 'Managing Innovation: Controlled Chaos' in Quinn, J B et al (Eds), *The Strategy Process*, pp 627- 637, Prentice-Hall, Englewood Cliffs, N. J.

Reuber, A. R & Dyke, L. S & Fischer, E M (1990) 'Experientially Acquired Knowledge and Entrepreneurial Venture Success' in the proceedings from the *Academy of Management Annual Meeting*, August 12-15, pp 69-73, , San Francisco, USA

Revans, R. W (1982), *The Origins and Growth of Action Learning*, Lund: Studentlitteratur

Schön, D (1983), *The Reflective Practitioner. How Professionals Think in Action*, Basic Books, New York. N Y.

Stevenson, H H & Jarillo, C. (1990), 'A Paradigm of Entrepreneurship: Entrepreneurial Management', *Strategic Management Journal*, vol. 11, Special Issue on Corporate Entrepreneurship

Tetschner, H. & Herlau, H & Nyberg, J. (1992), *Uddannelsebaseret erhvervs-udvikling* (An Educational Strategy for Local Economic Development), Copenhagen School of Economics, Copenhagen

11 Business plan as an educational tool in entrepreneurship training

Asko Miettinen

Introduction

Planning might be one of the most misunderstood area of management practice, in large or small companies. Within the specific context of entrepreneurship, there is a pretty strong consensus among academic management writers that the time devoted to planning, prior to initiation, is somewhat unrelated to an entrepreneur's chances of survival or extent of success

Yet if one takes a look at the shelves of more popular business books, one might come away confused The one area of management practice generally and consistently thought by academics to be the least important to the prospective entrepreneur, planning, is also the area about which the most books are published There are a number of books that offer to assist in planning a new business. Writers know how to plan and write about planning better than anyone Writers also typically spend a good deal of their time sitting in rooms - not exactly hotbeds of commerce, unless one is dealing in words.

Many entrepreneurs that quickly went on to greater growth tell that they were relatively informal about planning But almost all who have demonstrated a keen awareness, either formally or informally, of the importance of certain key aspects of the planning process The general echo seems to be: well-planned and conceived doing, yes; an over-emphasis and reliance on Arabic numerals, no. Informed doing seems to be the best plan in practice Formal business plans have taken on a considerable role in the financing of start-up and early stage firms Many university 'entrepreneurship' courses are dominated by their preparation and evaluation as well. Any formal approach to planning may involve certain risks, including excessive emphasis on the process. Both the minimal approach to planning and the full-blown approach may be effective, but under different circumstances both can be of little help or even harmful. It is commonly thought there are planners and doers Planners are known to find deep comfort in numbered shadows of reality They also think. In another room, behind the cluttered desk stacked with paper, are the doers - men and women trying to get something done. When one goes into business for oneself, it means naturally working both ends of the room.

What kind of thinkers are thinking entrepreneurs or would be entrepreneurs? Most economists prefer a vision of rational utility-maximising agents 'Rational' entrepreneurs all possess the same knowledge, all reason the same logical way, almost all notice the same threats and opportunities and pursue the same goals - or do they? Can most business planning be signified an intentional, deliberate, and intelligent activity, entrepreneurs consciously directing the firm's strategic resource allocations to ensure the long term survival prospects of a venture?

Schendel and Hofer placed entrepreneurship at the centre of strategy making They wrote, 'Any successful business begins with a 'key idea' ... that product of the entrepreneurial mind' (1979, p. 6). Further, to institutionalise entrepreneurial strategic management, they devised a series of six complicated responsibilities to stress managerial rationality. Promises about the payoffs which would result from applying the over-arching comprehensive rationality, strategy formulation as analytical thinking process have often failed to materialise even in the case of large companies not to talk about small entrepreneurial ventures (Hurst, 1986, Pearce et al., 1987).

In addition to 'cognitive functionalism' (Stubbart, 1989) with its central axioms about minds less rational approaches are needed: intentionally does not always guarantee that intentions are realised by action Intentional actions do not always achieve their object (Minzberg, 1978) 'Boundedly rational heuristic entrepreneur' may sound more believable. A frame-work which could accommodate both 'smart' and 'dumb' reasoning is needed: a model of both intelligent choices and occasional errors.

Brytting (1990) emphasises that the small firm typically receives its organising structures through two fundamentally different types of processes; one that is spontaneous, surprising and non-analytical, and another that is planned and analytical. The properties of 'Spontaneity' includes not only pure chance, but things like deliberate plans, and spontaneous, but nevertheless co-ordinated judgements based on a shared understanding of the firm He concludes that 'the small firm is only partly a rational phenomenon'.

Business plan perspectives

Formal business plans have achieved a dominating role in many university entrepreneurship courses Yet, relatively little objective analysis has been done on their contents or impact on investor decision making. The author reports here some findings from examination of thirty business plans submitted by undergraduate students teams in 1991 and 1992 They were prepared after an average 'start up your own business' course The business plan preparation was supported by two 'educational interventions' by the instructors Both tutoring sessions took about an hour for each team. The preparation period took some four or five months before the final evaluation Assessment of these plans was carried out by a systematic diagnosis of the plan documents themselves. A general modifiable frame of reference was given the teams to help them to get started and structure their work

The first observation is that all thirty plans have some kind of stated overall objective, presenting broadly and understandably what the companies are trying to do. Only fourteen of the thirty, however, have a specific strategy, formulated and clearly explained, that appears rational and achievable. The other sixteen firms' documents only contain an implied strategy, not clearly indicating the overall approach they intend to take forward to achieve their overall objectives.

Table 11.1 indicates the classification of the central orientation of the plans into three different emphases, allocated those that had mixed prorities on a weighted basis In forty percent, the central orientation was the product itself. While product emphasis can be a promising feature for a plan, this sometimes sounds like 'technology push'. Furthermore, sometimes the teams were more interested in a technology than in the end product itself or equalling these two different issues The teams' purpose that they can do it better than anybody else, but can forget to demonstrate that anyone wants it. Quite often in the guidance sessions it came out that a product-oriented plan focuses so strongly on the attractiveness of the product that the plan omits critical elements of attractiveness from a market perspective as well as aspects of the team's capabilities to carry out implementation.

Table 11.1
Central orientation of plan

Type of firm	%
Product	40
Market	33
People	27
Total	100

One third of the thirty plans reviewed to focus on the market Many of these, however, indicate an overoptimistic or unrealistic rapid growth The plans do not convince the reader that the planned ventures have a clear competitive advantage in the marketplace, or why the new firm is going to be able to develop a particular share or to take a special segment of the market

Twenty-seven percent of the plans concentrate on the people who are the team Some serious questions are still raised although people are no doubt one of the most important ingredients for the success of a new venture Some plans try to persuade that 'We are a superb team', trusting their own skills and flexibility to shift as needed - in spite of the product and their market. The teams sometimes seem to lack of commitment to the specifics of goal-oriented activities and awareness of the marketplace What is needed in a new business plan is a central orientation with clear elaboration of the selected thrust in both of the other identified dimensions

Starting a new business is basically an industrial experiment Implicit in the experiment are a number of hypotheses (commonly called assumptions) which must be tested Some of the assumptions will turn out to be dead wrong or partially wrong, so a major purpose of the plan must be deliberately plan to reduce ignorance, so that important assumptions may be systematically replaced by information Hence the plan must also be a design for learning and should include specific goals set, and actions taken, to reduce uncertainty Each step should challenge the team members to justify moving to the next stage of the plan on the basis of new information learned in the previous step The entire planning process can be considered a learning process, where the teams can also learn effectively even from failure

Deficiencies in plans

Analysis of the plans for possible deficiencies may reveal gaps in the details provided to support the formulated strategy During the first tutoring session more than a half lack emphasis on economic performance. This figure was then reduced to one third by the second session. They just do not mention profitability and/or growth in a significant accurate fashion. Profits often appear to be either a number game or too implicit. Profits are seldom a central point of the teams' discussions of the firm they are trying to build.

In about half the cases, plans lack adequate discussion of the economic environment, the business climate and the degree of competition in the market, which is often underestimated. The plans generally reflect what the teams understand best, but they also reflect what the teams do not understand Too little attention is generally called to non technical aspects of the business environment.

Especially in terms of the specifics of the competition, in sixty per cent of the business plans the teams are unable to identify anyone who competes with the proposed enterprise. (This was reduced to about one third by the final assessment of the plans but still indicating that some of the teams did poorly their homeworks) These business plans communicate that the firm has come forth by the kiss of a Muse, in a brand new marketplace that no one so far has ever entered This is very wishful thinking, and is usually incorrect and dangerous type of planning

A further common deficiency is that very many (about sixty per cent) of the business plans suggest that they are trying to do too much or too many different things at once Plans often give a list of multiple product lines or services at the outset. They list large numbers of markets or market segments that the firm will somehow attempt to enter and conquer, without really communicating priorities so as to demonstrate focus.

Functional planning deficiences

The marketing plan, the financial plan, the technology plan, and the management team were assessed and evaluated for moderate or significant deficiencies as four clusters of functionally oriented plan components As table 11.2 indicates this rating identified inadequacies in all areas, even after the tutoring sessions , with marketing plans being seen as deficient in most cases.

The marketing plan should be an analysis of the firm's opportunities in the marketplace It is supposed to cover the ongoing trends and opportunities in primary and submarkets to which the company may seek to sell These trends and opportunities concern market segments, customer's needs, buying patterns, regulation, demographics, life-style, and other forces The position of competitors, both direct and indirect should be included Analysis and recommendation of pricing structures might be relevant as well as qualified statements of market sizes, growth, and expected market shares. The sales plan follows often the marketing plan, but the writing of orders is not automatic

The marketing plans clearly indicated the way in which the teams collect and were planning to make use of information: many of them almost take pride in ignoring formal market research being immensely intuitive, showing great faith in 'gut' feelings and demonstrating self-reliant and self-confident in the area of marketing Still in the final evaluation only thirty per cent of the cases have the teams developed a detailed sales plan, stating details on sales force - why, where, when. In thirty per cent of the situations a broad sales plan is implied but not in a very detailed way. fourty per cent of the cases do not contain any sales plan at all. Sales are presumably to be realised from a good product or service aimed at a great market, but with no information provided as how the enterprise plans to get customers to place orders.

Table 11.2
Inadequate functional plan in critical area (n = 30 plans)

	Per cent of plans reviewed		
Type of plan	Moderate Deficiencies	Significant Deficiencies	Total plans with inadequacies
Marketing plan	40	30	70
Management team	20	20	40
Technology plan	30	15	45
Financial plan	30	30	60

In terms of market research (table 11.3), ten per cent of the plans evidence no market data at all and sixty per cent only broad brush data to establishing existence of the market In twenty per cent of the cases there is adequate market information to a moderate extent The remaining ten per cent of the cases evidence detailed knowledge of potential customers.

Table 11.3
Market research issues

Research issues	%
No market data	10
'Broad brush' approach	60
Moderate amount of adequate market data	20
Plan indicates detailed knowledge of customers	10

The next area of analysis is the skills composition of the management team Consisting of advanced students it is obvious that there is not much experience in the teams

Production and R & D experience is represented and also some finance and accounting Marketing and sales are absent practically from all the teams Some of the teams have clearly seen this particular deficiency and are aiming at recruit sales people in their plans. Production plans are generally much better than marketing plans Let us turn to the financial aspects of the plan (table 11.4) Financial planning is influenced by the opportunities of the new business, by the realities of the finance market, and by the choices of the management of the company Financial plans can be relatively short term: How will next year's business be financed? It is more regular, however, to project financial data presented in the business plan five years into the future Financial projections are usually supposed to include things like the income statement, the cash-flow forecast, the balance sheet, and the break even analysis

Table 11.4
Projected financial statements included (%)

None	-
Data not available	-
One- to three-year income statement	15
Four- to five-year income statement	20
One- to three-year income statement and balance sheet	35
One- to five-year income statement and balance sheet	30
Total	100

The teams are well aware of the fact that potential investors dealing with the business plans do not invest if the plans do not treat expected financial outcomes No team is promising more financial information in a later submission, which happening among many other business plans. In ten per cent of the cases a one - to three - year income statement is available and the teams know how to do it. In sixty per cent of the cases both multiyear income statements and balance sheets are included in the business plans. Cash flow statements were not demanded by the instructors and that is why they are included in only few plans, despite the fact that investors are usually more immediately concerned with cash flow than with any other financial parameter.

There are only a few proposals providing financial plans based on multiple sets of assumptions reflecting alternative sales projections like 'pessimistic', 'most likely', and 'optimistic'. In all, the financial statements were better presented than expected. Many of the financial statements are not realistic in the other hand: costs, funds needed, and risks included are very often underestimated in the plans.

Conclusions and speculations

It is well recognised that there is relatively little relationship between projections and results for new ventures Yet the practice persists to evaluate performance based on adherence to business plans and projections, where virtually every aspect of a new venture is based on assumptions to be verified later on Working with the students especially provides thus the danger to go into business of planning instead of the real business and to use all right words of a plan but little of the substance of the business.

Anyway, a fundamental purpose for planning new ventures requires explicit statement Since ignorance is the main factor which explains the disparity between plans and actual performance for new ventures, a major purpose of the plan must be to reduce that ignorance whether the plan is prepared by a student team or a real start-up team supported by investors. Further, the business plan process as well as the whole venturing process can be identified as a learning process. While we are still interested in the numbers written in the plans and indicating the business outcomes, there is another principal measure to be taken into account: what has been learned, and how effectively have plans been modified in response to that learning Planning for new ventures goes beyond merely learning reactively from unexpected experiences that occur. Proactive learning is necessary and possible - by identifying specific planning events which are designed to produce information for the explicit purpose of learning

What should actually be included in the business plan in our experience are alternatives, allowing the teams to try to adapt within changing situations An important aspect of planning for maybe entrepreneurs during the early days of their business is adaptability and the preparation for it.

The most important thought or planning that will go into a new business will be the choice of product or service the teams will choose to deliver Second most important, intimately wrapped up in the first, may well be the alternatives and back-up options the teams consider - the 'what if's'. The what ifs are really an expression of how well the teams have been able to think the business through They involve the most important dynamics, inputs or out-puts affecting the business

The most important aspects of business planning for the prospective of new venture seem to start with questions of what and how, not how much and how many The more options considered, the more alternatives thought through, barring the odd instance of trouble-free demand, the more likely the teams are to be better prepared for managing their businesses.

A strong control should be emphasised as well when under way - stronger than is usually prescribed for new ventures Control and the sort of feedback mechanisms that also serve the planning process are certainly something to be concerned about, but at the outset industry and the competitors and most of the customers are of top priority In our experience it is possible to teach and learn something about entrepreneurship by business plans. Writing a business plan can well be planning to learn, although there are some problems in getting across the traditional boundaries of classroom learning This can be done to a certain extent by specifying the cognitive and other abilities in terms of environments, where things really take place The solutions of educational problems can not be found in our wishes and efforts, but by understanding our society and world around us

Moving back to the issue of 'managerial rationality' we could describe the learning occurring in the process of writing a business plan in terms of ' a cognitive hierarchy', where the level of complexity and explanation varies from data to information, and then from knowledge/understanding to wisdom

It can been seen among some teams how understanding is composed of loose data and information to become organised information that is 'interpreted, processed according a point of view, preparing the receiver for appropriate action' It is information that has been given a context, internalised by the receiver, and integrated with experience, study, or intuition. 'Integrated knowledge relates bits and fields of knowledge to each other, which in turn enables one to use the knowledge to do something'

Anyway, so far the record would seem to indicate entrepreneurship is still as tough a row to hoe as ever The majority of new businesses are still failing at an alarming rate The carriers of the entrepreneurial spirit are people who make very personal choices We can teach entrepreneurship in our schools and universities, in terms of the nuts and bolts of what it takes to run a business, but the level of entrepreneurship will probably continue to have a great deal to do with the number of individuals who find themselves driven to accomplish on their own terms

The level of competition and opportunity in a society no doubt influences, if not dictate, the level of entrepreneurial activity But the entrepreneurial ethic is not rooted in a society's need to achieve but rather rooted in the need of the individual as a wilful agent capable of making a difference And there we find once again the traditional entrepreneurial values of independence, self-determination and hard work, possibly far beyond any formal planning

References

Brytting, T. (1990), 'Spontaneity and Systematic Planning in Small Firms - a Grounded Theory Approach', *International Small Business Journal*, vol 9, no. 1, pp 45-63

Hurst, D. K (1986), 'Why Strategic Management Is Bankrupt', *Organizational Dynamics*, Summer, pp 5-27

Minzberg, H (1978), 'Patterns in strategy formulation', *Management Science*, vol 24, no 9, pp 934-948

Pearce, J. A., Freeman, E B and Robinson, R B (1987), 'The tenuous link between formalstrategic planning and financial performance', *Academy of Management Science*, vol. 7, no. 4, pp. 658-675

Rich, S. R and Gumpert, D E (1987), *Business Plans that Win. Lessons from the MIT Enterprise Forum*, Harper & Row, New York

Schendel, D. E and Hofer, C. W (1979), *Strategic Management: A New View of Business Policy and Planning*, Little, Brown, Boston

Stubbart, Ch. I. (1989), 'Managerial Cognition: A Missing Link in Startegic Management Research', *Journal of Management Studies*, vol 26, no 4, pp 324-347

12 Entrepreneurial training in the UK: Past confusion and future promise?

Peter Rosa

Abstract

There are many 'believers' in the value of entrepreneurial and enterprise education and training in the UK, even though concepts of 'entrepreneurship' and 'enterprise' are vague and confusing The paper analyses reasons for this confusion, and demonstrates that it is associated with several factors. These include heterogeneity of 'enterprise roles' and the diversity of academic traditions underpinnning concepts of 'enterprise Also noted is the ambivalence of successive UK governments in the 1980s to 'enterprise' education and training Policy tended to stress non intervention, leaving it to market forces to stimulate entrepreneurial attitudes and skills relevant to wealth creation. In terms of social policy and welfare, however, direct intervention was more permissible, particularly to alleviate the drastic effects of regional unemployment following industrial restructuring The failure to clarify the differing roles of entrepreneurial and enterprise education when related to wealth creation on the one hand and social welfare on the other is possibly a major source of confusion to practitioners. This failure arguably reduces the effectiveness of education and training, as it is not targeted enough to either camp to maximise benefits

The post Thatcher era could lead to more targeted intervention to promote small businesses and 'effective' entrepreneurship, but there are few signs at present that the ambivalent attitude of government to enterprise education and training is changing

Introduction

In discussing ways to implement small enterprise development through 'entrepreneurial' or 'enterprise' education and training, it is common to assume that the general policy works, and that it is of paramount importance to local or even national economic development. Gibb (1989), for example, discusses 'ensuring the design of effective training programmes for SMEs in Europe'. The choice of the word 'ensuring' betrays that it is already predetermined that to produce such training programmes is worthwhile and essential The possibility that 'enterprise' support and training may be a minor factor in determining business success compared to other factors (such as those that shape 'demand' for goods and services in the economy (see Dawson 1990)), is seldom critically addressed

Ritchie has observed that the policy and research world of enterprise development and training is dominated by practitioners whom he categorises as 'believers' (Ritchie, 1987,1989), who have 'faith' in the revival of small businesses and the 'enterprise culture' He talks about 'educator-missionaries', and, of the 'researcher as courtier' who:

'sermonizes about how Revivalism might give 'birth to new enterprise' like some guru, prophet, priest, faith healer or similar advocate given the 'air' and 'grace' that 'befits a gentleman living at the courts of princes' like Castiglione originally observed.', (Ritchie, 1989b, p. 19).

Such people, Ritchie argues, are particularly defensive towards 'analytical' and 'sceptical' researchers whom are usually viewed as more 'academic' than 'action based'(Ritchie, 1989, p. 5). As in many religious faiths, to question is to be heretical. When faith is also married to vested interest, strategic issues are even less likely to be questioned, and hostility to change will be even greater. A priest who becomes an atheist either keeps his doubts to himself or rapidly does himself out of a job This point is particularly pertinent when considering the spectacular rise of the small business support network as a major service industry in the UK (and elsewhere) (Lambshead and Moran, 1991, p. 1).

As in many religious faiths too, fundamentals of the 'enterprise doctrine' and practice are imprecise, ambiguous and contradictory There is no single coherent scientific/academic body of theory to underpin 'enterprise development'. The historical beginnings of the 'enterprise' movement are shrouded in mystery There is no historical text book on the subject, and research to remedy this gap is extremely difficult as the researcher confronts the imprecise nature of what 'enterprise/entrepreneurial development, education and training' really are, and how they relate to concrete policy decisions often formulated outside the arena of public debate In the absence of history, there is 'mythology', the influence of venerated ancestors (e.g 19th Century entrepreneurs who possessed the 'spirit' of enterprise that their descendants lack (Weiner 1985) and 'cult' prophets and prophetesses (Margaret Thatcher, Ronald Reagan, Anita Rodick). The successful 'entrepreneur in the UK has become the god or goddess of current UK political ideology, the leading actor in the theatre of the new economics' (Gibb, 1990, p. 3).

Faith is a poor substitute for strategic reasoning in furthering the cause of economic development at national or local levels With faith alone the reasons for carrying out enterprise or entrepreneurial education or training are shrouded in confusion, and the inevitable consequence is a recipe for ad hoc development and implementation of indubitably well intentioned, but often ineffective entrepreneurial and enterprise programmes and initiatives. This paper firstly analyses the causes of confusion, especially related to the UK experience in the Thatcher Years. It then reconstructs government and opposition strategies of economic 'wealth creation' as far as they relate to the roles of 'enterprise development' in these processes. Discussion seeks to demonstrate that enterprise and entrepreneurial education and training would be much more effective if focused more clearly on any one of the alternative strategic approaches to enterprise development

The elements of confusion

Whether one is a 'believer', 'sceptic' or just a detached 'analyst' in the Ritchie typology, some confusion accompanies the meaning of 'enterprise'/'entrepreneurial' development, education and training. Amongst academics, practitioners and educationalists there are divergent views and interpretations on what these concepts really mean, and over the effectiveness of policy measures when these concepts are applied It is possible to differentiate several core reasons for underlying confusion and controversy. These are outlined below, and subsequently discussed in detail:

- The difficulty of defining concepts such as enterprise and entrepreneurship and of achieving consensus over definitions.
- The political advantages of loose and ambiguous concepts.
- Heterogeneity in theoretical concepts underpinning enterprise and entrepreneurial development
- Heterogeneity in policy roles and objectives of enterprise/entrepreneurial development, education and training
- Incomplete penetration of free market principles guiding local academics, policy makers and practitioners.

Difficulties of definition

'Enterprise' and 'entrepreneurship' are like other broad labels such as 'society', 'ecology', 'religion', 'culture', people have 'notions' of what they mean, but few are able to satisfactorily articulate them. Such vagueness is unacceptable to people such as some academics, educationalists and local government officers and planners who have to professionally put boundaries on concepts to apply them usefully, and to provide reference points so that different people can perceive and operationalise concepts surrounding 'enterprise' and 'entrepreneurship' in the same precise and measured way Academics in particular have completely failed to reach consensus on definitions, as most offering definitions have tended to value their own view of reality more than any need to achieve standardisation. (Indeed in an academic sense the quest for holistic definitions tends to be sterile and unproductive (Rosa and Bowes, 1990)) Gartner (1989) referring to 'entrepreneurship' lists eight pages of definitions from the literature He notes 'that few studies employ the same definition' (p. 53), that there is a lack of basic agreement (p 53) and that definitions are often vague In many studies the ' entrepreneur' is not even defined' (p 48).

In the UK context definitional confusion is compounded by the fact that, as Gibb observes:

> 'there are fundamental conceptual differences in the use of the term entrepreneurial education in Canada and the USA compared with the UK These differences in concept are important because they are substantially reflected in the practice. Much of what is practised in this field in the UK educational system is labelled 'enterprise' rather than entrepreneurship education It does not necessarily embrace small business or indeed the entrepreneur It is substantially linked with the development of an Enterprise Culture within which the entrepreneur will flourish ' (Gibb 1989b,

pp. 2,3).

In essense 'enterprise' is commonly used in three different senses in the UK, only two of which relate directly to economic development. These are also detailed in figure 12.1:

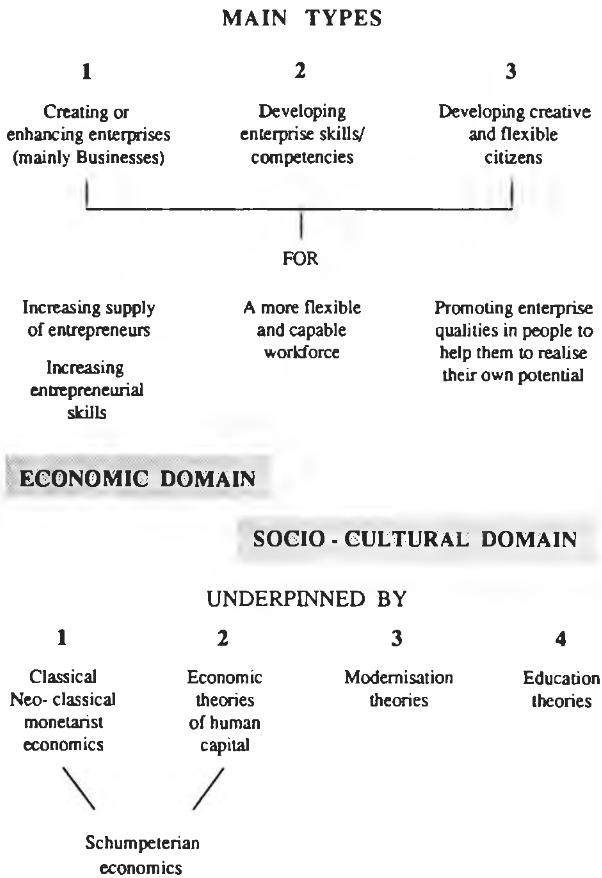

Figure 12 1 Enterprise development

Enterprise as a business organisation of some type. There is a great diversity here, from one person self employed business, to large corporations Some are even associated with types of businesses such as co-operatives, community businesses, franchises, and so on. With interest focused on an organisation of some kind, the concept of enterprise development and education usually refers to the processes of starting businesses, and growing them and teaching people who run the businesses the necessary skills to survive and thrive in the business environment The ultimate achievement is developing a 'seed into a mighty oak' - when the small venture matures into a multi-million pound corporation, creating significant wealth and employment This process of development can be enhanced in many ways by the 'right' kind of support This may range from physical reforms as part of a package of legislation to create an environment where entrepreneurs may 'germinate' and 'flourish' by central government, to detailed consultancy to enhance aspects of a specific businesses performance at the local level, - to detailed training and education to provide the basic skills and expertise

Enterprise as a series of personal skills and qualities vital to economic development. 'Enterprise is the characteristic of people, groups and organisations which produces a disposition to self-realisation through achievement It encompasses the self-reliance to innovate, accept risk and act independently, if these are needed to complete tasks effectively. People and organisations showing enterprise have the drive, energy, creativity and leadership to see tasks through to completion by individual effort or successful teamwork.' (Cannon, 1991, p. 2).

Those whose notions of enterprise development fall into this camp, tend to argue that the process of developing small firms and businesses, is only the tip of the iceberg To ensure a supply of new businesses, you also must have a supply of people who want to and are capable of starting and managing these businesses These people must have 'enterprising' attitudes to want to start the businesses in the first place Secondly they must possess the enterprising attitudes and competencies to enable the person to thrive in business once the firm has got off the ground

It follows that the process of enterprise development and enterprise education is not so much the process of developing individual businesses, but the process of developing the (a) people who potentially and actually run these businesses, and (b) the people who may work in these businesses The main focus of enterprise therefore is the development of enterprising skills and competencies in people at all levels in society This is particularly important in the school and higher education systems where traditional education has tended to stifle enterprising qualities

The creation of an enterprise culture is often seen as an essential part of this process The 'enterprise' culture in this context is the creation of an educational and business support environment where the enterprise skills and competencies can be instilled in people at all levels for the better development of the society. In the UK context this means developing enterprise competencies and attitudes necessary to thrive nationally and internationally in today's complex and ever changing world, a world where Britain is commonly perceived to be slipping ever further behind our main industrial competitors

Enterprise as a series of personal skills and qualities vital to good citizenship and the realisation of the individual's full potential. This view still acknowledges the necessity to develop enterprising skills and competencies throughout society but does not recognize as paramount the need to relate this to the industrial business environment Many teachers in primary, secondary and higher education see the development of enterprise not so much as an economic necessity, as a social necessity They would argue that enterprise is a quality

(a) necessary to develop creative responsible citizens; (b) necessary for people to realise their full potential- to equip them for the varying demands of a complex, varied and ever changing world.

(Last year I gave an invited talk on enterprise development to a mixed group of local policy makers, practitioners and educationalists in Wales On being asked which of the three views of 'enterprise' they identified most with, about one in five chose option A:, a similar proportion chose B: and a clear majority chose C:, the one option least related to economic development, and least in tune with Thatcherite economic principles)

Political advantages of vagueness

We may speculate that it is the very vagueness of terms such as 'entrepreneurship' and 'enterprise development' that are attractive for some politicians, policy makers and even some academics. Essentially vagueness is useful when propaganda is called for. The absence of definition enables untested beliefs to be disseminated with a minimum of argument and conflict. Forceful assertion can readily become acceptable, especially if the vagueness of the overarching concept enables a person to read into it his or her own notions of the truth. The vagueness of 'enterprise' has been to the advantage of both government and academics in the 1980's in their attempts in the UK to change the national culture. It is rare to find any definitions in UK Government publications during the 1980s that promoted the 'enterprise' message Some academics too, who intrinsically believe in the 'enterprise gospel', also tend to exploit vagueness through assuming that 'enterprise' is too well known and accepted to require careful definition or justification

Heterogeneity in underlying theoretical concepts

The basic ideas linking economic growth to the development of small firms and of promoting 'enterprise' were already being developed in the 1970s (See Mussati, 1990, p 7) - well before the Thatcherite era in the UK History may show that Margaret Thatcher acted more as a catalyst to their adoption worldwide, rather than as an instigator. For example the importance of small firms had long been appreciated by policy makers in Japan and the FDR, and was seen as a vital reason for their economic success by the 1970s (Neck 1987, p. 23) In the UK concern about the decline of small firms led to a major government report on small firms in 1971 (Bolton, 1971) Recession in the 1970s led to a growing appreciation of the poor state of British industry There was considerable consensus that British industry was uncompetitive, with a decreasing supply of firms capable of producing the surplus the economy needed to invest in non-productive areas such as state welfare Both Mr Benn on the left of the labour party (then in government) and Mrs Thatcher on the conservative right (in opposition) both advocated the revival of the market sector as a possible solution (Bacon and Eltis 1978, p 63).

The adoption of these ideas by politicians does not mean that they were novel ideas Many of the elements that underpin the concepts behind enterprise development and education already existed in different forms in the social sciences. Enterprise development is predominantly a policy makers view of economic development It is characterised by an absence of easily recognisable academic roots, by ambiguity and much definitional uncertainty I hypothesise that this reflects the fact that enterprise development draws nebulously from several bodies of economic, sociological and educational theory, and is often interwoven with elements of conventional wisdom Political need and circumstance primarily dictate which of these fundamental concepts are drawn upon to justify the policy being adopted What then are these fundamental bodies of theory? They include economic concepts (detailed in figure 12 2):

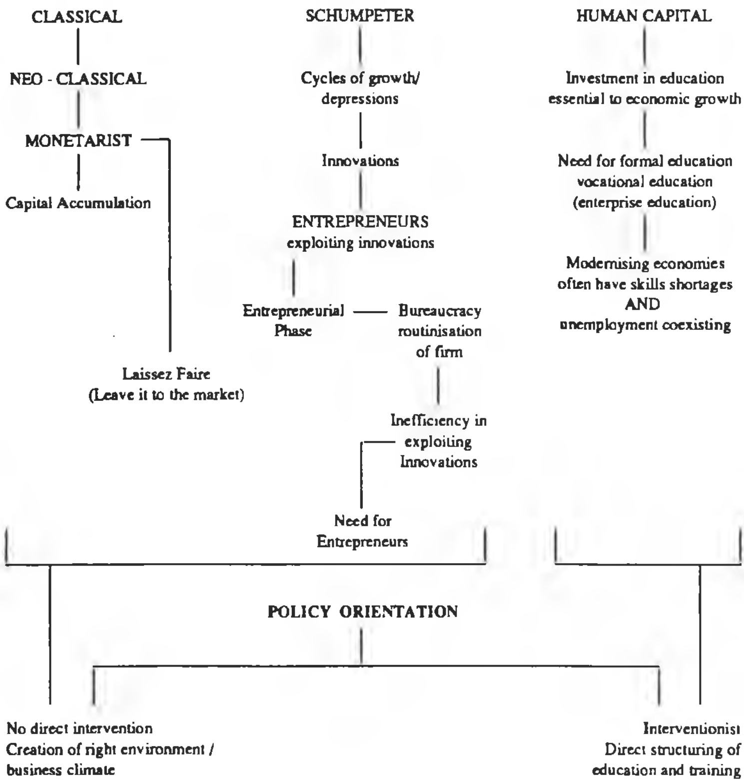

Figure 12 2 Economic concepts underlying enterprise development

Classical, neo-classical and modern monetarist economic theories of development: There are two fundamental basic ideas underlying these approaches

- development as the gradual accumulation of capital This was envisaged originally in terms of 'physical' capital - money, labour and physical resources Modern neo-classical economists now acknowledge that 'human capital' is a resource that should also be part of the equation. The wealth of the nation is thus increased by the gradual and harmonious increment of physical and human capital, accumulating in a state of a general equilibrium of competing economic forces.
- Laissez Faire' originating with early classical economists (Smith, Ricardo - see Meier and Baldwin 1964, p 20), that the most efficient use of resources is that when forces of competition and the free market are given full opportunity to operate unmolested by government intervention. Economic growth and progress will be greatest in those countries where 'Laissez Faire' policies are pursued with vigour.

Neo-classical economists (particularly Marshall: see Bateson et al , 1988) developed 'Laissez Faire much further, inspired by contemporary debates on Darwinian evolution and natural selection. Leave the economy alone, and enterprises will struggle for survival and ascendancy. In modern jargon, the leanest and fittest will survive. Modern monetarists are sophisticated variants of these 19th Century economic traditions (Smith, 1982)

The modern versions of monetarism inspire policies that are there to reduce government intervention in the processes of economic wealth creation and development. The role of government is to create an environment where competition can flourish, not to tell individuals, institutions of enterprises what to do. Encouragement of 'enterprise education' is part of the overall policy to increase economic diversity and competition throughout all sectors, public as well as private Competitive forces will then raise efficiency, productivity and hence economic growth.

Schumpeterian economic theories. Entrepreneurship is not heavily stressed in the classic economic traditions, for those who run enterprises are merely part of the process of efficiency maximisation through the action of competitive forces Schumpeter, however, realised that the views of economic development as a balanced process of steady capital accumulation were flawed. His alternative theories viewed economic development as taking place as a series of highly productive 'bursts', in which new technological discoveries and inventions provided a basis for rapid economic growth Crucial to this process was the entrepreneur, the being who instigated economic innovation by seizing on inventions and new ideas and exploiting them commercially (see Meier and Baldwin 1984, pp. 87ff).

Schumpeter's theories on economic growth stress the dynamic and cyclical nature of development, with economic booms interspersed with economic depressions. Depressions are caused by the consolidation of entrepreneurial activity through the growth of corporations and bureaucracies, in which owners of firms cease to innovate, but become routine managers and administrators Tasks are delegated to teams of managers hierarchically controlled, and with routinised administrative roles and functions resulting in the progressive elimination of any sense of initiative As this process continues, entrepreneurial energy is progressively stifled until the next cycle of technological innovation and invention takes place The bureaucratic corporations are ill equipped to take advantage of these, so room is created for the next generation of entrepreneurs

Schumpeter's theories predict that as these cycles of boom and depression continue, there is a gradual deterioration of the whole entrepreneurial drive in people Entrepreneurial obsolescence takes place and infects the social institutions and ultimately the all important political institutions too. A Schumpeterian may argue that this stagnation was what happened in the late 1970s in the UK Only by reviving the spirit of enterprise and by encouraging and reviving the entrepreneurial drive, skills and competencies could this near chronic stagnation be reversed.

Economic theories of human capital. It was noticed by economists in the 1950s that a nation's wealth could not totally be accounted for through the accumulation of physical capital alone The notion of 'human capital' became firmly established as a major force in the early 1960s as ex colonial countries struggled for economic development Investment in education and health became regarded as essential pre-requisites of economic development. It is no use having sophisticated equipment, complex organisations and so on if the people had not the knowledge to make use of them In the 1970s it became increasingly obvious that formal education was not necessarily the best route to development Critics noted that the supply of high level professional jobs was limited in relation to the numbers coming out of formal education expecting such jobs Nor was the link between economic growth and formal education that clear cut. Studies such as those by Robertson on Ghanaian female entrepreneurs demonstrated that education actually resulted in reduced business and trading activity (Robertson, 1984)

Parallel to this, human resource researchers were noting that in modernizing countries, it was not unusual to find high rates of unemployment existing alongside severe skill shortages (not unfamiliar in Wales and Scotland) Education, it became increasingly thought, should be much more vocational, technological and practical to resolve these problems. Enterprise skills and competencies are, in this school of thought, essential skills associated with the need to flexibly respond to rapidly changing skill requirements. (Without this element of changing conditions, the onus would be on solidly and unimaginatively replicating good practice - essential in many professions Would you feel comfortable with an 'enterprising' dentist or brain surgeon?)

Socio-cultural modernisation theories. (see figure 12.3) The idea that there are stages of human social development and growth, culminating in the most progressive stage, modern Western capitalist democracies (Rostow, 1971). Underdevelopment is explainable in terms of people being 'behind' in this progression Doing something about it entails 'modernising them' Central to the overall approach are two notions (Long, 1976):

- That there are socio-cultural, psychological and economic obstacles and barriers to development for example people are underdeveloped because they are conservative, lazy, passive, unenterprising, dependent, unmotivated and so on.
- The idea of socio-cultural or psychological pre-requisites to development That is to say people first need to become creative, innovative, dynamic, achievement orientated and so on Many of these modernizing qualities and attributes are inspired by the writings of Weber, who associated commercial success in Northern Europe and the USA with values drawn from their common Protestant heritage, and from the writings of McClelland (1961)(who acknowledges his debt to Weberian idea), who advocated that a clear link exists between economic success and the 'need to achieve' The need to achieve in turn is heavily correlated with many attitudes and attributes that today would be considered 'enterprising' or 'entrepreneurial'. Enterprise in this sense is a modern development of modernisation theory, in which 'enterprising' skills, qualities and competencies are essential pre-requisites for

economic and social development; while non enterprising characteristics are obstacles and barriers

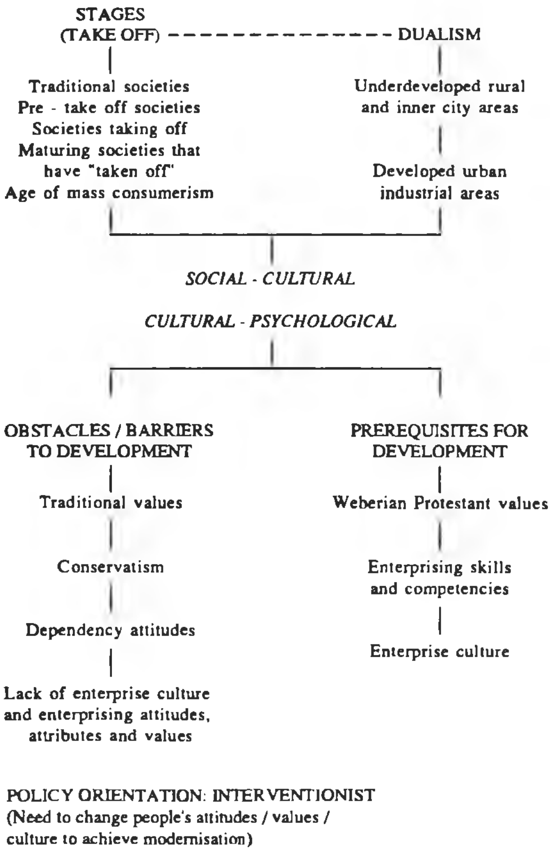

Figure 12 3 Modernization concepts underlying enterprise development

Heterogeneity in roles for enterprise development

Surprisingly there has been very little attention paid to the fact that entrepreneurship and Enterprise development can have not just one but several roles to play in a modern economy and society. Most studies tend to concentrate on one, and ignore the others Even where more than one role is identified, there have been few attempts to systematically explore the interrelationships between different roles.

Some primary roles for enterprise development are:

-Economic Development through Wealth Creation:

-- *Generating new industries.* Storey (1982) points out that it is new firms rather than small firms that are vital for introducing innovation into the industrial base of a region High rates of new firm formation are thus likely to have a crucial effect on economic growth This is likely to be especially beneficial if new firms exploit innovations in high growth innovative sectors Insofar as new firms tend to start off as small firms, promoting small firms is an important tool for encouraging economic development Some studies, however, have questioned the true value of small firms as innovators, arguing that large firms tend to succeed better as innovators (e g Oakey, 1979)

-- *Adding dynamism to the economy by introducing new competition by small firms to otherwise complacent large firms.* This view was stressed by the Bolton Parliamentary Commission on Small Firms in 1972 and is a popular justification for promoting small enterprises. Its effectiveness is perhaps overstated as research shows that most small firms invariably compete directly with each other rather than large firms. The most effective competitors for large firms are other large firms.

-- *The aggregate contribution of small firms to GDP is significant in all countries. The more small firms there are the more the contribution will be.* Proponents of this view can point to Japanese and German economic success based on a thriving small and medium firm sector (Brikau and Trinder, 1991) In most countries in the world, especially third world countries, small enterprises are the most common unit of production. They are also the most efficient users of resources (Nelson, 1987:1). It is not known, however, how far economic growth is due to the aggregate activities of small firms, or whether small firms increase because of opportunities created by economic growth due to other factors Proponents of dependency theory (e.g Frank, 1969) would argue, for example, that small firms only survive where multinationals allow them to

-Welfare:

-- *Job Creation* Population increase in many developing countries is resulting in the need to absorb an ever larger labour force. Tomecko (1990, p 17)) describes that in Kenya, for example, the wage and farming sectors lag far behind that of the informal sector, consisting of enterprises under 49 employees, in absorbing the growing active working population Economic restructuring in Western developed countries and most recently in Eastern Europe have resulted in massive unemployment in some Regions hitherto dependent on wage labour associated with traditional 'smoke stack' industries. Again small enterprises and self employment have been regarded as important to absorb the unemployed, especially since the apparently promising findings of Birch (1979)

-- *Poverty Alleviation.* By increasing employment and creating wealth the promotion of small enterprises by implication reduces poverty In this sense small enterprise development as Harper points out, like all development, is ultimately 'all about the reduction of poverty' (Harper, 1990, p 52) This interpretation masks the fact that the relationship between small enterprise development and poverty alleviation has not been systematically and precisely focused upon. The reason for this may be that it is difficult to separate enterprise activities from other aspects of economic life As Harper states: 'Small enterprise, at least for the poor, cannot be treated as a separate discrete activity: it is inextricably integrated into he web of economic activities which make up the daily struggle to maintain life. The same poor people in rural areas, for example, may in one year work as cultivators, hunters, gatherers, artisans, petty traders and wage labourers: any form of assistance which attempted to isolate these activities which can be defined as 'small enterprise' would be doomed to failure '

The role of poverty alleviation is further complicated by the use of the word 'enterprise' development in the sense of cultural qualities as prerequisites for entrepreneurial activity. The notion that a non enterprise culture contributes to underdevelopment and poverty is highly controversial and as yet based more on belief than hard evidence.

Incomplete penetration of free market principles

Most senior government officials and academics in the UK in the 1980s were educated during the 1950s, 1960s and 1970s, when orthodox strategies for local economic development stressed the value of planned intervention. The non-interventionist free market policies of the Thatcher Governments in the 1980s had to be implemented by these officials A similar situation has now arisen in Eastern Europe and some African countries where free market policies are being legislated for at national level, but often implemented at local level by the same officials who formerly pursued quite different policies

In these circumstances policies of planned intervention can coexist alongside national non-interventionist policies, all within the broad umbrella of the label 'enterprise development' - providing conflicting rationales and methods for promoting small businesses and furthering the cause of 'enterprise' education and training An example of this is the survival throughout the Thatcher years in the 1980s of national planning development agencies in Scotland (The Scottish Development Agency (SDA) and the Highlands and Islands Development Board (HIDB), which were set up by socialist Labour Governments in the 1960s These bodies were able to incorporate some aspects of the Thatcherite agenda (e g small enterprise development and training, inner city regeneration) without having to sacrifice their planned approaches to the furtherance of economic development. The HIDB and SDA were recently replaced with twentthree Scottish Local Enterprise Councils (LECS), envisaged as flexible semi-autonomous development companies run jointly by public and private sector representatives, with a remit to stimulate local enterprise and match more flexibly local development and training needs with government and private sector resources. The new LECs are much more in keeping with Thatcherite principles of stimulating rather than directing economic development The LECs, however, have succeeded in maximising continuity with the defunct development agencies by re-employing a high percentage of former SDA and HIDB officials. Planned intervention is still simmering underneath the surface of creative enterprise

Is there a method behind this confusion

From this analysis it becomes apparent why there has been so much confusion surrounding the whole area of 'enterprise' and 'entrepreneurial' development, education and training These concepts form an eclectic approach to economic development, drawing from a variety of intellectual economic, sociological and socio-psychological traditions. These are not necessarily integrated with academic rigour, but can be loose interpretations and perceptions of these traditions by politicians formulating policy (for example how Margaret Thatcher perceived Adam Smith's ideas on 'Laissez Faire' is arguably more important in policy terms than the views of Adam Smith by any top economist). The emphasis of any particular tradition in the 'mix' of ideas can also vary widely according to previous experience and political ideology. Local Government Officials trained as planners in the 1960s and 1970s still tend to pursue more interventionist policies in promoting 'enterprise' development and education, when allowed to. Policy needs, as demonstrated, are also divergent, and 'enterprise' policy, promotion and support can have a variety of roles, each ideally requiring specialist attention. Uncritical faith in entrepreneurial or enterprise development programmes is arguably in part a consequence of a failure to appreciate how different macro strategies of enterprise development effectively interface with specific needs. Such policy in the UK has never been described in a form that enterprise educationalists, trainers and practitioners can easily understand It is an open question whether Government in the Thatcher years could have spelt out their policy on 'enterprise', as many believe that it evolved in an 'ad hoc' manner around certain principles, rather than being rigorously planned.

An analysis of 'enterprise' policy in the Thatcher years is thus a difficult exercise In hindsight 'enterprise' policy evolved, in practice, into two branches, one dealing with wealth creation and the other with 'welfare' The 'welfare' branch was implemented mainly through one Government Department, the Department of Employment (cynically labelled the Department of 'Unemployment' by many). Each had to contend with rival 'interventionist' views of 'enterprise' development, espoused particularly by the opposition Labour Party Figure 12 4 outlines the policy of wealth creation. Firstly it should be noted that the first underlying assumption by both political parties is that economic growth is a norm and that demand is dynamic. Technological progress, social and political change are creating new economic and business opportunities all the time. If this assumption is not true, then there is little incentive to pursue 'enterprise development'. The emphasis would be in raising demand through (a) steady economic growth (using traditional Keynesian principles of economic management) - or through redistributing wealth and curbing multinationals (guided by Marxist theories or by theories of structural dependency (see Frank, 1969, Foster-Carter, 1985, Long, 1976, chapter 4) More recently Dawson has argued, in evaluating the importance of the macro environment for small enterprise development, that:

> ' major attraction of the notion of small enterprise promotion is that it has been perceived as a way of helping the poor without infringing on the power of the rich. An analysis of the problem which suggests that the scope of small firm development is constrained not primarily by a lack of state assistance but rather by the power of large domestic and international corporations may well prove politically expedient' (Dawson, 1990, p. 40)

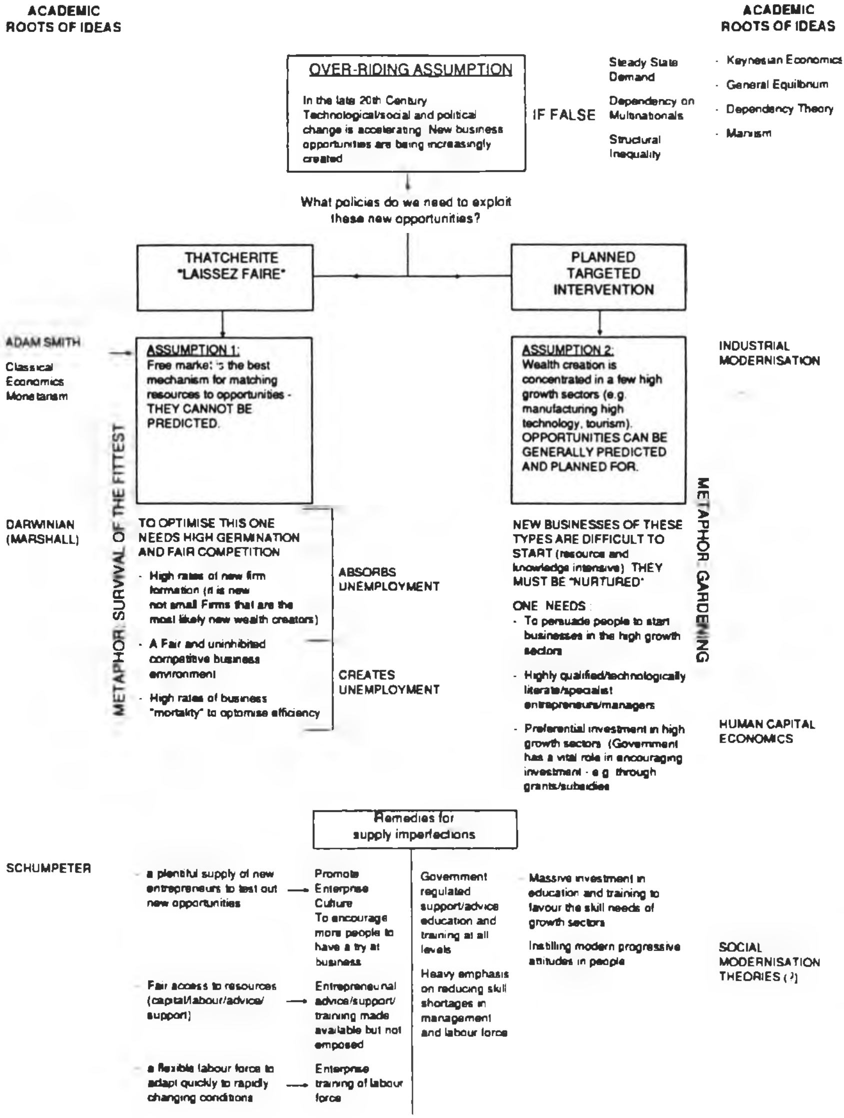

Figure 12 4 Strategic policies for enterprise development in the UK for wealth creation

Assuming sufficient potential demand, which both main UK political parties implicitly do, the next question is how to exploit it. Here views differ sharply. Figure 12.4 shows that the Thatcherite approach assumes that it is the free market that is the only efficient way of matching resources with opportunities. This is because it is impossible for government to efficiently predict in an ever changing economic, political and social environment where the best new business opportunities are likely to be. The 'interventionists' in contrast believe that business opportunities most likely to achieve high rates of economic growth canbe predicted in general terms - for example that they are most likely to lie in manufacturing, electronics, bio-technology, tourism etc).

The two approaches also have radically different solutions on how to ensure that businesses with significant impact on wealth creation are introduced into the economy. The Thatcherite approach, as figure 12.4 shows, relies on competition to sort out high performance firms from the rest. For the policy to work, there must be a continuous high rate of new firms starting to trade, to continually inject new diversity into the economy. If competition is to work, there must obviously also be a high rate of business failure. An illustration of this is provided by Reynolds and Maki (1990) in a study of the birth, death, expansion and contraction of US business establishments. Reynolds and Maki, 1990's study showed that the most prosperous regions in the US are associated not only with higher rates of new firm 'births', but also with higher rates of 'deaths'. This implies a 'survival of the fittest' evolutionary process where competitive forces match opportunities with entrepreneurial talent. As in any

Darwinian environment, diversity and renewal are essential pre-requisites to evolutionary success. Reynolds and Maki concluded (pp 90-91):

> 'The most important finding for public policy was the importance of high establishment and job birth and death rates to economic growth. This was so pervasive that the analysis proceeded by combining both birth and death measures as indications of business establishment and job volatility. This was strong evidence that the process of economic change requires a substantial transfer of resources (capital, facilities, entrepreneurial and managerial talent) from one firm to another, from one industry to another. Public policies that attempt to prevent such shifts by subsidising organisations and industry in decline may not only support non-competitive activity, they may retard the development of more promising activities. An adaptive economic system seems to require a substantial degree of volatility - business births and deaths, jobs created and destroyed. The most suitable role for government entities may be to facilitate adaptation of the economic system through changes in business entities and jobs while minimising the social costs - interim unemployment, redeployment of capital and physical assets - associated with such transactions.'

Contrast this with the planned interventionist approach in figure 12.4. The emphasis is on 'picking winners'. Having targeted high growth sectors, new businesses in those sectors have to be 'nurtured', and much public sector investment must be spent before the full benefits can be realised. Using 'the survival of the fittest' metaphor, what survives through competition may be tough weeds rather than productive fruit. The interventionists, to use the 'gardening metaphor', would protect the fruit seedling until it was strong enough to survive and flourish. This is worth it as the end product is much better. Unlike in the 'competitive' approach, the interventionists see little merit in business failure. A failing business with proper support will live to thrive again one day. The industrialist Sir John Harvey Jones on a televised recent visit to Poland, for example, condemned 'mindless' laissez-faire approaches He articulated the feelings of many industrialists in Britain in the 1980s that:

> 'tough' free market approaches lead to the extinction of too many potentially good businesses A business can never return if it leaves the market If it survives, however, it can always expand again when better times arrive Unfortunately business managers are not given sufficient time to re-adjust in times of recession or structural change. They are left to 'sink or swim' by policy makers, not realising that most will sink without trace.'

On contemplating the extinction of much Polish industry when exposed to the full wind of market forces, he stated: 'I am depressed. We are in a classic situation where economists are playing with people's lives without understanding the problems (Harvey-Jones, 1991, BBC, 23 October).

The planned interventionist's case is illustrated further by Storey:

> 'Within an economy there are relatively few small firms which are both willing and able to grow and create a significant number of jobs. For example, amongst every 100 northern English region manufacturing firms which started in business after 1965, thirty per cent ceased trading within three years, but amongst those surviving for sixty years, two firms at that stage provided one quarter of all the jobs The key point is that in terms of job creation only a few firms matter, and it is only those firms which should become the focus of public policy' (Storey, 1987, p. 325 - emphasis my own).

Smith (1982), in a critical discussion on 'monetarism' and its role in Thatcher Government's approach to industrial policy, also argues at length that in the German and Japanese post war economic miracles, government played a crucial and interventionist role in its policy of industrial development: 'The Japanese example seems to undercut in a most decisive way, assertions to the effect that state intervention inevitably has damaging economic effects, and that 'laissez faire' and the free market system offer the only hope for economic prosperity' (Smith, 1982, p. 231).

The role entrepreneurial and 'enterprise' education and training differs radically between the interventionists and non interventionist approaches To the interventionists, it is lack of skills, particularly managerial skills, that prevent small businesses from growing to their full potential. In times of change, it is lack of investment on retraining both in terms of managerial and work force skills that is the major cause of non survival Interventionists believe ultimately that the whole education system must be redesigned to 'upgrade' capital to enable people to have the technical background to participate fully in the management and or work of high growth industries The main blockage is a 'supply' one, which only planned, orthodox, technical, entrepreneurial and managerial education and training, heavily planned and subsidised by the state, can produce results The German educational model with its stress on technological training and eduction is held up as an example to be emulated.

The non-interventionists, however, have supply problems of quite different kinds In theory education and training have a minimal role, as most wealth creation depends on enough businesses exploiting new potential demand As long as there is a plentiful supply of entrepreneurs willing to have a go (see figure 12 4), it does not matter if managerial incompetence produces failure If there is a market, someone with the necessary skills will eventually succeed in exploiting it. If skills are lacking, the enterprise and entrepreneurial private sector support industry will provide training as required for a price. If there is no genuine demand for this training, the trainers will go out of business unless they learn to match service to demand more efficiently.

In practice, however, there are two main areas of concern on the supply side. Firstly there may be too few entrepreneurs willing to test new opportunities Secondly dynamic volatile markets require flexible managers and workers to respond quickly to changing conditions, and able to acquire new skills quickly and efficiently. Significant inflexibility in attitudes and skills would handicap economic growth

The remedy for both these supply problems involves promoting an 'enterprise culture'. Gibb (1987, pp. 35-37) argues that the development of an 'enterprise culture' is no less than the development of entrepreneurial and enterprising attributes and competencies throughout society. These attributes draw heavily on ideas on post-Weberian socio-psychological pre-requisites for success in business and wealth creation (e.g achievement motivation, initiative, flexibility, creativity, independence, leadership etc - see Gibb, 1987, p. 11 for a full listing) which must become institutionalised before significant social modernisation and development takes place 'Enterprising attributes' are the building blocks' of the entrepreneurial culture. People can express enterprising attitudes in a multitude of personal, social and economic contexts. They become entrepreneurial when they are present to a marked degree and are focused on a particular task - usually a business task or context Government has a leading role to play in changing basic attitudes and beliefs, in creating a better climate in which such attributes and beliefs can be accepted

Gibb (1984, 1987, 1990) and in other papers sees government as having a leading role in promoting the enterprise culture through education and training policy In particular government should, in Gibb's view, change the education system to make it possible for people at all levels to train and enhance their entrepreneurial abilities and competencies. Programmes specifically targeted at the development of business skills, especially small business skills, are the 'front end' of this process of social engineering and educational change:

> 'In massaging entrepreneurial attributes, the role of education is potentially very important, and there is considerable overlap between the objectives of the education system and the development of enterprising persons. The focus and process of much of education as it currently stands, however, may work against the nurturing of entrepreneurship. This process can be seen to operate particularly in the higher education and university sector and to a substantial degree in the business schools The potential for change in support of enterprise education and small business training among all levels of youth is enormous; there are a number of programmes which have already been actively been developed. A key factor in their ultimate success will be the degree to which they are clearly seen to develop the attributes or competencies associated with entrepreneurship The replacement of academic knowledge-based assessment criteria by competency criteria is still a challenge yet to be overcome
>
> If the reinforcement of this trend in education and training seems to be desirable, it will need support from basic changes in the educational and training system, including the training of staff, the changing of traditional attitudes to timing and subject content, the re-orientation of rewards, particularly in the university sector, to encourage more flexible approaches, greater involvement with industry, development of more multi-disciplinary approaches, and the re-orientation of traditional research values.' (Gibb, 1987, p 36).

Is direct intervention by government in promoting enterprise education and training as really essential to develop an enterprise culture as Gibb asserts? A 'laissez faire' government, it could be argued, could achieve most of its objectives without any direct intervention in education. This could be achieved by promoting the 'enterprise' message through normal channels of communication Business people can be honoured and set up as examples to follow. The monetary social rewards of successful business ownership can be dangled as carrots to tempt employees to go it alone. The frustration of employment can be enhanced through changes in employment law For example employment law can be amended to favour employers in making 'safe' long-term jobs a thing of the past (short term contracts, squeezing pay, introducing appraisal, incentive pay), to frustrate employees to an extent that starting a business is suddenly a more attractive prospect. As for flexible skills, human beings are naturally creative and inventive, it could be argued, if they are given the opportunity do be flexible at work. The problem of 'inflexibility', therefore, is more to do with liberalising systems of work than of educating or training enterprise competencies.

Those like Gibb who advocate government intervention to promote enterprise education and training, are 'targeted interventionists' in method, but are trying to operate within a non-interventionist 'laissez faire' Government strategy for industrial expansion. This might, at first, seem to be a difficult position from which to develop and carry out practical programmes of enterprise education and training, directly funded by Government. In practice this has not proved to be so difficult. Indeed the 1980s saw considerable resources spent by the Thatcher Governments in carrying out a varied agenda of 'enterprise' education and training Many educational and training establishments in Universities, Colleges and in local government who have actively undertaken enterprise and entrepreneurial education and training in the 1980s have owed most of their funding to Government enterprise initiatives of one form or another. Is there a fundamental contradiction here in the Thatcher 'non interventionist' strategy?

A likely explanation is to be found in considering the role of government funded enterprise initiatives. Most of them emanated from the Department of Employment, a primary dispenser of welfare. Figure 12 4 shows that the competition policy of the main 'wealth creation' strategy results in unemployment from uncompetitive businesses which have failed. In the early 1980s the industrial restructuring from the initial application of the competition policy, coupled with world recession, saw unemployment rise from just over 1 million to 3 million. Figure 12.5 outlines the strategic policy options of coping with unemployment, options that were theoretically consistent with the free market monetarist policies of which the 'wealth creation' strategies in figure 12 4 are a part As the theoretically 'correct' option (i.e correct from the standpoint of monetarist doctrine - see Smith 1982) outlined in theorem 1 is politically unacceptable, and the solution of theorem 2 is a long term one, the pragmatic option in 'theorem 3' were found to be timely and expedient Entrepreneurial training and the promotion of self-employment amongst the unemployed was a powerful weapon to reduce the full impact of the unemployment figures Thus most of the direct intervention by the Thatcher Government in funding enterprise and entrepreneurial education and training was mostly conceived as a welfare measure, to buy time for the overall non-interventionist strategy to work. By the end of the 1980s unemployment had declined appreciably and a record number of jobs had been created, to keep pace with a growing active working population.

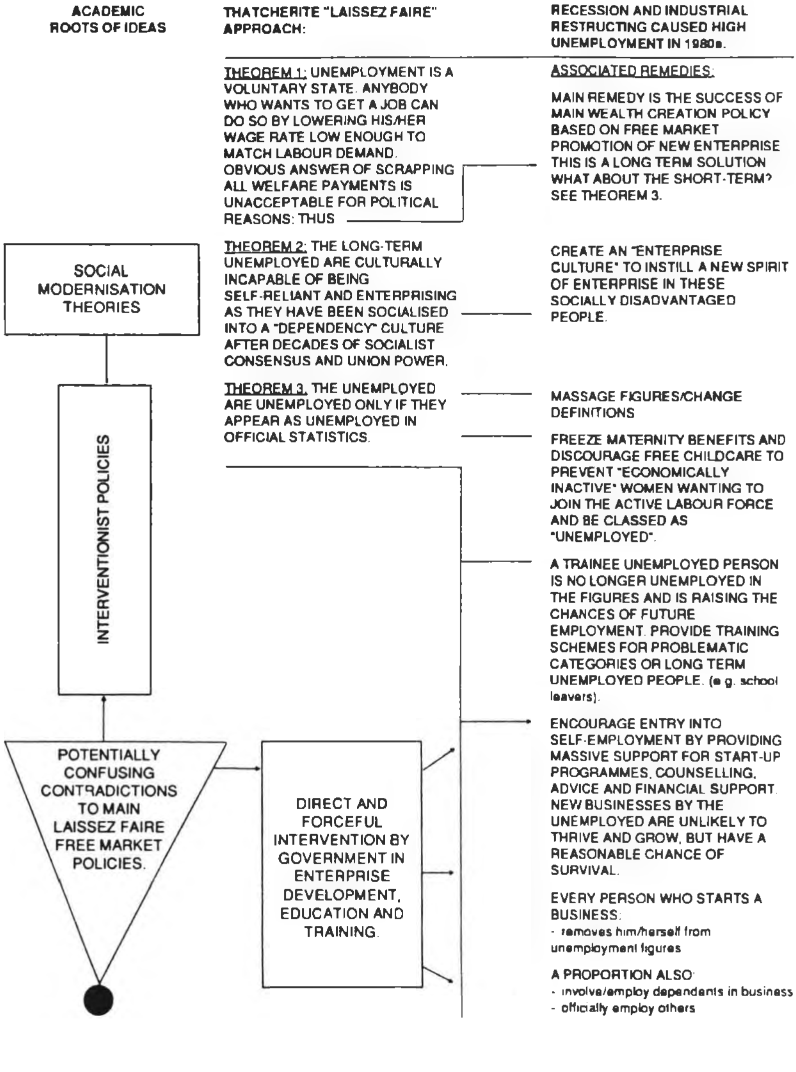

Figure 12.5 Strategic policies for enterprise development and education in the UK: For 'welfare' needs The Thatcher approach

The post Thatcher era

'Darwinian' free market competitive strategies to match resources to new business opportunities work best when general market conditions are favourable. The early 1990s have been times of severe recession in the UK, and unemployment is creeping up again. There is less talk about 'enterprise', the enterprise culture, entrepreneurship, self reliance, 'pricing yourselves out of jobs', and other hallmarks of the rhetoric of the Thatcher years Majorism is still committed to free enterprise policies, but the Thatcherite taboos on planning and targeted intervention are blurring. Michael Hesletine the Minister for Trade and Industry is said to be in favour of selective intervention, and to be developing some kind of planned industrial policy The role of enterprise education and training in the UK is now unsure. There may well be a shift towards more orthodox entrepreneurial training, less geared towards instilling a 'spirit of enterprise', and more targeted towards closing identified skill gaps in management competency. The recent growth of interest in business growth programmes at the expense of start-up programmes is perhaps a symptom of the change in mood

Conclusion

This paper has demonstrated that there has been more faith than strategic reasoning in the development and implementation of enterprise and entrepreneurial education and training in the UK during the 1980s. Indeed there has been considerable confusion, as 'enterprise' development is a woolly concept that encompasses several senses of meaning, a diversity of roles, and is underpinned by several distinctive and possibly incompatible academic traditions of economic and social development

The Thatcher era saw the ruthless adoption of non-interventionist 'enterprise' strategies of wealth creation, based on 'laissez faire' free market principles The paper contrasted this approach with alternative planned intervention approaches to enterprise development. The main lesson to emerge is that in their different ways, both kinds of strategy can work in achieving increased economic growth However the role of entrepreneurial and enterprise training in each strategy is quite different To maximise the effectiveness of such education and training, the development of programmes and the delivery of training must be consistent with the requirements of the macro strategic policy being adopted. Thus, for example, 'picking winners' in industries of high growth potential requires the upgrading of technological and managerial skills needed to thrive in such specialist sectors This kind of training is part of the 'nurturing' strategy of this interventionist policy. To train potential winners in this way would be wasted in the competitive non-interventionist free market strategies outlined in figure 12 4 The non-interventionist approach requires minimal direct government entrepreneurial training, but much training to be on offer when needed by individual firms. Catering for such unpredictable needs is a function best carried out by the private sector sensitive to the needs of specific 'training' customers The emphasis on market volatility in the non-interventionist strategy makes any private sector consultancy or training particularly valuable for starting businesses

In the Thatcher years, most direct government funded enterprise support and training was targeted on the unemployed Again the effectiveness of this training depends on awareness by the training developers and deliverers that their role is a welfare one rather than a 'wealth creating' one The failure by successive UK governments to clarify strategic objectives and how they can be furthered by specific types of enterprise or entrepreneurial education and training has been a major cause of confusion, which has led to inevitable dilution of the effectiveness of enterprise training and promotion There is no evidence in the 1990s either that the UK government will be any clearer in defining the strategic aims of its enterprise policy for the benefit of practitioners than it was in the 1980s.

References

Bacon, R and Eltis, W. (1976), *Britain's economic problem- too few producers.* London

Bateson, S. J., Galt, A. V. and Heasell, S. L. (1989), *Evolution, uncertainty and the small firm.* Presented at the 11th Small Firms Policy and Research Conference, Cardiff

Bannock, G (1987), *Britain in the 1980s- enterprise reborn,* Report for 3i Investors in Industry.

Birch, P. L. (1979), 'The job generation process', *MIT Program on Neighbourhood and Regional Change,* Massachusetts: MIT Cambridge

Brikau, R.A. and Trinder, D.J. (1991), 'The german success story: myth or reality? The performance of english SMEs in comparison to their german counterparts', *Working Paper: Polytechnic of South West Plymouth Business School*

Bolton, J. (1971), 'small firms: report of the commission of inquiry on small firms', *HMSO,* London cmnd 4811

Cannon, T. (1991), *Enterprise, creation, development and growth,* Oxford: Butterworth-Heinemann

Dawson, J. (1990), 'The wider context: the importance of the macroenvironment for small enterprise development', *Small Enterprise Development,* vol 1, no 3, pp. 39-46

Foster-Carter, A. (1985), *The sociology of development,* Ormskirk Causeway Press

Frank (1969), 'Capitalism and underdevelopment in Latin America: Historical studies of Chile and Brazil', *Monthly Review Press, New York*

Gartner, W. (1989), 'Who is an entrepreneur is the wrong question.', *Entrepreneurship - Theory and Practice,* pp 47-68

Gibb, A. (1984), 'Factors fostering entrepreneurship: The role of education.' in Watts, G and Moran, P. (eds.), *Education for Enterprise,* Cambridge: CRAC, pp. 13-18

Gibb, A (1987), 'Enterprise culture - its meaning and implications for education and training.', *Journal of European Industrial Training,* vol. 11, no 2

Gibb, A (1989a), *Towards ensuring the design of effective training programmes for small and medium enteprises in Europe.,* DUBS Occasional Paper 9049, University of Durham, pp 1-16

Gibb, A. (1989b), *Innovative approaches to entrepreneurship training programmes and education,* DUBS Occasional Paper 9182, University of Durhamp, p. 1-38

Gibb, A. (1990), *Enterprise culture: Its meaning and implications for education and training,* DUBS Occasional Paper 9047, University of Durham, pp 1-38

Harper, M. (1990), 'World development report 1990 focus on poverty', *Small Enterprise Devlopment,* vol. 1, no 3, pp 52-54

Long, N. (1976), *An introduction to the sociology of rural development,* London Tavistock

Lambshead, C. and Moran, P. (1991), *Working with the growth orientated entrepreneur: implications for councelling support services,* DUBS Occasional Paper 9182, University of Durham, pp 1-13

McClelland, P C (1961), *The achieving society,* Newy York: Free Press

Meier, G. M and Baldwin, R E (1964), *Economic development. New York: Wiley*

Mussati G. (1990), *Alle rigine dell' Imprenditorialita*, Milan: Etaslibri

Nelson, P. A. (1987), 'Promotion of small enterprises', *Neck, P. A. and Nelson, R. E. Small Enterprise Development*, Geneva: ILO Management Development Series no 14

Neck, P. (1987), 'Policy issues', *Neck, P.A. and Nelson, R.E. Small Enterprise Development*, Geneva: ILO Management Development Series no 14

Oakey, R.P. (1979), 'An analysis of the spatial distribution of significant British industrial innovations', *CURDS, discussion paper no. 25*,. University of Newcastle

Reynolds, P. and Maki, W. R. (1990), 'Business volatility and growth', *Report to the US Small Business Administration*, Regional Economic Development Associates, Minneapolis

Ritchie, J. (1989), *Explaining enterprise cultures*, DUBS Occasional Paper 8906, University of Durham, pp.1-26

Ritchie, J. (1989b), *Concepts of enterprise education: An overview and critique*, DUBS Occasional Paper 9053, University of Durham, pp 1-21

Robertson, C.C. (1984), 'Formal or non formal education? Entrepreneurial women in Ghana', *Comparative Education Review*, vol 28, no. 4, pp 639-658

Rosa, P and Bowes, A (1990), *Entrepreneurship: Some lessons of social anthropology*, ECSB: RENT IV, Cologne: also SEF Conference Series, University of Stirling, pp 1-24

Rostow, W. W. (1971), *The stages of economic growth*, A Non-Communist Manifesto, Cambridge: Cambridge University Press: 2nd Edition

Smith, K. (1989), *The British economic crisis - its past and future*, London: Pelican Books, Penguin.

Storey, D. J. (1982), Entrepreneurship and the new firm, London: Croom Helm

Storey, D J.; Keasey, K ; Watson, R and Wynarecyk P (1990), *The performance of small firms*, London: Croom Helm

Thatcher, M (1977), *Let our children grow tall: selected speeches 1975-1977*, London: Centre for Policy Studies

Tomecko, J. (1990), 'Mainstreaming small enterprises in Kenya', *Small enterprise development*, vol 1, no 3, pp 17-26

Weiner, M (1985), *The english culture and the decline of the industrial spirit 1850-1980*, London: Pelican Books, Penguin

13 Entrepreneurship education: Principles and consequences

Dietmar Rößl

Objective and reasoning

In the first chapter of the present paper the specific requirements made and restrictions imposed on the educational program of the Department of Small Business Management are derived

This framework of requirements and restrictions results from the educational program being a part of the overall university education and from the makeup of the students at the Vienna University of Economics in general and at the Department of Small Business Management in particular.

The second chapter of the paper deals with principal questions of defining the scope of the discipline 'entrepreneurship and small business management'. These questions result from the overall structure of the education in business administration From an educational point of view the integration of specialized university institutions into the existing range of specializations concerning lines of businesses as well as functions asks to be justified In the next chapter we consider the effects of these restrictions on defining the subject matters of an entrepreneurship education within the overall university education and on preparing the extensive subject matters for the students taking part in such an educational program

For further illustrations the educational program of the Department of Small Business Management of the Vienna University of Economics is briefly outlined. It is an attempt to master these subject matters in a greatly limited number of classes Finally the educational program which is based on these considerations is opposed to the expectations of the students as well as to the opinions of graduates of this discipline The opinions of those graduates who founded or took over a company after having concluded their studies are of special interest in assessing the educational program.

The department and its educational program within the framework of the university

After having concluded their basic studies the students have to choose specialized disciplines of the science of business administration to continue their studies. The Department of Small Business Management offers such a specialized discipline within the branch of 'business administration'. At the time being the students at the Vienna University of Economics can choose among twenty-one specialized disciplines which either reflect a function (as for example advertising, marketing, personnel, organization) or a line of business (as for example insurance, trade, banking).

In some cases the requirements of the university severely limit a department in freely developing an entrepreneurship program (possibly conforming to market trends):

- As the educational program as a specialized discipline of the university education in business administration has to be integrated into the continuing studies, the requirements have to be met and the restrictions observed.
- Thus the educational program offered must comply with the following basic prerequisites which are typical for universities without tuition and admission restrictions:
  - -- It must be possible to complete the program in two years.
  - -- As the students have to study numerous other subjects beside what is offered in 'small business management', preliminary examinations on only four weekly classes in the specialized discipline of business administration are obligatory.
  - -- Requirements beyond the above (as for example entrance requirements, additional examinations, the participation in particular courses) can only be recommended, but cannot be declared obligatory.
  - -- As the students may write the obligatory diploma thesis also at another department with full professorship, the diploma thesis cannot be included as an integral part of imparting knowledge and spreading the subject matters.
  - -- Finally there is a diploma examination at the end of the studies, which consists of a four-hour written examination and a final oral examination.

These restrictions, for example, imply that the students cannot be forced to take more examinations than are generally planned. Moreover, the written diploma thesis cannot be replaced by practising in a company, even though this were thought to make sense.

Some of the students of the Department of Small Business Management intend to start or take over a company, others think of taking on management positions in small and medium-sized enterprises or will be confronted with SME-related problems in other organizations. Still another group of students starts out from the consideration that independent of their future professional plans it is more expedient to learn something about all the problems of one type of enterprise than to specialize in a functional field. Thus the educational program cannot be limited to 'entrepreneurship education' only.

For this reason the educational program of the Department of Small Business Management is not only an 'entrepreneurship program'. It is to be characterized as a course of studies of 'small business management' which tries to integrate 'entrepreneurship education' to a large extent.

A special educational program for small business management

In support of 'small business management' as a specialized discipline of the science of business administration

Differentiating the sub-discipline 'entrepreneurship and small business management'. Questions of defining the scope of the discipline 'entrepreneurship and small business management' are of great importance, as for European universities it is still no matter of course to establish SME-oriented educational programs, although there are numerous successful 'entrepreneurship programs' in the United States[1].

On top of that specialized university institutions ask to be justified

- from an organizational point of view concerning their integration into the existing range of already existing specializations and
- from an economical point of view concerning cost-benefit considerations

In the science of business administration we usually differentiate between the fundamentals of business administration (management studies) and functional as well as product-related approaches.

Every additional differentiation of sub-disciplines increases definition problems and the danger of duplications as well as of a fragmentation of the discipline. Additional classification criteria, however, aggravate the problems unproportionally. In order to efficiently plan science and research it is necessary to ensure that, on the one hand, there is no subject matter of a discipline which is not dealt with in any of its sub-disciplines and that, on the other hand, there are no duplications which mean inefficiency due to parallel research which is not intended, but probable.

Beside the classification criteria already mentioned, the following possibilities are among others being discussed and in some cases also made use of[2] :

- classification of business administration according to certain company sizes
- classification of business administration according to phases in the development process of enterprises (start-up, growth, etc.)
- classification of business administration according to different types of entrepreneurs (e g. the 'real entrepreneur' or 'Schumpeter's entrepreneur' versus a small business administrator, management business, family business, etc.)
- classification according to the geographic region of entrepreneurial activity (business administration of multinational enterprises, questions on Europe, questions on Eastern Europe, etc.)
- classification of business administration according to the entrepreneurs' objectives (profit versus non-profit organizations, social economy).

The following pointed example illustrates the definition problems. The starting point are marketing problems of a small but growing non-profit trading company oriented toward Eastern Europe (export promotion) and the question of assigning this field of research to sub-disciplines:

classification criterion	form	fields of definitions
only "function":	e.g. marketing	0
additionally "product":	e.g. trade	1
additionally "size":	e.g. small	3
add. "phase of development":	e.g. growth	6
additionally "region":	Eastern Europe	
additionally "objectives":	non-profit	

Figure 13.1 Definition problems with several classification criteria of business administration

Limiting the scope of the sub-discipline 'entrepreneurship and small business management'. In case of the sub-discipline 'entrepreneurship and small business management' due to the heterogeneity of the subject matters these definition problems can be solved only by considering the other existing educational programs offered:

- Functional limitation:
  Due to the universalistic education requirements we must accept overlapping as far as central functions are concerned. To what extent an international orientation is integrated depends on whether the smaller units are dealt with in other sub-disciplines ('foreign trade' or 'international management').
  As the course of studies of 'small business management' cannot impart all what is imparted by several courses of studies of functions together, it is necessary to thin out the material in the functional areas SME's cannot be reduced to operative (information) management, also they are not simply 'small large-scale enterprises' (everything is the same, only more trivial), thus each and every selection of subject matters is necessarily arbitrary and is possible only in a pragmatic manner on the new pay background of the 'average relevance of the subject matters'.[3]
- Limitation according to the line of business:
  SME's exist in all lines of businesses. Here the subject matters can be limited, when problems specific to size are sufficiently dealt with in line-related sub-disciplines [4]
- Limitation according to the objective of the enterprise:
  In case there is a sub-discipline 'public economy' and/or 'business administration of cultural institutions' small non-profit organizations can also be left out for pragmatic reasons.

The sub-discipline 'entrepreneurship and small business management' is always running the risk of wanting to offer too many subject matters The possibilities of limiting the subject matters must therefore always be taken In order to improve such possibilities of limiting the subject matters, SME-related problems should - if possible - be explicitly dealt with in other sub-disciplines[5] Normally parts of the subject matters concerning SME's have to be ignored even though they are not covered in other sub-disciplines This results in the fact that several - downright typical - SME-dominated areas are often neglected in the curriculum:

- professions (lawyers, doctors, etc.)
- farms
- services
- non-profit organizations (as for example in the cultural area and in sports).

In support of the sub-discipline 'entrepreneurship and small business management' from educational and economic points of view. As a rule general management implicitly defines a large-scale greatly hierarchically structured industrial enterprise producing consumer goods utilizing the mass-production system and being legally structured as a joint stock company as their reference. It is therefore necessary to create SME-related sub-disciplines in order to achieve a correcting effect. Otherwise only the large-scale enterprises would benefit from the university education in business administration

Even if general management are limited to the actually 'universally valid' statements[6], it is necessary to transfer the general statements that are independent of size and thus very abstract to SME's[7].

After having established[8] such a specialized discipline its justification from educational and economic points of view can be derived from the actual demand: in 1987/88 appr fifteen per cent of the students at the Vienna University of Economics chose the course of studies of 'entrepreneurship and small business management'[9]. Dependent on the respective branch of studies the students have to enrol in one or two of these specialized disciplines. Taking into consideration the numbers of students in the individual branches this means that the above-mentioned course of studies covers appr nine per cent of the demand for enrolments in a specialized discipline. Thus the number of students who choose the course of studies offered by the Department of Small Business Management is above average[10].

As far as the national economy is concerned the discipline 'entrepreneurship and small business management' is of significant importance as it produces entrepreneurs who are trained in strategic thinking: While only appr. 6.5 % of the graduates of the Vienna University of Economics join an existing company of the parents, the family, etc.[11], thirteen per cent of the graduates of the discipline 'small business management' do.

Requirements made on the educational program - positioning the educational program of the Department of Small Business Management at the Vienna University of Economics

The central question of positioning the educational program. When going through current data a comparatively widely accepted list of requirements can soon be made out[12]; often, however, they cannot be considered in educational programs of business administration[13]:

- social competence (guidance of people / ability to solve conflicts)
- ability to cooperate and work in teams
- ability to cope with stress
- an analytic approach in analyzing problems and a synoptic, holistic approach in developing and assessing solutions
- international mobility
- positive thinking
- openness and straightforwardness
- knowledge of languages
- knowledge of data processing

On the one hand, qualifications that imply a versatile employability also in other areas than the one especially trained for are central requirements[14] As SME's are less structured internally, this flexible employability is particularly valid for graduates of entrepreneurship and small business management programs. Our 'knowledge' being temporary results in the necessity of being able to independently produce knowledge, because the knowledge imparted today as 'true and relevant' can tomorrow in the reality of the professional life turn out to be not sufficient and possibly not relevant or even wrong[15].

On the other hand, the SME-specific situation requires a graduate to be promptly employable[16]. As a rule there is no time for learning without already taking on responsibility.

This thesis is supported by empirical data of the research reported on below[17]: Due to the lack of institutionalized training programs in smaller enterprises the necessary further education is significantly more often acquired in the spare time and at one's own expense[18]. As far as the demand for further education is concerned there are, however, no significant differences.

This results in the principal problem of positioning entrepreneurship and small business management programs in the field of tension between

- training a universalistic ability to solve problems and
- imparting practice-related and immediately exploitable, but more quickly outdated knowledge and abilities in having a command of the instruments of business administration.

The decision in positioning the educational program. We assent to Zeitel's opinion that managerial qualifications become more important also or especially for SME's[19], as the managerial qualifications of the entrepreneurs as well as the employees of SME's often did not keep pace with the changes in requirements. Often SME's as suppliers and subcontractors do not meet the managerial requirements made by their large-scale partners.

Hence follows the special importance:

- of the ability to systematically analyze problems concerning any given situation in a quickly changing environment and on the basis of this analysis
- of the ability to independently in a creative and heuristic process develop solutions adapted to the specific situation.
- Also of special importance is the ability to communicate one's analyses and approaches, as ('Schumpeter's') individual fighter often can no longer meet the manifold managerial and technical requirements

This is not to deny the importance of knowledge which can be put into practice as quickly as possible[20]. But

- first of all in view of the limited time available for a course of studies of 'small business management' at the university a decision must be taken either in favour of 'imparting knowledge' or of 'enabling the students to independently produce knowledge' and
- secondly commercially successful training courses which purely 'impart know ledge' are already offered
- It can further be argued that the qualities required such as the ability to take decisions and the motivation for the task again hint at the special importance of personal qualities, acquired skills are named only secondarily[21].
- The heterogeneity of SME's, the resulting complexity of knowledge necessarily to be imparted from a practical point of view and the quickly changing practical

requirements speak against orienting the program toward immediately exploitable instrumental abilities.

A homogeneous course of studies of business administration for SME's that is oriented toward instrumental knowledge would - as Zeitel concludes - be a failure[22].

In view of the limited time this heterogeneity can only be faced by making a choice which without the educational program being oriented toward a line of business can only be arbitrary.

But the potential market does not seem to be sufficient for programs oriented toward lines of businesses. Looking through current entrepreneurship programs in any case reveals that there are only attempts to differentiate lines of businesses within integrated programs[23].

Moreover, a course of studies of 'entrepreneurship and small business management' is not exclusively addressed to (potential) entrepreneurs, but to all groups of people who deal with SME-related problems[24] :

- management of SME's,
- activities in economic policy (governments, lobbies, etc),
- in administrative authorities (trade authorities, etc.) and
- in enterprises which are partners of SME's (consulting services, management training institutions, financial services, large-scale buyers of services and goods of SME's, etc.).

These arguments ask to concentrate on abilities that go beyond bureaucratic and technocratic performing skills and beyond having a command of the instruments of business administration[25]. From this point of view detailed and immediately exploitable knowledge of facts becomes insignificant. This is, however, in no case thought to back a science-oriented education not relating to practice in the sense of the metaphor of the ivory tower.

Nevertheless, the ability to systematically analyze problems and on the basis of the analysis the ability to independently in a creative and heuristic process develop solutions adapted to the specific situations are the central educational requirements of a course of studies of small business management at the university.

With this principal positioning given the choice of subject matters and the didactic methods (e.g case studies) cannot eliminate, but reduce the danger of neglecting a relation to practice and routine.

Determining the subject matters. For the specific context of the course of studies of 'entrepreneurship and small business management' at the Vienna University of Economics we found out that training the ability to combine modules of what has been learned to completely new combinations in concrete situations is to be seen as the central educational objective. Therefore, the question by means of which subject matters

- the ability to apply general abstract statements to concrete problems or statements specific to certain cases to other concrete situations and also
- the ability to recognize the general abstract content of statements that are specific to certain cases and thus
- the ability to independently produce knowledge is trained seems to be almost secondary

Nevertheless it is of course appropriate and obvious to develop and train these universalistic abilities within the framework of conditions specific to SME's.

Such specific conditions under which SME's operate and by which the subject matters can be oriented are for example:

- dynamic aspects specific to development (start-up and shutdown of an enterprise, problems of growth and shrinkage)[26]
- management in case of greatly limited and thus limiting resources (lack of know-how, limited capital resources, small repertoire of methods and instruments of business administration, dependency on individual persons, etc.)
- importance of interfacial management (interfaces between functional areas, relations between individuals as well as between enterprises, interfaces between the enterprise and the private life of the entrepreneur, etc.)

Consequences and realization

Beside the central educational objective of developing systematic and analytic methods of thinking and abilities to heuristically solve problems the educational program can only initiate individual further education in order to meet a lot of other requirements:

- using specialized English literature to signalize the importance of knowing foreign languages
- supporting students in connection with exchange programs
- training the students' conduct by having them present case studies (sometimes with the entrepreneur concerned attending this presentation) - at least making them aware of the importance of a self-confident manner.

After a long discussion within the Department the educational program was changed according to this orientation starting with the summer semester of 1989:

- Subject matters which are quickly outdated or which anyhow compellingly require a specialist when needed in practice (e.g. details of various legal problems)[27] or which can easily be looked up (e.g. structures of the economy and of lines of businesses) were reduced
- The educational program was extended in exchange for less details. While before the reform in a practical course, for example, SME-specific forms of bookkeeping were taught, these forms are now seen only with respect to advantages and disadvantages concerning their information content for business administration. At the same time in this course, for example, the range of subject matters was significantly extended and now in principle comprises the complete operative information management which is partly gathered in project case studies.
- Systematic and analytic thinking and creative problem solving was increasingly promoted by pushing the case study method:
  While previously for simple, though often arithmetically sophisticated examples single-valued results in the sense of right or wrong were looked for, now the algorithmic insolubility of real cases is discussed.
  While previously exemplary structural data were presented to the students, the students must now themselves collect the information necessary for working on a case (e.g. market size, market growth, distribution of competitors according to size, intensity of competition, information on the consumers' behaviour of the relevant

target groups) in a creative and heuristic process. Quite a lot of students fail because of the necessary - formerly given - first steps in the working process:
-- Working on a project in groups / team management,
-- splitting up the problem into sub-problems,
-- formulating the possibly helpful necessary information input,
-- defining the sources that could offer the necessary information (statistics, specialists, etc.)

For the students who often preferred to have recipes imparted and not the understanding of a problem, these changes were painful and in certain stages also frustrating. As a consequence of these changes which were repeatedly communicated also the makeup of the students changed after a certain time-lag According to tendency the number of students interested in immediately exploitable instrumental knowledge decreased. The claim formulated by this group to have the instruments of business administration[28] imparted in eight practical courses with twelve classes each in such a way that the knowledge is directly applicable can in any case not be satisfied without being limited to a few instruments.

The current orientation of the educational program also leads to a limitation of the instruments dealt with The choice is, however, made by the students who choose instruments for and apply them to a given problem The central requirement is not the command of certain methods, but the ability to orient oneself by the problem and independently identify and apply instruments often only slightly known to the students in the beginning in order to improve the quality of a decision.

The central items of this concept are the integration of practitioners into several lectures and seminars as well as the training of analytic thinking and heuristic problem solving by means of practical cases

This method is briefly illustrated by the example of the practical course 'marketing in SME's' In every semester the trainer and also participants win entrepreneurs to cooperate. At first the students practice the case study method by means of one up to two cases in literature. Afterwards the participants work in teams on problems either given by the entrepreneur or identified by the students themselves. In regular meetings with the trainer an analytical framework is developed. Hereby the role of the trainer should be restricted to guiding the students toward formulating the correct questions The team itself then concretely analyzes the problem and develops a proposal for a solution to the problem. At the end of the practical course the teams present their results This allows them to practice various presentation techniques. It is then the task of the trainer to guide the participants as moderator of a discussion or by setting up teams toward recognizing the general statements of the specific case and understanding the connection between the problem and the steps of analysis applied.

In the beginning the entrepreneurs often see their co-operation in these practical courses as doing the students a favour. As the work on the project goes on, they accept the students and their work and thus also the university's work more and more

The fact that entrepreneurs take part in the final presentations, although they already received a written report and that in case of newly emerging marketing problems they again offer to cooperate shows that the entrepreneurs also gain by the work of the students[33].

Lectures:

Lectures are freely offered to the students who are asked to attend the lectures regularly, but are examined on the subjects of the lectures only in the final examination of the course of studies.

Main lecture spread over two semesters:

• small business management	4 weekly classes per semester

Lectures of practitioners:

These lectures[29] include knowledge gained through practical experience. The lecturers are an entrepreneur, the long-term head of an SME-specific financing department and a data processing consultant.

• Employing marketing in SME's	2 weekly classes per semester
• Employing financing instruments in SME's	2 weekly classes per semester
• Using data processing in SME's	2 weekly classes per semester

Practical courses on case studies:[30]

At least two of these practical courses must be chosen. Before being admitted to work on practical cases an examination on selected relevant literature has to be taken.

Practical development-oriented courses:

• Startup of an enterprise	1 weekly class per semester
• Shutdown of an enterprise	1 weekly class per semester

Practical instrument-oriented courses:[31]

• Instruments of operations management	1 weekly class per semester
• Instruments of strategic management	1 weekly class per semester

Practical function-oriented courses:

• Financing	1 weekly class per semester
• Procurement/production	1 weekly class per semester
• Personnel	1 weekly class per semester
• Marketing	1 weekly class per semester

Seminars:

Before attending a seminar two practical courses on case studies must have been completed.

- The supply is determined by the demand so as to have 10 participants per seminar at the most. The Head of the Department and one practitioner who is selected according to the specific topic look after the seminars.
  (5 seminars — 2 weekly classes per semester)
- Moreover, students irregularly prepare seminars and workshops on varying topics together with entrepreneurs.
  (project seminars — 2 weekly classes per semester)

Diploma thesis:

The diploma thesis does not have to be written in the specialized discipline of business administration chosen and can thus not be included as an integral part of teaching. In accordance with the objectives of the university as a whole the diploma thesis is seen as a single scientific work aiming at generating statements that claim validity for a broader field. Therefore, simple requirements concerning the theory of science must be met. A purely casuistic work without any implications going beyond the isolated case on generating theses, on judging the validity of statements, etc. is not accepted[32].

• preparatory course on methods	2 weekly classes per semester

Diploma examination:

The final examination at the end of the studies consists of examinations in different disciplines. The diploma examination in "small business management" comprises a 4-hour written examination and an oral examination on the entire subject matter.

Figure 13.2 The current educational program

Requirements made and opinions given on the educational program from the point of view of the students and graduates

The empirical research

On the problem concerned (requirements made on the educational program, the students' motives and development patterns of graduates of the course of studies of 'entrepreneurship and small business management' at the Vienna University of Economics) there are no transferable investigations[34] on the low level of abstraction aimed at. Though it was tried to use the principally relevant sociological and psychological attempts[35] to explain the choice of studies and the following developments in professional life as theoretical input and a means for structuring the research, the present investigation is only explorative. The data analyses may thus be used only as pure descriptions of an isolated case or as basis for inductively generating theses.

In order to gain more information on the students, their motives and plans for the future as well as future career patterns and assessments of the educational program offered in March/April 1992 students and graduates of the educational program 'entrepreneurship and small business management' were questioned

The sample of students:

- Questionnaires were submitted to ninety-two students who in the summer semester of 1992 took part in at least one out of the eight practical courses offered and who had passed the first intermediate examination (one questionnaire was not usable). Appr. ninety per cent of the students of one year were reached[36]

The sample of graduates:

- 335 (seventy-eight per cent) of the 429 students who concluded their studies in the discipline 'entrepreneurship and small business management' between 1988 and 1991 were questioned by means of written questionnaires[37]. three questionnaires could not be delivered[38] and seven questionnaires were not usable so that finally 181 questionnaires could be used for the analysis (evaluable return fifty-five per cent)[39].

Opinions on and result of the educational program from the points of view of students and graduates

Expectations. The data on the fields of activities and on the motives show clearly that the reforms of the subject matters of the educational program changed the makeup of students choosing the discipline 'small business management':

	graduates	students	level of significance[40]
accounting/auditing	24%	8%	***
information management	25%	17%	
management	20%	31%	*a*
education	8%	8%	
entrepreneur	9%	49%	***
sales	17%	15%	
organization/data processing	21%	15%	
staff positions	7%	20%	***
marketing/public relations	21%	31%	*

Figure 13.3 Fields of activities of the graduates and fields of activities aimed at by the students of the discipline 'entrepreneurship and small business management'

Furthermore, the present students of the discipline 'small business management' are ready to work significantly more than the graduates[41] and speak considerably more languages[42].

	former students										
motives	I	II	$s_{(1-2)}$[43]	III	IV	$s_{(3-4)}$[43]	V	$s_{(3-5)}$[43]	VI	VII	$s_{(6-7)}$[43]
percentage	33%	67%		25%	75%		8%		17%	83%	
interest in subject	72%	80%		67%	81%	*	86%	*a*	90%	74%	*
usefulness	52%	61%		43%	63%	*	79%	*	71%	55%	*a*
development of personality	7%	7%		7%	7%		7%		4%	8%	
challenge	15%	18%		17%	16%		7%		10%	18%	
recommendation	7%	16%	*a*	9%	14%		0%		3%	15%	*a*
negative selection	18%	22%		22%	20%		7%		10%	23%	*a*
previous knowledge	12%	6%		13%	6%		7%		13%	7%	
easy studies	5%	4%		7%	4%		0%		0%	5%	
parental company	100%	0%	-[44]	100%	10%	-[44]	100%		45%	31%	
choose SBM again	51%	58%		45%	59%	*a*	69%	*a*	76%	52%	**
duration of studies (years)	6.3	6.4		6.3	6.3		6.4		6.4	6.3	

Figure 13.4 will be continued next page

	present students						former and present students			
motives	I	II	$s_{(1-2)}$ [45]	VI	VII	$s_{(6-7)}$ [45]	VIII	IX	$s_{(8-9)}$ [45]	sum total
percentage	24%	76%		51%	49%		66%	34%		100%
interest in subject	73%	90%	*	85%	87%		77%	86%	a	80%
usefulness	82%	74%		80%	71%		58%	76%	**	64%
development of personality	9%	13%		13%	11%		7%	13%	a	9%
challenge	5%	19%		15%	16%		17%	15%		16%
recommendation	0%	7%		2%	9%		13%	6%	*	10%
negative selection[46]	27%	23%		28%	20%		20%	23%		22%
previous knowledge	14%	6%		9%	7%		8%	8%		8%
easy studies	5%	1%		2%	2%		4%	2%		4%
parental company	100%	0%	-[44]	39%	9%	***	33%	24%	a	30%
choose SBM again	100%	98%		100%	97%		56%	99%	***	68%
duration of studies (years)	4.3	4.4		4.4	4.3		6.35	4.35	-[47]	

Legend

- I 'Potential successors': group of those graduates or students whose parents have a company
- II 'No potential successors': graduates or students whose parents do not have a company.
- III 'Potential successors who failed': potential successors who did not take over the enterprise and who do not (or no longer) intend to do so (that is to say graduates who finally did not and will not take over the company).
- IV 'Actual successors and graduates without a parental company': graduates without a parental company and those who already took over the parental company or still intend to do so.
- V 'Actual successors': potential successors who already took over the parental company or still intend to do so (that is to say graduates who finally took over or will take over the company).
- VI 'Entrepreneurs': those graduates or students who already set themselves up and those who intend to set themselves up after having acquired additional knowledge of the line of business and technical skills (no matter whether there is a parental company or not).
- VII 'No entrepreneurs': graduates or students who did not set themselves up and do not (or no longer) intend to do so.
- VIII Former students (sample of graduates).
- IX Present students (sample of students)
- X General observation of the samples of graduates and students

Figure 13.4 Motives for choosing and general assessment of the discipline 'small business management (SBM)' from the points of view of graduates and present students

When - despite all methodical problems - the questioning of graduates and students concerning their motives for choosing the discipline 'entrepreneurship and small business management' is interpreted as shortened longitudinal study, several distinct changes become apparent which could be traced back to the reform of subject matters as well as to the changes of didactic methods in the summer semester of 1989:

- The percentage of potential successors is decreasing:
  The clear orientation toward 'enabling the students to independently produce knowledge' induced the students who are less interested in the ability to independently 'produce knowledge' to turn to other departments.
  To one's surprise this group is to a large extent made up of potential successors who are comparatively little motivated by subject matters. As a consequence the percentage of potential successors is decreasing (from thirty-three per cent to twenty-four per cent, *a*),
  while the percentage of entrepreneurs is increasing (from seventeen per cent to fifty-one per cent, ***).
- An unproportionally high percentage of the potential successors is not intrinsically motivated:
  Apparently potential successors are - due to the secure future they perceive and to the (wrong) opinion that on account of having grown up with an enterprise they already know everything - in general less interested in critically examining the subject matters[48].
  For twelve per cent (fife per cent) of the former (present) students whose parents have a company this company (possibly the wish/pressure of the parents) is the only one of ten given motives for choosing the discipline 'small business management'. Beside the parental company the potential successors name significantly less motives for choosing the discipline 'small business management'[49].
  While twenty-four per cent of the former students have parents who own a company and do not take over this company, it is only four per cent of the present students who do not intend to set themselves up although their parents have a company[50].
- The percentage of 'potential entrepreneurs' is increasing:
  The students are to a large extent made up of potential entrepreneurs and their percentage has been constantly increasing particularly in the last year.
  seventeen per cent of the graduates of the years 1988-1991 can be identified as 'entrepreneurs'. This percentage constantly increased from fourteen per cent in 1988 to twent-four per cent in 1991.
  Among the present students fifty-one per cent 'intend' to set themselves up ('entrepreneurial students'). Although appr. twenty-five per cent of these 'entrepreneurial students'[51] expect great initial students'[52]. problems when starting or taking over an enterprise, all of them would choose the discipline 'entrepreneurship and small business management' again. This means that they definitely have critical expectations of what such an educational program realistically can and what it cannot accomplish.
  These 'entrepreneurs' have recognized the importance of an in many ways adaptable university education versus quickly outdated skills which can relatively easily be learned on one's own or bought[53] and they are to a great extent motivated by subject matters:
  Ninety per cent (eighty-five per cent) of the 'entrepreneurs' chose the discipline 'small business management' because of their interest in the subject matters offered

and seventy-one per cent (eighty per cent) because of their practical exploit ability (usefulness).
When comparing the motives it can be seen that this group is to a large extent intrinsically motivated, while the potential successors are rather extrinsic ally motivated

- The duration of the studies is not significally different for the two groups:
  The engagement of the potential successors in the company of the parents seems to be neglectible[54], as there is no difference in the mean duration of the studies, the higher standard deviation possibly hints at the fact that some of them show above-average engagement in the parents' company.
- The present students are better motivated:
  The present students name significantly (*a*) more motives than the former students for choosing the discipline 'small business management'. It can thus be concluded that the Department succeeded in positioning itself more clearly on the 'market' and thus also in 'upgrading itself'.
  The students questioned were on an average already in the 9th semester of their studies. Thus they know the course of studies and also the alternatives at the university very well From the fact that the students are extremely content with the educational program it can be concluded that the course of studies for the most part meets their expectations (motives). Although the educational program does not aim at immediately applicable knowledge, the students think that the subject matters are to a large extent exploitable in practice We thus conclude that the students have recognized that general abilities to perceive and solve problems - even though they have to be adapted to the respective situation - are exploitable in practice

Career planning. Fifty-eight per cent of the graduates already had a clear idea of their profession before they started looking for a job. Twenty per cent of them already had this idea before starting their studies, fifty-eight per cent developed this idea during their studies and twenty-two per cent only at the end of their studies In comparison to the total average those graduates who already set themselves up or still intend to do so ('entrepreneurs') significantly more often have a clear idea of their profession and plan their career on a long-term basis[55].

Employability. As far as the requirement made on graduates of a 'small business management' program to be immediately employable is concerned we must state that the educational program of the Department of Small Business Management only conditionally meets this requirement:

- Fifty-two per cent of the graduates say that they needed professional training
- According to tendency training is more often necessary in larger companies[56], but also in companies with less than twenty employees the graduates are not employable without any further education[57]

Opinions. While the students have an extremely positive opinion on the educational program[58], the graduates' opinion is clearly more critical: forty-four per cent of the graduates say that they would not choose this specialized discipline again and forty-eight per cent of the graduates say that they cannot make use of what they have learned The 'entrepreneurs'' opinion is, however, distinctly better: They more often[59] think that they can make use of what they have learned, although it is precisely them who perceive the highest demand for further education[60]. Moreover, the 'entrepreneurs' would significantly more often choose 'small business management' again[61].

As a rule the graduates questioned completed most of the course of studies of 'small business management' before the reform[62]. This group was hit hard by the changes, as in the practical courses they were not yet led toward thinking systematically and analytically and toward solving problems within the framework of SME-specific conditions in a creative and heuristic way, while the diploma examination was already adapted to the new requirements after a short period of transition[63].

When comparing those graduates who started studying 'entrepreneurship and small business management' before the winter semester of 1988/89 and those who started in that semester and afterwards[64] distinct differences can be seen.

These results may, however, not be overestimated, as the 2nd sub-sample contains an unproportionally high number of successful students[65] whose opinion on the studies chosen is better:

	graduates who studied prior to the reform	after the reform	level of significance
percentage	76%	24%	
interest in subject matters	73%	89%	*
practical exploitability	59%	59%	
development of personality	3%	8%	
challenge	16%	14%	
recommendation	13%	14%	
negative selection	19%	19%	
previous knowledge	4%	13%	*
easy studies	4%	6%	
parental company	34%	27%	
choose SBM again	48%	78%	***
duration of studies (years)	6.7	5.3	***
standard dev.	1.5	0.8	***

Figure 13.5 Comparing the perceptions of the graduates before and after the reform of the educational program in 1989

Finally it can be seen that those who would not enrol in the discipline 'small business management' again based their choice on completely incorrect assumptions:

	choose SBM again	do not choose SBM again	level of significance
interest in subject matters	90%	60%	***
practical exploitability	64%	50%	a
easy studies	1%	9%	*

Figure 13.6 Motives for choosing the studies of the graduates who are content and those who are not

Those graduates who would not enrol in 'small business management' again from the beginning identify themselves little with the discipline and are very insecure about their choice of the specialized discipline: While those who would enrol in the discipline again are able to give a number of reasons for their decision, those who now have a critical opinion on their choice name significantly[66] less reasons for their original decision.

Those graduates who would not choose 'small business management' again did not choose the discipline because of an interest in subject matters or the practical exploit ability of the subject matters The only motive more frequently named by this group is the fact that they presume the studies to be easy

The unexpectedly long duration of studies of precisely this group shows that finally this expectation (to be able to conclude the studies without making great efforts) was not fulfilled either: While those graduates who would choose the discipline again completed the whole studies in appr. six years, those who would not choose the discipline again needed seven years[67]. More successful students are naturally more content with their choice of studies

Moreover, the more successful graduates are also more content with what they have learned. The graduates' critical opinion in any case partly reflects a general frustration in professional life:

- In particular those who were able to make use of what they have learned in their professional life are content with their choice of the discipline 'small business management', while those who took a job for which they were not prepared by the studies chosen naturally regret their choice[68].
- The higher the starting salary is, the more content are the graduates with the education they received and vice versa The disappointment in the lower salary[69] and the discontentment with the job[70] are projected on the education received The discrepancy between the graduates' expectations and reality often results in the practice giving them a shock[71] on which they react by changing jobs and shifting the responsibility from themselves on to external circumstances

Conclusions and theses

Some students of earlier semesters often chose the studies as 'practice-related school for entrepreneurs'. Due to the alternatives offered (e.g Hernstein, WIFI) and due to the makeup of students the Department of Small Business Management did not want to meet this claim. The Department tried to fulfil the varying expectations and not to orient itself completely by the requirements of an entrepreneurship education.

A final assessment of the reform of the studies concerning subject matters and didactic methods is not possible yet, as the graduates questioned completed a substantial part of their studies before the restructuring and the sub-sample of those who studied afterwards contains an unproportionally high number of successful students.

The students accept the educational objectives and the didactic methods to a large extent. It must, however, be recognized that in view of the fact that the students are (basically) free to choose - after a certain delay in time - the supply creates a demand with those who feel that these subject matters and didactic methods appeal to them

It can be assumed that those who chose the discipline 'entrepreneurship and small business management' had prior to their decision considered information on subject matters, educational objectives and didactic methods The Department itself helped spread information on the conception of itself, its educational objective and the types of practical courses used within the university.

The educational program is located in the field of tension between the two extremes of 'imparting knowledge' and 'enabling the students to independently produce knowledge'. The clear orientation toward the second extreme induced students who are interested more in immediately exploitable subject matters to turn to other departments or other programs outside the university. This orientation also kept students who are in general hardly motivated by subject matters away from the discipline 'entrepreneurship and small business management'

The group of those who are little motivated by subject matters is partly made up of potential successors. It can be concluded from the empirical data that the children of entrepreneurs are often pushed to choose a certain education of which the subject matters hardly motivate them:

For twelve per cent (five per cent) of the former (present) students whose parents have a company this company (possibly the wish/pressure of the parents) is the only one of ten given motives for choosing the discipline 'small business management'.

It is thus not surprising that those graduates whose parents have a company, but who do not set themselves up are significantly more discontent with their choice of studies

The didactic method chosen (project case studies) forces the students to actively take part in the practical courses. Therefore, according to tendency the percentage of students who are rather less motivated is decreasing As a consequence the percentage of potential successors is also decreasing, while the percentage of entrepreneurs is increasing This means that the Department succeeded in 'upgrading' the educational program and thus also the participants:

The present students are ready to work a lot harder for their studies To a large and above all increasing extent they consist of potential entrepreneurs who have recognized the importance of an in many ways adaptable university education versus quickly outdated skills which can relatively easily be learned on one's own or bought

Notes

[1] The years of efforts made in this direction for example at the Dortmund and Lueneburg universities are a shining example for this situation in educational policy In this connection the Department of Small Business Management at the Vienna University of Economics which was founded already in 1936 and reestablished in 1956 is rather an exception.
The situation in the United States with more than 300 universities offering entrepreneurship courses or entire entrepreneurship programs and almost 1000 foundation chairs of entrepreneurship education differs basically from the situation in Europe (Weihe/Klenger/Plaschka/Reich 1991, 267f and the literature quoted in there).

[2] Mugler 1984, 769.

[3] In order to grasp these relevant problems see Kahle 1986, 549.

[4] In the sub-discipline ' small business management' trading companies can for example be left out if there is a sub-discipline ' business administration of trading companies' .

[5] Mugler 1984, 773.
Size-related characteristics could for example be considered in the disciplines ' business administration of trading companies' , ' international management' , ' business administration of tourism enterprises' etc.; also functional sub-disciplines could relieve the sub-discipline ' small business management' as far as the requirements made on the educational program are concerned

[6] Loitlsberger 1983, 73.

[7] Mugler 1984, 772

[8] Estimating a potential demand is considerably more complex. Measuring the intention to consume a still unknown product is considerably more problematic in this case than with consumer products. Due to the fact that services are associated with a concrete situation of them being performed - which is completely unknown before the consumption - it is already more difficult to anticipate the intention to consume a service In this case the measuring problem is aggravated by problems in communicating the product and by the fact that the product does not only depend on the situation, but also increasingly on the persons involved (Likewise it is difficult to estimate the potential demand for a festival program of which the objectives are clear, but not the concrete dates, venues and especially actors, conductors and orchestras.)

[9] Tholler 1988, 57ff.

[10] In 1987/88 there were only 17 specialized disciplines.

[11] Tholler 1988, 57ff.

[12] Author unknown 1990; author unknown 1991a; author unknown 1991b, Arbeitskreis 1992.

[13] Weihe/Klenger/Plaschka/Reich 1991, 231

[14] Barthel 1990, 208f.

[15] Weihe/Klenger/Plaschka/Reich 1991, 238

[16] Kahle 1986, 554; Zeitel 1986, 779.

[17] The way of choosing a profession of graduates of the discipline ' small business management' - demands and experiences; continuous research of the Department of Small Business Management, project supervision: Roessl, D., project execution: Vosatka, K

[18] Level of significance: *** resp **
The level of significance relates to Chi-square or Fisher's exact test The error probability lies in case of
- *a* between 0.05 and 0.1,
- * between 0.01 and 0.05,
- ** between 0.005 and 0 01 and
- *** below 0.005.

[19] Zeitel speaks of the importance of a ' science-oriented management' (Zeitel 1986, 778).

[20] Zeitel 1986, 779.

[21] Otruba/Pelizon/Manner/Bleier/Hochreiner 1991, 70.

[22] Zeitel 1986, 778f.

[23] Weihe/Klenger/Plaschka/Reich 1991, 229.

[24] Mugler 1984, 774; Mugler 1986, 780; Kahle gives a narrower definition of the addressees (Kahle 1986, 546).

[25] Mugler 1986, 780.

[26] Mugler 1986, 781.

[27] In some cases not of the same opinion Kahle 1986, 553.

[28] E.g. cost accounting, investment analysis, value analysis, SWOT analysis, analysis of potentials, portfolio techniques, ratios, cash forecasting instruments, market research - techniques, balance sheet analysis, etc.

[29] The results of the examinations on two of these three lectures can be counted toward the diploma examination

[30] In order to identify the functional areas especially relevant concerning size compare, Kahle 1986, pp. 546-552.

[31] These practical instrument-oriented courses must also be seen under the aspect of training analytic thinking and creative and heuristic problem solving

[32] Mugler 1986, p. 781

[33] Here we must hint at the fact that the entrepreneurs shall make their enterprises available only as objects of demonstration and provide the teams with the information they ask for if available The Department of Small Business Management neither promises a certain way of carrying out the project nor a certain input of time or work nor any result. As the tasks are often very complex and the teams' qualification and readiness to work can only vaguely be estimated in advance, useful results cannot be promised
Also if there are useful results from the point of view of the entrepreneur, as is frequently the case, the university or the trainer do not receive any ' consultation fees' Still business consultants have already lodged protests.

[34] On career planning, on the requirements made on graduates and on the courses of studies in general there are numerous investigations: Barth 1991; BMWF 1990a, BMWF 1990b, Clement 1982; Grün/Tschirf/Michor 1991; Grün/Tschirf 1989, Tholler 1988.

[35] For a survey of the attempts at explanation compare Seifert 1977 and Seifert 1990.

[36] Owing to the lack of a formal enrolment for the specialized discipline offered by a department this number can only be calculated back from the numbers of graduates.

[37] It was not possible to collect the complete data, as not all of the addresses were available The majority of the difference between 429 and 335 can be attributed to the graduates of the discipline who have not yet concluded the complete studies and could thus not be identified as graduates in the centrally administered collection of addresses The rest can be attributed to changes in the data administration and concerns mainly the year 1988 We think that a systematic error caused by this choice of addresses can be excluded

[38] As many students change their domicile after having concluded their studies it must be assumed that many questionnaires were delivered (e g at the dormitory, the parents' domicile), but were not returned as undeliverable

This is supported by the unusually small number of undeliverable questionnaires, although for this data collection it was expected to lie substantially above the values of other empirical projects (appr. ten er cent-fifteen per cent). Questionnaires received after April 28 could not be taken into consideration.

[39] The evaluation of the data has not been concluded yet. Therefore only the first results and their preliminary interpretation can be presented here.

[40] see footnote 18

[41] 8per cent of the students want to work less than fourty-one hours per week, but thirteen per cent are ready to work more than sixty hours per week; the comparative figures concerning the graduates are seventeen per cent and seven per cent (level of significance: *a*).

[42] Almost fourty per cent of the students, but only fifteen per cent of the graduates ' speak' (or learn) more than two foreign languages. eight per cent of the students, but twenty-four per cent of the graduates speak only one foreign language (there is even one graduate who does not speak any foreign language at all) (level of significance: **).

[48] Moreover, this group doubts that persons who themselves are no entrepreneurs can tell them anything new. (The trainers have a university education and in addition various professional qualifications - e.g. as business consultants, market and public opinion analysts - and to a varying degree work in these fields.)
If free of this arrogance, according to the author's own experience the most engaged students are to be found precisely in this group, too.

[49] Sample of graduates: 1 8 motives as compared to 2.1, level of significance *a* (t-test); sample of students: 2.1 motives as compared to 2.3 motives, statistically not significant due to the smaller sample.

[50] Therefore the corresponding data of columns III to V are not shown for the sample of students.
Here the problem of comparing memories and reality (motives for choosing the studies) on the one hand and planning and reality (professional expectations) on the other hand can be seen very clearly

[51] Due to different research designs and the resulting differences of the respective populations it is difficult to compare these results with others Data collected in Lower Saxony, for example, reveal that thirty-four per cent of the beginners in ' economy' and twenty-two per cent of the graduates are interested in setting themselves up (Weihe/Klenger/Plaschka/Reich 1991, 65). These numbers are only conditionally comparable, as e.g the students of the discipline ' auditing and taxation' are naturally to a large extent future entrepreneurs, because this course of studies is clearly aimed at the profession of the tax adviser etc.

[52] In comparison only four per cent of those students who do not want to set themselves up expect great initial problems when starting a job

[53] An unproportionally high percentage of these graduates e g goes on to the doctorate (level of significance: *). According to tendency the ' entrepreneurs' of the sample of students also more often (fifty-five per cent as compared to fourty per cent) aim at the doctorate

[54] This is supported by the author's own experience: As the students whose parents have a company are not informed about this company in most cases it is impossible to use these enterprises for illustrating purposes in the practical courses.

[55] Level of significance as compared to the other graduates: **.

[56] Statistically not significant.

[57] Fourty-three per cent of the graduates working in companies with less than 20 employees say that they needed further professional education

[58] Only one of those questioned regrets his decision to have chosen ' small business management' .

[59] Statistically not significant.

[60] Sixty-three per cent as compared to fifty per cent (statistically not significant).

[61] Seventy-six per cent as compared to fifty-two per cent (level of significance: **).

[62] On an average the graduates concluded their studies only in mid-1990. The average duration of the studies being 6.35 years they, on an average, started their studies of ' small business management' in the winter semester of 1987/88.
At the Vienna University of Economics this duration of studies of the students enrolled in the specialized discipline ' small business management' is slightly above average The average duration of studies has been constantly increasing and was 6.2 years in 1990/91 (Grün/Tschirf 1989, 20).

[63] This hit especially those students hard who after a longer duration of studies only later on took their final examination (the standard deviation of the duration of studies is appr. 1.5 years).

[64] It seems to be plausible to make such a division, as with probably few exceptions those students who started studying in the winter semester of 1988/89 attended only one practical course of the ' old type' .

[65] The less successful students who started studying between 1988/89 and 1991 have not yet concluded their studies and are thus not included.

[66] Level of significance: * (t-test).

[67] Level of significance: *a* (t-test).

[68] Seventy-five per cent of those who could make use of their knowledge are content with the course of studies of ' small business management', while sixty-nine per cent of those graduates who work in other fields are not content with their choice of studies (***). Those graduates who now aim at the position of areal manager in a larger enterprise or who work in trade, chambers, insurances or tourism are especially discontent with their choice of studies. According to the fields of activities particularly those who work in purchasing, accounting/balance sheet accounting and personnel (***) are discontent with the discipline ' small business management' .

[69] Those graduates who would choose ' small business management' again on an average earn ATS 1,200 per month more than those who regret their choice of studies (t-test *a*).

[70] Almost sixty per cent of those graduates who are not content with their jobs would not enrol in the course of studies chosen again (*a*)

[71] Rosenstiel/Nerdinger/Spieß, 1991, 239ff.

References

Arbeitskreis (1992), Arbeitskreis II Unternehmer(in) 2000, 'Perspektiven in der Aus-, Fort- und Weiterbildung', *Arbeitskreis im Rahmen des Jubilaeums 40 Jahre IfG und Symposium 'Gewerbe und Handwerk 2000'*, April ,Vienna

Author unknown (1990), 'Manager in der Zukunft - Das Fuehrungskraefte-Profil des Jahres 2000', *Die Presse*, no. 20, November

Author unknown (1991a), 'Manager-Wissen fuer morgen', *Die Presse*, no. 19, March

Author unknown (1991b), 'Die 'Wollmilchsau' als Wunschkandidat-Betriebe suchen junge Alleskoenner', *Die Presse*, no 25, 25 October

Barth, H. (1991), 'Berufsbildung und Arbeitsmarkt, Perspektiven und Szenarien bis zum Jahr 2000', *17. wissenschaftliche Jahrestagung des Oesterreichischen Instituts für Bildungsforschung*, Vienna

Barthel, K W. (1990), 'Berufsbildung in Theorie und Praxis; Schlüsselqualifikationen', *Der Ausbilder*, no. 11, pp 208-210

Bundesministerium für Wissenschaft und Forschung (BMWF) (1990a), *Statistisches Taschenbuch*, Vienna

Bundesministerium für Wissenschaft und Forschung (BMWF) (1990b) *Universitaeten/Hochschulen - Statistische Daten*, Vienna

Clement, W. (Ed.) (1982), *Karriereplanung und Probleme des beruflichen Einsatzes von Hochschulabsolventen*, Vienna

Gruen, O./ Tschirf, A. (1989), *Portraet eines Absolventenjahrganges*, Vienna

Gruen, O./ Tschirf, A./ Michor, T. (1991), 'Zukuenftiger Bedarf an WU-Absolventen - Zwischenbericht', *zbp*, no. 3

Kahle, E. (1986) 'Inhaltliche Anforderungen an ein mittelstaendisch orientiertes Studium der Betriebswirtschaftslehre', *Die Betriebswirtschaft*, vol. 46, no. 5, pp. 545-556

Loitlsberger, E. (1983), 'Begriff, Bereiche und Bedeutung der ABWL', *Journal für Betriebswirtschaft*, vol. 33, no. 2, pp. 66-86

Mugler, J. (1984), 'Betriebswirtschaftslehre der Klein- und Mittelbetriebe, Be-gründung - Anforderungen - Konzeption' Albach, H./ Held, Th. (Ed.), *Betriebswirt-schaftslehre mittelstaendischer Unternehmen, Wissenschaftliche Tagung des Ver-ban des der Hochschullehrer fuer Betriebswirtschaft e.V. 1984*, pp. 768-781, Stuttgart,

Mugler, J. (1986), 'Kommentar zum Beitrag von Egbert Kahle 'Inhaltliche Anforderungen an ein mittelstaendisch orientiertes Studium der Betriebswirtschaftslehre' *DBW*, vol. 6, pp. 545-556; in *Die Betriebswirtschaft*, vol. 46, no. 6, pp. 780-782

Otruba, H./ Pelizon, P./ Manner, G./ Bleier, P./Hochreiner M. (1991), 'Kosten-Nutzen-Rechnung von Universitaeten', Berlin

Rosenstiel, L. v./ Nerdinger, F. W./ Spieß, E. (1991), *Was morgen alles anders laeuft - Die neuen Spielregeln für Manager*, Duesseldorf-Vienna-New York

Seifert, K.H. (1977), 'Theorien der Berufswahl und der beruflichen Entwicklung', Seifert, K. H./ Eckhardt, H. H./ Jaide, W. (Ed.), *Handbuch der Berufspsychologie*, Linz

Seifert, K. H. (1990), 'Studienwahl und Studienbewaeltigung Ergebnis der Laufbahnforschung bei Maturanten und Studenten', *Studien- und Berufswahl-Zur Entwicklung von akademischen Berufen, Studienmotivationen und Universitaetsstudien*, Vienna-Klagenfurt

Tholler, K. (1988), 'Ist die Studienreform der Sozial- und Wirtschaftswissenschaften praxisgerecht?', *wirtschaftswiss. Diss. an der Wirtschaftsuniversitaet Wien*

Weihe, H. J. / Klenger, F. / Plaschka, G. / Reich, F. R. (1991), 'Unternehmerausbildung - Ausbildung zum Entrepreneur, Eine Studie zur Situation der Aus- und Weiterbildung von Unternehmensgruendern', *FGF Entrepreneurship-Research Monographien*; vol. 2, ed. by Klandt, H., Cologne-Dortmund

Zeitel, G. (1986), 'Akademische Ausbildung fuer die mittelstaendische Wirtschaft', *Die Betriebswirtschaft*; vol. 46, no. 6, pp. 778-780

14 Empirical concept for studying the educational requirements of entrepreneurship

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Summary

This paper attempts to show, how job requirements can be defined for the empirical research and for the derivation of training objectives for entrepreneurship education The paper is based on the role concept of Mintzberg who is characterizing the nature of managerial work by ten roles. These roles have to be transferred in some aspects for describing the nature of entrepreneurial work Getting the entrepreneurial roles then these roles are analysed with the aim of identifying those qualification requirements which are essential for a successful role performance Finally based on this knowledge a concept for the empirical analysis of training objectives for entrepreneurship education is presented

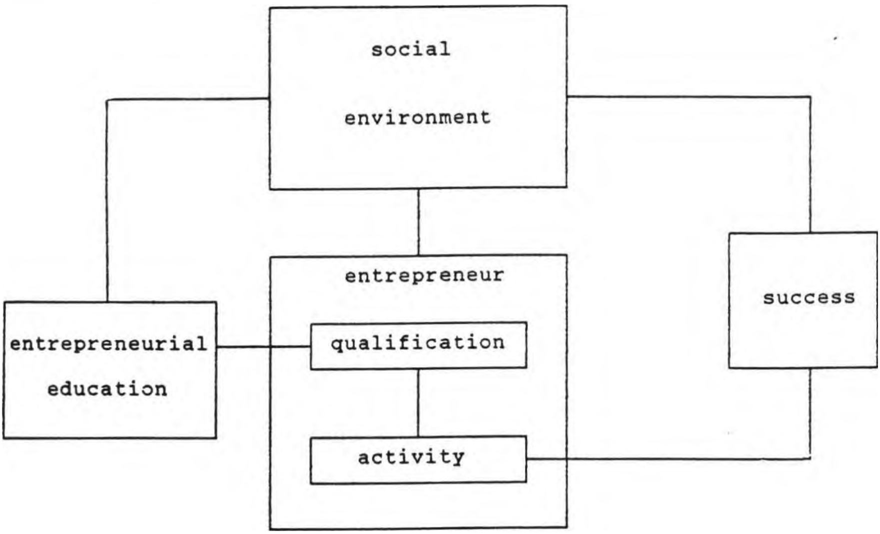
Introduction and theoretical frame

Entrepreneurship education more and more is considered to be important for the success of the entrepreneur But empirical based information about education objectives for the construction of appropriate curriculums is missing One reason for that is the difficulty of defining qualification requirements

The following paper attempts to show, how training objectives for entrepreneurship education can be identified by empirical research

The theoretical frame of the paper is derived from the general theoretical frame of entrepreneurship research (Klandt, 1984) Here the entrepreneur and his social environment are pointed out as independent elements which are determining business activities and business success.

The paper only is focusing on business activities. Business activities are producing the success of the enterprise. The entrepreneur as acting person determines the business activities. Depending on his qualification his activities more or less are satisfying the specific requirements of the situation. If the quality of his activities can be improved by entrepreneurial education before he is starting the business, education has to be add as another independent element of the system. The following illustration elucidates these relations.



Theoretical approach for studying training objectives

Definition of training objectives

By training objectives shall be understood an intended training result. In relation to the human learning process the effect of training can be observed as a behavioural change (Correl, 1972). So training objectives for entrepreneurship education have to be described as intended entrepreneurial behaviour. This means that the participants of training courses should learn entrepreneurial behaviour. They must be prepared to all the activities on which they will have to spend their time in the later business life. Therefore, approaches to the problem of finding training objectives for entrepreneurship education only can be based on the real requirements of the entrepreneurial job.

Concerning to the degree of abstraction, three different levels of training objectives can be discussed (Dubs at al., 1974):

- direction objectives: abstract description of aims, methods and values of education;

- information objectives: concrete description of the education by naming concrete aims and contents;
- planning objectives: concrete description of education plan and teaching units.

In the following, training objectives shall be discussed on the level of information objectives.

Analysing training objectives in the form of different job requirements

There are two main approaches to the problem of analysing the entrepreneur's job. One can derive the characteristics of the entrepreneurial job by studying the literature about the entrepreneurial work or one can examine its characteristics by empirical research. Because theories, which are describing the entrepreneur's job, are missing, the only acceptable way which can provide appropriate results is to make an empirical research.

The bases for the research are the job requirements of the entrepreneur's daily work. According to this, the following questions result as central points of interest:

- How can job requirements be categorized?
- How can the identified job requirements be studied?

Generally job requirements are all necessary activities for starting-up and managing a new business. According to the presented theoretical frame, activities are determined by the entrepreneur (subjective condition) and the entrepreneur's environment (objective condition).

Based on the four elements of the theoretical frame (initial idea, entrepreneur, activity, environment) four definitions of job requirements can be derived (Quaas/Raum, 1973):

- R1: requirements as intended start-up ideas, objectives and ways;
- R2: requirements as necessary start-up conditions or environment conditions;
- R3: requirements as required human (subjective) conditions like personal characteristic, abilities, skills, motivations etc. Regarding to the point of view, personal requirements can be seen as psychological functions (recognizing, analysing, deciding and acting) (R3a) or as personal characteristics and structure of personality (R3b);
- R4: requirements as a description of necessary activities.

The usefulness of these descriptions for the derivation of job requirements depends on the specific research intention. Concerning to the aim of identifying job requirements for deriving training objectives, the definitions R1 and R2 are not useful, because they are not related directly to business activities. Directly related to business activities are the definitions R3 and R4. R3 is describing the human factor of work meanwhile R4 is defining the necessary working activities themselves. R4 is forming the linkage between the situational factor and the human factor of work and it must be the central point of the analysis.

Identifying job requirements (R4) will give an impression of the entrepreneurial work. But for deriving training objectives the human factor cannot be neglected. Qualification requirements on the level of the working person (R3) have to be analysed, too. Concerning to the definition of training objectives as intended behavioural objectives the definition as psychological functions (R3a) is the useful one, because qualification requirements defined as personal characteristics (R3b) cannot be teached

Resuming it can be pointed out that the analysis of training objectives is based on the analysis of required start-up activities (job requirements) and the required human qualification (qualification requirements) for performing these activities

Methodical problems of the empirical research

In addition to the general problems of empirical research like validity, reliability, objectivity, and efficiency two special problems are connected with the analysis of training objectives.

The problem of transposition is related to the transformation of job requirements into education objectives (Isenegger, 1972). This problem considers the danger that information can be lost or added by the researcher while formulating training objectives on the basis of the collected data. Solving this problem the distance between the level of describing job requirements and the level of describing training objectives has to be minimized. This could be achieved by using a similar classification system for describing job requirements and training objectives.

The problem of conclusion occurs while the process of conclusing training objectives based on the collected data (Volpert, 1974). This problem refers to the connection between the working person and the work itself. Regarding to this problem, it has to be installed a methodical bridge between the analysis of job requirements and the conclusion of qualification requirements In other words, a direct linkage between job requirements and qualification requirements has to be found.

Discussing traditional methods of studying training objectives

Looking to the methods of job analysis mentioned in the literature it can be recognized that they are not very useful for analysing training objectives The traditional methods of job analysis are suffering the following disadvantages:

- They are just looking to the working process and less to the worker himself.
- The working process is divided into different fragmented working units.
- These methods usually are developed for analysing mechanical working activities. Analysing very complex, unstructured, fragmented, and mental working activities, is not possible.
- Mentioned categories of job requirements are not proved theoretically.
- They do not solve the problems of transposition and conclusion.

Concept for studying training objectives

These disadvantages of the traditional methods make it necessary to develop a new approach This approach has to catalogize training objectives and it has to show ways for studying the work of entrepreneurs

Classification of job requirements

The first step will be to show, how job requirements can be studied Looking to the common approaches for analysing the work of managers, four different ways of research can be identified (Ramme, 1990): analysing the functions of managers (organising, planning and controlling), their tasks, the activities on which they spend their time and their roles.

Also the work of entrepreneurs can be parted into functions and tasks. Functions and tasks are realized by activities. So work just can be analysed completely by a concept which includes these three different approaches. In comparison to the traditional concepts, the main advantage of such an integrated concept is that it would record the wide field of job requirements. But the connection between work and entrepreneur (problem of conclusion) this concept does not realize.

Looking to the role concept as a fourth concept it seems that it could give a solution. Roles are describing expectations and requirements which are associated with a special job. Like every manager also the entrepreneur is confronted with expectations and requirements by the group of persons he is dealing with, for example bankers, suppliers, clients, or his subordinates Those expectations are defining his role as entrepreneur and are forming the job requirements

A systematic description of managerial roles presented Mintzberg (Mintzberg, 1973). For describing the nature of managerial work, Mintzberg suggested ten different roles divided into three groups - three interpersonal roles, three informational roles, and four decisional roles

Mintzberg developed his role concept for describing the work of managers of bigger enterprises Now shall be shown, how these roles can be characterized by typical working activities for matching with the entrepreneurial job.

Interpersonal roles. Business activities are involving contacts with other persons The interpersonal contact is of key significance for the success of the enterprise. Three interpersonal roles can be determined.

-The entrepreneur as figurehead:

One of the most basic and most simple role is the role of figurehead The entrepreneur is the head of his enterprise According to his position and authority he must perform some duties of a ceremonial nature Very seldom these duties belong to the central tasks of his job Nevertheless they are very important In some cases it is required by law that the entrepreneur is present - notably the signing of documents - and in other cases his participation is considered as a social necessity To the external world the entrepreneur is representing the enterprise and the enterprise's capacity will be measured by his appearance

-The entrepreneur as leader

The entrepreneur as head of his enterprise defines the atmosphere in which his organization will work and he is responsible for the work of his employees He determines culture and philosophy of the enterprise.

The leader role is one of the most significant of all roles and permeates nearly all activities Surely, this role is less important during the initial process of starting a business But when the enterprise is improving its market position and growing it can be expected that subordinates are coming on board and activities which make up the leader role are gaining more importance Regarding to the fact that in a small enterprise is no place for inefficiently working persons and that everyone has to do

his best, staff management is essential for the success of the enterprise.
Key purpose of the leader role is, to effect an integration between individual needs and organizational goals The leader has to give guidance and motivation to his subordinates. Activities which make up the leader role are hiring, training, encouraging or criticizing, ordering, promoting, and dismissing subordinates. For maintaining the liveliness and flexibility of an organisation also recognizing staff problems belongs to the tasks of the entrepreneur as leader.

-The entrepreneur as liaison

Besides internal contacts management also requires to keep the enterprise in a close touch with the world outside. It is to suppose that entrepreneurs are spending a lot of time in talking with people who are not their subordinates. The liaison role is devoted to these interpersonal contacts with persons outside the enterprise.
This role seems to be one of the most important roles of the entrepreneur. Starting a business requires multiple contacts to customers, suppliers, bankers, consultance etc Building up and maintaining a network of contacts can influence the success of the company deeply.

Informational roles. Information can be seen as a strategical factor for the success of the young enterprise Activities like business planning, assessing risks and chances of business ideas, identifying problems and possibilities, or managing the running enterprise need a wide range of information.

By virtue of his interpersonal contacts the entrepreneur is in the unique position to get information. On the one hand side he is maintaining a wide range of contacts to the world outside the enterprise, and on the other hand side he has the access to all internal information So in effect, he is the enterprise's nerve centre and the processing of information is a key part of his job. All activities related to the reception and to the transmission of information are forming the second set of roles which is described by three roles.

-The entrepreneur as monitor:

The monitor role contains all activities which are oriented to the reception of information Because of the variety of his interpersonal contacts the entrepreneur is receiving passively a lot of unsolicited information, often as gossip, hearsay, and speculation. Actively he is seeking information in order to detect changes, to identify problems and opportunities, to build up knowledge about his milieu, or to be informed when decisions must be made.
As categories of information Mintzberg distinguishes internal operations, external events, analyses and reports, ideas and trends, and pressures.

-The entrepreneur as disseminator:

For keeping on running his organization the entrepreneur has to distribute a lot of is information to his subordinates But out of the wide range of information he has got, only some is necessary and impotent to know for his subordinates For that the entrepreneur has to filter and to equalize information and to pass just the important one.
It can be supposed that the role of the disseminator - like the role of the leader - is gaining importance with the growing enterprise and the delegation of work

-The entrepreneur as spokesman:

The spokesman role is the counterpart to the role of the disseminator. As formal

authority the manager has to speak on behalf of his organization. He has to send some information to all key influencers of the environment such as suppliers, customers, government agencies, or the press. For maintaining his network of personal contacts he has to satisfy in some way the demand of information of influential people.
The quantity and the quality of information the entrepreneur has to transmit depend on the special aim of the contact. But for being effective and gaining the respect of contacted persons the entrepreneur itself has to be up-to-minute.

Decisional roles. Every working activity also includes decision activities (Brinkmann, 1983). By making decisions the entrepreneur underlies many influences and requirements out of the decision situation. Considering specific parameters of the decision situation four roles describe the entrepreneur as decision-maker.

-The entrepreneur as entrepreneur:
The most characteristic role of the entrepreneur is the role of the entrepreneur itself. Taking this role the entrepreneur acts as initiator and designer of new organizations as well as of changes in ongoing organizations. Generally this role is not initialized by pressing problems. More decisions are purely voluntary and innovative ones. It depends on the entrepreneur himself when and why he is reflecting and initiating changes.
Main activities of this role are permanent searching for new possibilities, and scanning the organization and the environment with the intention to discover opportunities or problems. For that information is necessary which is received in the monitor role. After discovering a problem or a opportunity the phase of designing and decision-making begins and activities for improving the situation must be started.
This role seems to be the most important role of the entrepreneur. In this role the entrepreneur is like the motor of his enterprise and he is maintaining its liveliness and flexibility.
-The entrepreneur as disturbance handler:
This role depicts the entrepreneur involuntarily responding to pressures produce by suddenly appearing problems which can lead to a negative development of the enterprise. Such problems can be produced by unforeseen events like sudden market changes, production problems, staff conflicts, or losses of resources. For preventing negative developments rapid interventions are necessary. The entrepreneur must act.
-The entrepreneur as resource allocator:
This role resumes all activities of managing resources. In contrast to the role of the entrepreneur here common decisions like allocation of money, time, material and equipment, or manpower have to be made
-The entrepreneur as negotiator:
The negotiator role results form the fact that the entrepreneur has to make many decisions together with other people. Negotiation is resource trading in real-time Typical negotiations which the entrepreneur has to participate are bargaining with suppliers and customers about price conditions, with bankers for financial supports, or with subordinates about salaries. The negotiator role often is connected with the entrepreneur role because the entrepreneur must spend considerable time in the negotiator role for implementing his proposed changes.

Classification of qualification requirements

After having identified categories for describing job requirements the next question will be, to find a classification for describing qualification requirements. Regarding to the problem of conclusion these categories also should serve to define teaching requirements. For that the taxonomy of training objectives presented by Bloom (1976) could be useful. Bloom describes in his taxonomy three main categories: cognitive objectives, affective objectives and motorical objectives.

For characterizing training objectives of mainly head working people, like entrepreneurs, just cognitive training objectives should be observed. The other categories seem less important. Instead of this another missing category should be considered, social skills. Entrepreneurs have to deal with a number of specific situations involving relationships with other people. For being effective in these relations - which means that a behaviour achieves its intended purpose (Sidney at al., 1973) - social skills are needed

These two categories of qualification requirements shall be discussed now.

Social skills. By social skills shall be understood all kinds of behavioural requirements which are important for dealing with other people. A person is acquiring social skills by socialization mainly during his childhood but later on the job, too. As learn able competencies social skills should be considered as a training objective for entrepreneurship education.

The derivation of special social skills (Brinkmann at al., 1982) is based on the model of communication consisting of transmitter, receiver and communication channel (Shannon/Weaver, 1949). In this model two dimensions of social skills can be identified: the communication channel and the relationship between the communicants

- The communication channel:
  Skills summarized by the communication channel are skills required by different mediums and forms of communication. Handling different communication mediums such as telephone, computer, or telefax are the most essential skills for communicating.
  Common forms of communicating are verbal and written contacts. Looking to verbal communication face-to-face contacts and oral contacts have to be distinguished. communicating by telephone is different from direct face-to-face communication. In direct interpersonal communication the communicants can see each other and interpret the behaviour of his partner. So facial expressions, gestures, and appearance are giving many additional hints about the other's mental attitudes, opinions etc While telephoning these hints are missing Skills needed for verbal communication are perceptual sensitivity, self-presentation, or handling unilateral or bilateral relationships.
  Required by written communication are skills like structuring letters and reports or capacity of expression.
- The relationship between the communicants :
  The kind of social relationship between the communicants determines the way of communicating It is usual to describe the social relationship between the communicants by social roles Social roles are differing in internal or external relationships
  Roles involved in internal relationships are depending on the direction of

communication. Horizontal communication requires the role of a colleague and vertical or diagonal communications those of a superior and of a subordinate (Sidney at al., 1973; Brinkmann at al., 1982). Assuming that the entrepreneur is his own boss the role of a subordinate can be neglected.

Communication in different role positions requires special skills in translating the information which is received or which is to transmit because every role position does have it's role specific repertoire of symbols, like language - specially technical language -, gesture and behaviour. A communication between two different persons only is possible when they are speaking the same language So acting out of different role positions requires the ability of translating information while having horizontal, vertical, and diagonal role relations

Looking to external relationships a much wider range of necessary roles can be observed Typical roles which the entrepreneur is taking here are the role of a supplier, the role of a seller, the role of a competitor, or the role of a business friend. Handling external relationships requires the knowledge about different roles and the flexibility in changing roles (Brinkmann a.o., 1982). Speaking with a wide range of persons out of different jobs, different social classes, and positions, requires translating skills for understanding the various languages of different roles

Cognitive skills. The derivation of cognitive skills is based on the assumption that every working activity includes an act of decision (Brinkmann at al., 1982) Every act of decision can be divided into decision situation and decision process (Kirsch, 1971). Decision-making is initialized by a situation which does not agree with a preferred situation (goal). The task of the decision maker is to transfer the found situation into the preferred situation.

Decision-making in the world of young and small enterprises is hard because of the complexity of the entrepreneur's professional task fields Typical characteristics of his business situation are indetermnation of goals, unstructuredness of perception and action fields, in transparency, self-dynamic of the system, exponential paths of development, limited time and material resources, and only partly possible manipulations (Dörner at al., 1983; Klandt, 1990).

Regarding to different decision situations three kinds of problems can be identified (Dörner, 1976):

- Interpolation problems: Here the problem solver knows goals and possible manipulations. The only difficulty exists by choosing the adequate manipulation
- Synthesis problems: Goals can be defined exactly but possible ways of manipulation are unknown
- Dialectical problems: Dialectical problems are characterized that neither goals are defined nor manipulations are known

Solving these different kinds of problems requires different cognitive skills. But common to all kinds of problems is the necessity of knowledge about the met situation.

Knowledge is one element of cognitive skills Knowledge can be defined as the reminding of universals and specifics of task fields, and the recording of methods and heurisms for problem solving (Bloom, 1973; Dörner, 1976). Bloom distinguishes knowledge of specifics, of terminologies, of ways and means of dealing with specifics, of conventions, of trends and sequences, of classifications and categories, of criteria, of methodology, of universals and abstractions in a field, of principles and generalizations, and of theories and structures.

The second element is the ability of problem solving itself which is different for each kind of the above mentioned problems. So interpolations problems require skills like comprehension and analysis of the problem situation and goals, production of a plan or proposed set of operations, evaluating the effects of manipulations, acting, considering feedback, and reorientation if failed. For getting the necessary information active search for information is essential.

The solution of synthesis problems is not possible before known operations are transferred to the specifics of the present problem For this transferation the problem solver has to construct models and has to make analogies of the reality. In the case that it is not possible to estimate the effects of manipulations because of incomplete information the solution of synthesis problems requires risk readiness.

Most difficult to solve are dialectical problems The scientific research up today does not give many hints which skills that could be Generally it can be said that at least skills on the level of the solution of synthesis problems are essential. Furthermore here are required the abilities of independent goal formulation and goal modification and a high degree on innovation and creativity.

It can be resumed that the required level of cognitive skills is determined by the degree of uncertainty about goals and possible manipulations

But cognitive skills are not only depending on parameters like goals and ways of manipulation. Also other situational factors like time pressure, number of participating persons and their personal relations are to consider (Brinkmann at al., 1982).

If the decision process is initialized by unexpected changes in the task field and pressure to act overcomes, additional skills are required, like strength of purpose and restricted search of solutions and the readiness to take second-best solutions instead of failing by waiting and thinking too long. For bearing the time pressure while solving the problem a high stress tolerance is needed

If in the decision process two or more persons are involved special skills for interpersonal problem solving are required Many persons do have many different opinions and imaginations about goals and possible manipulations. Here readiness for compromises and negotiating skills like convincing and persuading are important for solving the problem

Also the personal influence on decisions is important If the decision process is initialized by other persons and these persons also are determining important decision parameters like goals then the decision maker has to orientate his decision to the needs of the other persons This requires loyalty and readiness to adaptation. If the decision maker has to initialize the decision making process by his own, because he is independent, readiness for taking responsibility is important

Entrepreneurial roles, job requirements, and qualification requirements

After discussing entrepreneurial roles and training objectives now it shall be shown how the entrepreneurial roles can be related with job requirements and qualification requirements The following table illustrates some examples

Table 14.1
Examples of entrepreneurial jobs, job requirements and qualification requirements

Role	Job requirements	Qualification requirements
interpersonal roles		
figurehead	representation participation	- social skills techniques of self-presentation
leader	select subordinates train subordinates instruct subordinate lead subordinates enrich jobs help and care about subordinates build moral in company assess subordinates promote subordinates staff performance giving orders stimulate subordinates toward greater productivity review work define roles and lines of authority build working groups	- social skills handling of different leadership styles motivating providing a supportive atmosphere delegating taking personal interest in people role specific languages - knowledge labor rights labor market
liaison	representation of the enterprise contact people building up a interpersonal network	- social skills role flexibility interpretation of roles analysing people and their behaviour (judgement) recognizing social connections

Role	Job requirements	Qualification requirements
informational roles		
monitor	trying to receive all necessary information active search of information	- social skills translating of information reflecting and evaluating of information handling different communication mediums (mail, telephone, reading of reports and publications etc.) evaluating the sources of information and the contents of the message - knowledge different sources of information
disseminator	inform subordinates and partners elect important and necessary information	- social skills translating information filtering information recognizing the specific demand of information transmitting information
spokesman	inform the outside elect important information manipulate information public relation	- social skills translating of information recognizing which information is desired public speaking self-presentation writing publications - knowledge marketing and public relations

Role	Job requirements	Qualification requirements
decision roles		
entrepreneur	create an entreprise business planning long-range planning developing innovative products searching and recognizing risks and possibilities	- knowledge technical knowledge about his products economics financial planning business planning long-range planning (for more see resource allocator) - decision skills solving dialectical problems risk readiness goal setting devoloping ways of interventions initiative responsibility creativity innovation
disturbance handler	react quickly	- knowledge (see resoucre allocator) - decision skills quick thinking stress tolerance strength of purpose flexibility and readiness for adaptations
resource allocator	short-range planning facility planning staff plannning financial planning supplier selection customer adquisition organizational planning maintaining of the production process controlling	- knowledge of economics and business administration knowledge of law - decision skills solving of interpolation and synthesis problems
negotiator	negotiating bargaining discussing	- social skills persuading convincing arguing trading - decision skills co-operating being able to bear and to work out personal conflicts toughness

The advantage of the presented concept can be seen in the integration of job requirements and qualification requirements in one theoretical concept, the role So the problem of transposition is solved The problem of conclusion seems to be solved partly because the qualification requirements are not derived directly out of a theoretical concept of human qualification. But the derivation is based on theoretical models So the conclusion from identified job requirements to training objectives at least is theoretical based and transparent.

Empirical analysis of training objectives

After having developed a concept of job and qualification requirements the next question is, how this concept can be operationalized for the empirical research.

Method and sample. The first question is, which method for measuring training objectives should be used For studying the nature of work three main methods has been used by the researcher, the diary method, the observation and the survey. The methods of diary and observation have the great advantage that they will provide detailed recordings. But they are very time-consuming A survey is the simplest method. It is easier to get entrepreneurs to co-operate because co-operation will take little time. Furthermore, it allows to study large numbers. Considering that young enterprises are developing and therefore job requirements are changing, too, it is necessary to study the entrepreneurial job during a longer time period. Looking only to the daily work could lead to wrong conclusions because it is just reflecting the present state of the enterprise. For covering the wide range of start-up activities and later managing activities different states of the business start-up process have to be studied. This shall be done by surveys asking entrepreneurs for their job activities during different states of the developing enterprise. For receiving some more detailed information about their actual daily work the survey method can be combined with the diary method.

Measuring roles. For measuring the reported roles in the business life they shall be characterized by typical activities and situational conditions which can be related with the role In the following, shortly some of the important activities and characteristics of roles are resumed

- The figurehead role:
  This role can be identified by activities like participating in public meetings, or signing of contracts and documents.
- The leader role:
  The leader role is to discover by questions about the organizational structure of the enterprise, the number of subordinates in different departments, the vocational training of the subordinates, or the number of personal contacts with subordinates during a day For getting some more specific recordings, in a diary further questions like objects of the contact or contacted persons can be asked
- The liaison role :
  Here it is interesting to know which persons outside of the enterprise the entrepreneur is contacting, the frequency of contacts to special groups of persons and typical forms of contacts Also it should be asked if the contacted person is well known or unknown

- The monitor role :
  Although this role is a very important one and the entrepreneur spend considerable time to it, it is difficult to analyse. The entrepreneur is bombarded with information during the whole day out of many sources without performing special searching activities. This cannot be measured directly. But indirectly questions about sources of information can help. Some hints also can be gained by the number of contacts to persons inside and outside the enterprise. When the entrepreneur is searching information actively this role can be observed directly.
- The disseminator role:
  to this role can supply questions about contacts with subordinates and kind of contact (assessment, teaching etc).
- The spokesman role:
  This role is to observe by recording contacts and different kinds of contacts to persons outside the enterprise.
- The entrepreneur role:
  The entrepreneur role is related with unusual planning activities and considerations about chances and risks. For identifying the required knowledge the contents of these activities have to be recorded.
- The disturbance manager role:
  While produced by unexpected and suddenly appearing crisis or problematical situations these parameters can be used for identifying this role. Additionally shall be measured the stress by asking for time pressure and pressure to act.
- The resource allocator role:
  This role can be identified by planning activities, the contents of the decisions, and the structure of the decision situation. Hints about required knowledge are supplied by the special type of planning problem.
- The negotiator role:
  The entrepreneur will take this role while he is making decision together with other persons. For getting hints to the type of negotiating process it has to be recorded which persons are involved and if the standpoints are different or not.

Final remarks

The presented paper should be seen as one step to a concept for measuring training objectives for entrepreneurship education. It shows a possible way how psychological models of human behaviour like the models of decision making, problem solving and social skills, can be integrated in one concept for analysing the entrepreneurial work. Now next steps will be to improve this concept, to formulate a questionnaire, and to test it in the practice for getting first results.

References

Bloom, B J.(1973), *Taxonomie von Lernzielen im kognitiven Bereich,* Weinheim

Brinkmann, G., Knoth, B., Krämer, W (1982), 'Führungskräfte kleiner Unternehmen', *Arbeitsanforderungen und Ausbildungsbedarf,* Köln

Correl, W., *Lernen und Verhalten,* Hamburg

Dörner, D. (1976), *Problemlosen als Informationsverarbeitung,* Stuttgart, Berlin, Köln, Mainz

Dörner, D., at al (1983), *Lohhausen: Vom Umgang mit Unbestimmtheit und Komplexität*, Bern

Dubs, R., Metzger, Ch., Hässler, T., Seitz, H. (1974), *Lehrplangestaltung*, Zürich, 1974

Isenegger, U (1972), *Lernzielerhebung zur Curriculumkonstruktion*, Weinheim

Kirsch, W (1971), *Entscheidungsprozesse*, Bd II, Wiesbaden

Klandt, H (1984), *Aktivität und Erfolg des Unternehmungsgründers, Eine Analyse des mikrosozialen Umfeldes*, Bergisch Gladbach

Klandt, H. (1993), 'Real and potential entrepreneurs playing a business simulation game', in Klandt, H. *(ed.), Entrepreneurship and business development*, The Avebury Business School Library, Aldershot, Brookfield USA, Hong Kong, Singapore, Sidney, p.101-120

Mintzberg, H (1973), *The nature of managerial work*, New York

Quaas, W., Raum, H (1973), 'Zur Problematik der Begriffsfassungen von Arbeitsanforderungen, ihrer Erfaßbarkeit und praktischen Bedeutung', in Hacker, W., Quaas, W., Raum, H., Schulz, H.-J.(eds.), *Psychologische Arbeitsuntersuchungen*, Berlin

Ramme, I. (1990), *Die Arbeit von Führungskräften: Konzepte und empirische Ergebnisse*, Bergisch Gladbach

Shannon, C.E., Weaver, W. (1949), *The mathematical theory of communication*, Urbana

Sidney, E., Brown, M., Argyle, M. (1973), *Skills with people - A guide for Managers* London

Volpert, W. (1974), *Handlungsstrukturanalyse als Beitrag zur Qualifikationsforschung*, Köln

15 Entrepreneurship-training as an integral part of an engineering education at the Fachhochschule Lüneburg

Hermann J. Weihe

Introduction

In the past the Fachhochschule Lüneburg did not have a college in the classical engineering sciences such as mechanical and electrical engineering Until now students have been instructed in the fields of business administration, social work, civil engineering, architecture and civil engineering (water resources management, environmental engineering).

In planning the establishment of an additional college the following fundamental considerations were decisive:

- The middle-sized business of the region had a greater need for a broader based education in engineering than for another college in mechanical or electrical engineering
- Due to the competition in higher education for students, it seemed to make more sense to fill a gap than to make an additional me-too offer in classical engineering
- The interdisciplinary character of practical problems requires corresponding teaching concept.
- The shortage of engineers with management skills could be reduced
- The entrepreneurial and creative impetus to become intra- or entrepreneur could be deliberately promoted
- Highly complex systems demand a systems engineer who finds his professional satisfaction more in the further development of such systems than in traditional tasks.

The result of these considerations was the planning of a College of Applied Automation Engineering

Placement of the College of Applied Automation Engineering

A degree program of eight semesters includes two internships (5th and 8th semester). Specialized professors in the fields of electrical and mechanical engineering, data processing and business administration ensure the interdisciplinary character of the concept.

Small classes of students are taught in seminar-like courses; fourty students are admitted each semester, the normal size of groups in practical training courses is fourteen students The faculty has extensive professional experience (averaging ten years) in higher management functions and is involved in the technology transfer activities of the Fachhochschule Academic qualifications have to be demonstrated by a doctoral degree, activities at well-known research institutions and by the successful transformation of recent scientific findings into practical applications.

The curriculum aims at training systems engineers who are able to develop automation processes.

In particular, systems engineers would have to fulfil the following requirements:

- Developing concepts and strategies for manufacturing systems
- Recognizing automation possibilities
- Analysing the sellers market in the field of automation solutions
- Recognizing appropriate solutions
- Guaranteeing profitability and efficiency
- Determining capacity and quality requirements
- Negotiating successfully with suppliers
- Convincing the management of the economic sense of the project
- Achieving acceptance by the staff concerned
- Supervising implementation
- Servicing the whole system in order to ensure output quality and to maintain continuously a high level of efficiency.

It is obvious that besides a conventional training in engineering, which represents the core of the curriculum, a management and entrepreneurship component must be added in order to fulfil these requirements successfully.

In addition the concept should include from the start elements which give students an incentive to assume entrepreneurial responsibilities.

The Fachhochschule Lüneburg has, for the first time in Germany, advertised for a professor to teach and research in the field of entrepreneurship

Unfortunately there has been little experience in Germany, or even none at all, on how to organise curricula and teaching environments in order to promote an interest in entrepreneurship among students

The next chapter will outline some preliminary reflections on how to embed an entrepreneurship dimension in an educational curriculum The following statements should however be understood more as questions than as ready-made answers

Educational variables

In a first approach it seems to be useful to examine individual variables regarding the possibilities to shape them and their probable effects on the promotion of student interest in entrepreneurship.

The interrelations are illustrated in a conceptual framework. In a further step individual complexes of variables will be investigated more closely.

Concept

The promotion of an interest in entrepreneurship cannot be achieved in an additive way It should be integral part of the curriculum and the whole conception of the Fachhochschule.

The following illustration reflects the existing interrelations:

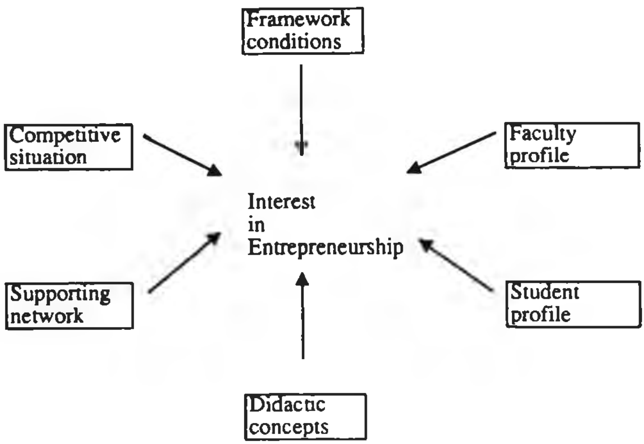


Figure 15.1 Interest in entrepreneurship in a conceptual framework

Faculty profile

In order to guarantee success it is of central importance to find experienced entrepreneurs as teachers The more concrete their own experience of this environment, for which the students are to be prepared, the better the chance for faculty to communicate and impart explicitly and above all implicitly contents and attitudes of entrepreneurship in a distinct and comprehensible way. The success of the teachers as entrepreneurs is an important role model for the students. Since such a background of experience is not necessarily typical for an academic career at Fachhochschulen, part-time lecturers will be relied upon to fulfil these requirements The establishment of a visiting professorship on a one-year rotation basis, for which experienced entrepreneurs could be chosen, would also be helpful.

Due to the distinctly interdisciplinary and team teaching concept the capability of teachers to work in teams is an essential precondition for successful teaching. A preference for teamwork signifies a predisposition towards the kind of learning essential to imparting an orientation to entrepreneurship

Didactic competence and the readiness to keep a critical distance from the classical teaching patterns at Fachhochschulen could create a learning environment which promotes entrepreneurship. A fairly experimental attitude which promotes independence, a readiness to assume responsibility and the capability to learn requires an adviser and consultant more urgently than an university teacher in the traditional sense.

With regard to the insufficient equipment of Fachhochschulen in general and the - in contrast to the teaching quality required - modest salaries, only the creative entrepreneurial activity of the faculty will provide a convincing solution to both problems, proving once again that every shortage is a great opportunity. Teachers as entrepreneurs in their own interest will surely have a positive influence on the teaching of entrepreneurship

Last and perhaps most significant, the faculty must clearly identify with the entrepreneurship orientation of the college. Only if this orientation is supported unreservedly by all faculty members and only if it is translated in their day-to-day actions can the mission of the college be fulfilled.

Student profile

The personal traits of students have a lasting effect on the quality of learning and teaching The students should be active, ready to run a risk, independent, committed and critical The Fachhochschule should attempt to attract students who at least think of themselves as the entrepreneurial type to apply for admission.

The emphasis put on entrepreneurship in the colleges' recruitment efforts should motivate those students to apply whose ambitions aim in the medium or long term at a self-employed professional career.

It is surely desirable that the students already have a vocational training combined with concrete professional experience, so that their career ambitions are realistic. Concrete experience during a period of salaried employment, with all the limitations and restrictions it implies, is a good motivation to pursue a career as an entrepreneur

If the students do have preliminary experience as entre- or entrepreneur, they would be able to develop these qualities in an optimal way.

Above all we hope to attract students with these characteristics by means of a targeted recruitment policy of the Fachhochschule The aim is to succeed in making the college publicly known as an educational institution which has successfully integrated the promotion of entrepreneurship in its curriculum

Didactic concepts

It will be highly important which implicit references are being made through the structuring of contents. Is it the life experienced in the world of a big organisation or is it the comprehension of people assuming entrepreneurial responsibilities in small or medium-sized companies ? The choice of contents implies certain expectations and attitudes, which are then perceived and accepted as unquestioned points of reference by the students.

In the choice of a didactic concept it is important to favour those elements which promote an active and enquiring mind Students who are trained to adopt knowledge passively without reflection or criticism in order to reproduce it word for word at a later date will behave similarly in their later professional career. Independence and responsibility in the acquisition of knowledge should be the guiding principles for learning

Concrete tasks should be taken out of the entrepreneurs' world in order to practice entrepreneurial problem solving.

Practical tasks should as far as possible be put into the hands of students By setting up a supply infrastructure, organizing social events, critically surveying teaching and education quality, and creating a culturally attractive environment (to name just a few aspects) students could gain valuable experience.

The role models offered to the students should reveal a close orientation towards entrepreneurial practice. The more spontaneous the identification, the more effective it will prove to be.

The organisation of special events which are out of line with the general expectations of engineering students could contribute to broadening horizons. Critical approaches to arts, politics and questions of a philosophical nature could serve this purpose.

At last - and this for good reason - I would like to point out that courses will also be offered which impart a theoretical knowledge of entrepreneurship Whereas this is sometimes regarded as the main way of promoting entrepreneurship, in our point of view it has only marginal significance. We expect that practical knowledge will follow from ambitions and not the other way round

Supporting network

The environment of the college, the Fachhochschule as a whole and the region with its local authorities, banking system, companies, trade and labour associations, must support this program with its firm orientation towards entrepreneurship

An advisory board which consists mainly of experienced and successful entrepreneurs could serve as a platform for the critical support of all attempts to promote entrepreneurship Especially graduates could in the future provide important feedback.

The more the faculty is known in public, the less problematic it will be to find appropriate faculty and guest speakers First-hand information is undoubtedly a better preparation for a career as an entrepreneur than well-meaning textbook knowledge.

A widespread network of supporters could provide opportunities for internship semesters and traineeships. The future founders of companies will thus profit from appropriate learning environments.

This network should also offer support in the practical period of setting up one's own business. The encouragement and the experience of people with comparable backgrounds is surely of great advantage. The confidence to be able to rely on a group of promoters having the same interests may be helpful when making the high-risk decision in favour of starting up a new business.

Participation in the international scientific community will support the project This acquires special importance since the network situation in Germany concerning entrepreneurship is completely undeveloped

Competitive situation

As already mentioned the placement of the college was determined by the idea to fill a market gap. This goal will be achieved by setting up an institution to train systems engineers with a focus on intra- and entrepreneurship.

Such a solitary standing in Germany, which at present it undoubtedly has, implies also disadvantages. An ambitious idea needs surely many people to put it in practice if it is to develop its full potential. Competition could be useful in this respect, as it would probably help to mature the concept. Discussion by various experts could make the tasks before us more transparent. Diversified offers by other institutions would increase acceptance by both students and politicians. Potential competitors may need convincing before they enter the field. The more students apply for a place in the program and the more convincing the results are, the easier this task will be.

In order to place quite new services on the educational market, a targeted acquisition activity has to be developed. A prime target group are multipliers such as teachers at technical schools, student advisory services and consultants at employment offices. Information should be given predominantly to these groups.

Framework conditions

The idea that entrepreneurship as both an attitude and a skill can be developed by means of a systematic teaching approach seems to be quite new in Germany. Even in the New Länder, where the economic development is severely hindered by a lack of entrepreneurial know-how, not a single institution of higher education intends to give special attention to the promotion of entrepreneurship. Obviously the possibility to teach entrepreneurship as an attitude and a skill still has to be convincingly communicated.

The outcome of the severe competition on world markets is primarily determined by the quality of a companies' engineers. This requires entrepreneurial thinking and activity of each employee. But how can this requirement be fulfilled if intra- and entrepreneurship is not being realised and developed as a key competence of engineers ? The new college at Lüneburg is to make a contribution here.

The economic region surrounding Lüneburg has great expectations regarding the establishment of the new college. Especially the entrepreneurs of the region have strongly encouraged and supported the establishment of this college and contributed considerably to its authorization by the Department of Higher Education. Their expectations have to be met and taken into consideration.

Evaluation

There are obviously a great number of variables which have an influence on engineers orientation towards entrepreneurship. A check list could make the situation more transparent:

	Variables of teaching results	planned	realised	effective
Faculty profile	Entrepreneurship background			
	Ability to work in teams			
	Didactic competence			
	Recent experience in entrepreneurship			
	Distinct identification with entrepreneurship			
Student profile	Personal traits			
	Career ambitions			
	Vocational training/work experience			
	Preliminary experience as entrepreneur			
Didactic concepts	Structure of contents			
	Teaching concepts			
	Concrete tasks			
	Practical tasks			
	Role offers			
	Special events			
	Practical entrepreneurship knowledge			
Supporting network	Environment			
	Advisory board			
	Part-time lecturers and guest speakers			
	Internship semesters and traineeships			
	Foundation network			
	Scientific community			
Competitive situation	Concept "market gap"			
	Promotion by competition			
	Activation of multipliers			
Frame conditions	Teaching of entrepreneurship			
	Key competence of engineers			
	Entrepreneurs of the region			

Figure 15.2 Variables of teaching result

At the college of Applied Automation Engineering at the Fachhochschule Lüneburg entrepreneurship is being efficiently taught as a key qualification within the framework of an interdisciplinary education of systems engineers The first class curriculum concept and teaching results have made the Fachhochschule Lüneburg and its education in entrepreneurship a trade mark - a model for the entrepreneurship training of systems engineers

16 Post-Fordism or last way-out? Self-employment as an alternative strategy for unemployed persons

Hans-Jürgen Weißbach and Jane Wheelock

A comparison of trends in the Eastern Ruhr District and in the Tyne and Wear Region (North East England)

In this contribution, we want to compare some of the results of a short study which Hans-Jürgen Weißbach carried out in 1986 on the role of EC advisory schemes to stimulate self-employment in the Eastern Ruhr District and of a study made by Jane Wheelock in the Tyne and Wear Region in 1990 examining the impact of family structures on self-employment. Although the focuses of both studies were quite different, we can draw some conclusions from the comparison because the social backgrounds in both old industrialized regions have been very similar up to recently, while national frameworks of regulations, social policy etc. are rather different. The conclusions we have drawn from the studies refer to the impact of family structures and of collective initiatives on self-employment of unemployed persons, and to different male and female participation in self-employment.

While the industrial region of the Ruhr district found itself in a time of great structural change and high unemployment, an advisory programme called 'BEFÖBI' financed by the EC was set up in 1986 to facilitate self-employment for unemployed people and employment initiatives in the steel regions The aim of this programme has been to fill the gaps in advisory spheres which were not covered by the Chambers of Commerce or by other programmes, due to the inadequate perspectives of those wishing to start their own businesses, who often had been long-term unemployed or who lacked qualification and money While the programme started, the researcher had interviewed fifteen job creation initiatives in Dortmund and in the surrounding area, as requested by the local Economic Development Office, to test the necessity for and the likely success of special advisory schemes for these initiatives

At the beginning of the scheme, most of the initiatives were organised around non-profit-making bodies taking advantage of jobs and training schemes made possible by the Employment Office (ABM jobs similar to the former British CP workers) Some of these bodies also claimed from the European Social Fund In the first phase of the programme, some work initiatives (which were not classifiable as standard legal business entities) were started, for example:

- a bicycle shop (inc. renewal and repair of used cycles)
- a planning office (working on town- and eco-planning projects in co-operation with those affected by the projects)
- a further education project, orientated mainly around qualifications for unemployed women and those wishing to return to the employment market
- a woodworking co-operative
- an ecological garden centre, etc

The slow and complicated financial and social consolidation of the projects and their partly unclear perspectives for further development on one side, but mainly the 'creaming-off effects' on the regional labour market because of the improving economic situation on the other side, have led to a declining interest of unemployed persons in collective job creation activities which are aimed at self-employment. The creaming-off effect was mainly due to the expansion of attractive standard employment in the fields of commerce and services, but also due to new successful models of self-employment in the modern service industries which encouraged people to start their business individually, and in a more conventional way with the support of their bankers

In consequence, the advisory programme has become more used by single persons (about 300 per year) trying to found a normal business, although they nevertheless do not meet of the conditions of normal advisory support by the Chambers, e.g. because of a lack of relevant qualifications or capital funds One could thus suggest that the quality of self-employment ideas and projects for which applications were made has deteriorated over the time

This trend does not refer only to the special advisory programme applications to the BEFÖBI programme, but obviously also to the whole City of Dortmund and to the region, as indicated by business registrations which show an increasing number of new pubs, boutiques etc., i.e of businesses for which no particular qualifications are necessary. But it is not likely that this trend really indicates a lower entrance barrier of unqualified persons to successful self-employment. Seemingly, the entrepreneurial potential of the male generation from twenty-four up to forty-five years in Dortmund has been absorbed between 1985 and 1990 in business projects, mainly in qualified services Many of these businesses would never have been created if people had not been unemployed Even people with good business ideas and good qualifications went into self-employment to some extent involuntarily - and often were successful. Nowadays, the chances of going self-employed involuntarily with the help of the BEFÖBI programme are not as good as in the 1980s, due to the creaming-off, and to the fact that the best business ideas cannot be imitated Anyhow, the City does not try to influence the plans of the potential self-employed in a restrictive sense, because for many of them self-employment is the only alternative to unemployment.

Mainly females are not discouraged by this trend. A survey done in Dortmund ('Frauen und Existenzgründung' 1991) showed that in 1990 and 1991, forty per cent of those starting their own businesses were women. Most of them declared their reasons for taking this step as unemployment, having no chance of progressing within their professional career within firms (the so-called 'glass ceiling effect'), or even their spouse being long-term unemployed. What are the reasons for the fact that the number of women willing to start their own business is still expanding, despite of lack of capital, and the difficulties of moving directly from unemployment or out of the housewife status into running a business? Consideration of statistics shows that women in Dortmund are still under-represented in the total workforce (due to the earlier dominance of mining and steel industries and the lack of tradition of women working) Also, in the eastern Ruhr district there is a high percentage of women graduates concentrated in disadvantageous subjects (teaching, social professions etc) Because of the clearly limited spectrum of career patterns and the reduced choices in the workplace, women still see new possibilities opened to them through job creation projects and self-employment, whereas comparably similarly qualified men have not, since for them normal careers or, in the case of unemployment, bridging strategies are available in the workplace (via Unions, Welfare etc).

In 1991, having being involved in an academic exchange with Newcastle University in North East England, we studied the impact of the British government's emphasis on small firm formation based on a policy of promoting the enterprise culture. This included the Enterprise Allowance Scheme which provides state benefit to those starting up new businesses. After more than five years of the scheme's existence, it was remarked that the businesses were not often flourishing, nor were they in any way contributing to the further education of their participants There was a critique forming of the Scheme that it was merely a pressure valve for the State in that it reduced the unemployment figures. Local government and the voluntary sector took steps to set up advisory services with book-keeping and other basic management requirements in order to improve qualification levels, usually funded by central government grants Seemingly, the quality of projects and the qualifications of the founders have improved within the last years However, it is still felt that the people of the North East region are used to the culture of large undertakings, as in the Ruhr district a decade ago, so that little entrepreneurial spirit exists

A qualitative study undertaken by Jane Wheelock of the Business School in Sunderland Polytechnic was set up to identify contribution that family and informal networks made to new small businesses. She identified, as the Dortmund Study did, the spread of small businesses in the Service Economy, and interviewed businesses which had been set up during the previous ten years, including eight female-headed, eight male-, eight family businesses For Wheelock, the family of the business proprietor has a significant economic contribution to make in the region. This 'familial economic unit', as she calls it, means that the flexibility of family enterprises plays some role in 'Post-Fordist' models of the deprived peripheral economy, where the familial economic unit (instead of technology) enable the smaller businesses to meet demands for cheap and more personalised products.

Wheelock explains that the flexibility within these small firms derives from the fact that they can call upon labour from the informal, formal and voluntary sectors, regarding the business itself as well as child care, other informal (unpaid) work and often formal paid work in other firms to be necessities for the survival of the family business She cites the attractions of self-employment as pride, independence and the integration of family and business life, with the disadvantages being long hours and low incomes. Dependence on larger firms was also visible in some cases, and although there were few complaints about the state supported advisory services, private sector services from banks in particular were heavily criticized.

These findings were not new to us since they were echoed in a Dortmund study of women setting up business ('Frauen und Existenzgründung', 1991), where the women interviewed also complained of a lack of financial backup from banks and institutions coupled with problems regarding their accessibility to government funds and unemployment benefit.

Jane Wheelock stressed the crucial role that informal child care plays in the flexibility of the entrepreneur, a fact also echoed by the Dortmund study. Although there was not role-reversal in the Sunderland study, a shift in men's attitudes to domestic tasks and to child care could be seen. Many spouses (women and men) also undertook paid employment to enable the family to supplement low business incomes Spouses therefore played 'enabling roles' in the formal as well as the informal economy.

Now, the results of the studies allow us to have a comparative view on both regions:

Both regions are still suffering from high long-term unemployment of male workers from the core industries, while female unemployment has been reduced because of the increase of the service economy. But female are still underemployed in both regions, in Dortmund even female graduates. The discrepancy between obstructed or non-viable careers and a high, often still expanding amount of education signals a pressing problem for women which often are solved by attempts to start their own business even if they do not have an appropriate qualification Women play a more active part in the English family businesses than in Dortmund because they often have better skills in book-keeping, computers etc. than males have, deriving in many cases from their traditional role as manager of household finances. For men who have been skilled or semi-skilled workers before, self-employment is accepted in Tyne and Wear despite low earnings because of the lack of alternative occupations, while it has become difficult for men in Dortmund to find suitable niches of self-employment in which at least as much as the normal regional wages can be earned. region Women and men in both Britain and Germany who were interviewed often said they had not chosen to go self-employed but were rather forced into the decision by circumstance, but the pressure is more heavy in England.

In the Ruhr district, individual and collective initiatives of relatively highly qualified women have been rather important for their integration in the workforce and into self-employment, with the problems for women entering self-employment somewhat reduced by a dense network of institutions from special advisory and training agencies to kindergartens. In North East England the increase of self-employment was based on poor opportunities for traditional employment, and the availability of government funded self-employment subsidies, although the business viability was still also dependent on family networks. During the 1980s, better institutional conditions have been created by government interventions, but this may simply have increased competitive pressure in the small business sector In Dortmund, such a pressure has been felt during the last years, too The percentage of female founders of small businesses is about the same in both regions, perhaps their active role in England is even higher, due to female involvement in male established businesses.

What remains unclear is whether employment initiatives or family involvement are taking the roles of 'bridges' towards fully established lifetime self-employment or businesses. In the Eastern Ruhr district where job creation tools are highly developed and applications for advice and support in founding one's own business are frequently made, the mobility chances to standard employment inside or outside the region are much better, so that we can observe a high turnover of women from self-employment back to standard work. In the English North East, small businesses are often started when there are few possibilities for standard employment, though the longer term viability of the business is unclear.

The 'level of professionalisation' within the small businesses in the service sector is low in both regions, despite a high number of people with high school leaving certificates at least on the Ruhr, but it is increasing. About fifty per cent of the founders of small service firms have heightened their special competencies through their work on the job in Dortmund (As you may not know, you have to join a four hours course if you wants a license to open a pub in Germany.) Wheelock's study however indicated that training in the North East was often provided informally, sometimes by other family members.

The amount of structural change and solutions to local employment market problems that small firms as well as employment initiatives are providing are hardly quantifiable. However, we suppose that they will be important elements of post-fordist economy in peripheral regions. Their role-model function for the growing flexibility of the regional economy is possibly more important than their contribution to the number of jobs They may contribute to improve the underdeveloped regional supply of services as well as to spread commercial skills in regions which were dominated by manual industrial works.

References

Weißbach, H.-J. and Späker, G (1987), 'Zur Bedeutung örtlicher Beschäftigungsinitiativen in Regionen mit hoher Arbeitslosigkeit', in RKW (ed), *Productivity and the future of work,* Eschborn, pp 484 - 490

Wheelock, J (1991), 'Small businesses, 'Flexibility' and family work strategies', *sunderland polytechnic business school research paper*, July

Wheelock, J. (1992), 'The flexibility of small business family work strategies' in Caley, K. e.al. Chapman (eds.), *Small enterprise development: policy and practice in action*, London

17 Methodological elements for an effective seminar to train entrepreneurs - A heuristical profile

Eckhard Steuer

Introduction

Teachers/trainers of entrepreneurs are technical experts but often they are not fully qualified to teach and to train adults. To get a common understanding of a successful seminar for entrepreneurs, the participants of IntEnt 92 were invited to report about their teaching methods. They were invited to mark on a questionnaire (big wallpaper) their personal experiences with thirty-six methodological elements The profile was afterwards discussed in a work-shop.

It was found that the IntEnt 92 participants can be divided into two groups:

- University teachers who offer lectures or short-termed seminars to teach students without practical knowledge
- Technical trainers/consultants, who train and support interested adults to become successful entrepreneurs in the region
  Their long-termed qualification may be part of the credit they apply for.
  The qualification aims that the participant structures his idea of business, presents to experts who assess the chance of success.

Results

Twelve participants did mark the wallpaper questionnaire The following are some essentials of the interpretation including some comments of the discussion in the workshop. As only twelve of ninety IntEnt 92 participants did mark no percentages are shown.

Rarely applied and difficult

The traditional teaching approach rarely seemed to be taken up only exceptionally. Lecture, discussion, perhaps small-group-work are predominant. Activating methods as partner-interview (needs e.g. only twenty minutes, possible with all seizes of audiences) is unknown predominantly.

Homework is assessed as difficult.

Pinboard is predominantly not applied As a consequence very rarely the group moderation technique is applied, which is highly participants activating

Because of the high technical effort and because of the poor offer of marketable media it is not a surprise that the applications are only exceptionally of video training, expert system, computer aided instruction, interactive multi-medial learning system.

Excursions seem to be unused by university teachers But excursions could be connected with interviews of entrepreneurs whose good and bad experiences could illustrate and stimulate the future entrepreneurs.

Asking for expectations at the beginning of a seminar and post-preparation of seminars seem to be unused by university teachers.

Well known and often applied:

- Role play
- case studies
- expert interview
- role models (success stories)
- discussion
- exercise
- lecture
- small group work
- presentation (through participants)
- self-study.

References

Klandt, H. (1991), 'Zur Existenzberechtigung einer speziellen Betriebswirtschaftslehre für die Gründungs- und Frühentwicklungsphase', Müller-Böling/Seibt/Winand (eds), *Innovations - und Technologiemanagement*, pp. 479-494, Stuttgart

Steuer, E (1975), 'Praxiserkundung in einer organisationswissenschaftlichen Seminarveranstaltung, *Hochschuldidaktische Materialien*, no. 48, Hamburg

18 Teaching experiences using a business simulation game as a tool for entrepreneurship education

Heinz Klandt

Introduction

A business game ('EVa') simulating the start-up and early development phase (i.e. three months of start-up plus the first three years in monthly steps) of a software firm from the perspective of an owner manager (Szyperski, Klandt, 1990, Klandt, 1993b) was used for entrepreneurship education of a range of groups including business students, engineering students, employees, executives and real entrepreneurs (Klandt, 1991, Klandt 1993a).

A rough description of the simulation game is given in figure 18.1.

- simulated: start-up and early development phase
- software and system house
- variety of decision areas:
  purchases; production; sales, personnel, finance; location; information
- broad range of fields of activity: merchandise, services, products
- also qualitative decisions required (intuition)
- strategic and operative decisions are required
- monthly decisions (one period = one month) demanded
- with a large number of periods (thirty-seven) and
- of different possible decisions
  (more than 100 per period, 4,000 in total);
- this allows for a repeated gearing in, after attained feed back
- rather realistic tax and accounting environment is given

- decisions are requested under true time pressure
- basic feedback about the company and its market is given free
- but additional information has to be requested and paid for
- game runs on IBM PC, AT, PS/2
- written in Turbo Pascal
- source code of about 10,000 lines of code

Figure 18.1 Description of the simulation game

Using a deterministic model (identical inputs produce identical outputs), the subjects play against the computer programme, not against varying competitors, since only this method leads to meaningful empirical results for comparisons between the players.

A standardised procedure was developed including some seventy pages of documentation, an introductionary speech and a eight to ten hour day of playing the game on the computer with each player group consisting of one, two or three single players playing separately against the stand alone computer system.

In this situation the participants had to fill in two questionnaires: one - distributed at the start of the game - related to their employment status, their motives (need of achievement etc.) and in case of being self-employed to the structure (legal form, branch etc.) and performance (turnover, employees etc.) of their firm, the second questionnaire was related to the evaluation of the game (is it realistic?, what should be changed ? etc.).

A third source of information are the observations made by the game conductor (experimenter) including environmental factors (room situation, equipment), supports given by the game instructor, date and time of the event etc. Last but not least some thousand observations of each player group were made automatically by the computer system itself: each of the 4,000 decisions possible while playing the game was registered, the time of each monthly decision input and all states of the simulated firm (performance indicators like profits, bankrupts) were recorded.

Major findings

General Description

In thirty-three seminars (from 1988 to 1992) some 550 people have played the business game ' EVa' . Most of the participants were students (sixt-one per cent of the 511 valid answers) Apart from that thirty-two employees, managers, executives and eighty-nine entrepreneurs or other self-employed persons played the game (including part time self employment: sixty of them with forty hours a week or more engaged in self employed activities). Twenty-seven per cent female players were recorded.

Table 18.1
Self-employed activities (Part time incl.)

	absolute	in %
- have never been self-employed, and do not plan to be	176	35.1
- plan to become self-employed	241	48.0
- have been self-employed before	9	1.8
- presently self-employed	76	15.1
Valid Cases	502	100
Missing Data	50	

The participants were asked how realistic they considered the business simulation game EVa to be and what their overall evaluation of the game was.

Table 18.2
Do you consider 'EVa' to be realistic? (all cases)

	absolute	in %
very realistic	79	15.6
rather realistic	357	70.4
rather unrealistic	68	13.4
entirely unrealistic	3	0.6
Valid Cases	507	100
Missing Data	45	

Table 18 3
Overall evaluation of the game (all cases)

	absolute	in %
"EVa" is excellent	268	52.9
"EVa" is good	236	46.5
"EVa" is rather boring	2	0 4
"EVa" is absol. useless	1	0.2
Valid Cases	507	100
Missing Data	45	

Sixty-eight per cent of the participants considered the business simulation to be very or rather realistic and fifty-three per cent evaluated EVa as excellent, another forty-seven per cent as good, only 0.6 per cent had a negative impression on the business simulation game after the experience of playing the game.

Self-employed entrepreneurs compared with other participants

When developing the business simulation game one of its basic ideas was that self-employed entrepreneurs would experience and play the game differently from other professional groups

So one question was, whether the entrepreneurs evaluated the game in the same way or in a different way from the other groups.

With respect to the reality of the game the entrepreneurs with eighty-five per cent versus eighty-six per cent evaluated the simulation game to be as realistic as the comparative groups did 98 7 per cent of the entrepreneurs and 99 5 per cent of the other participants evaluated the business game positively; but the entrepreneurs were a bit less enthusiastic about the game: only forty-three per cent versus fifty-five per cent evaluated the game as excellent

In the questionnaire a need of achievement scale (Klandt, 1984) was also applied to all participants. It was expected, that the entrepreneurs would reach higher scores on that scale than other groups which played the game

Table 18 4
Is 'EVa' realistic or artificial?
(Self-employed cases versus employed cases)

	self-employed (part time incl.) abs.	%	employed abs.	%
very realistic	10	13.3	69	16.0
rather realistic	54	72.0	303	70.1
rather unrealistic	10	13.3	58	13 4
entirely unrealistic	1	1.3	2	0.5
Valid Cases	75	100	432	100
Missing Data	10		35	

Table 18.5
Overall evaluation of the game
(Self-employed cases versus employed cases)

	self employed (also part time) abs.	%	employed abs	%
"EVa" is excellent	32	42.7	236	54.6
"EVa" is good	42	56.0	194	44.9
"EVa" is rather boring	1	1.3	1	0.2
"EVa" is absol. useless	0	0 0	1	0.2
Valid Cases	75	100	432	100
Missing Data	10		35	

Table 18 6
Need of a achievement

	val n	Mean	StdDev.	Median
Groups in this study:				
- all players	496	33.4	3 49	33.0
- not self-employed	417	33.1	3.52	33.0
- self-employed	79	34.6	3.03	35.0
- less successful	17	34.2	3.01	35.0
- more successful	11	36.3	2.53	37.0
Comparative Groups[1]:				
- R&D employees	264	31.7	4.26	31.7
- Business students A	95	32.5	5.08	33.0
- Business students B	93	29.7	4.64	-
- Middle Management	41	34.1	-	-
- Interested in Entr.	59	34.2	4.10	34.5
- Entrepreneurs	77	36.9	5.1	38.0

[1]Source: Klandt, 1984, p 68, 148

With respect to that scale the group of entrepreneurs had a mean of 34 6 points while the comparative group had a mean of 33 1 points, which supports the division between those two groups as to the expected higher need of achievement score of the entrepreneurial group

But what about the directly observable behaviour of the participants?
The behaviour of self-employed and not self employed-players in terms of the number of decisions made during the game does not differ much Self-employed players are slightly less engaged in the personnel and purchase field, and more active in the acquisition of information (see table 18.7). Here a limited number of cases (n = 215) was analyzed.

Some indicators were developed with respect to measuring the performance of the players in the game It is possible to become bankrupt in the course of the game In that case the player receives another chance by starting a new game, as far as it is possible in the remaining time So, among other things, the participants may differ regarding:

* whether they go bankrupt, and, in that case, how often they do so,
* how many games the player started;
* the maximum period reached in one of the games played in the given times.

Table 18 8 shows the differences between entrepreneurs and other players of the game taking into account the above mentioned indicators of performance; the average entrepreneur seems to take more risks than other players (a mean of 0.79 vs 0.37).

Table 18.7
Average number of decisions made during the game

Field of Decision:	all players	not self employed	self employed	in real life more successful entr.	less successful entr.
All Fields	413	420	414	439	283
Start-up	5	5	5	5	6
Personnel	98	100	93	125	55
Purchase	49	51	45	46	38
Marketing	122	125	121	132	81
Production	58	59	60	47	32
Finance	17	16	21	18	13
Information	64	64	69	66	58
Valid Cases	215	167	39	6	11

Table 18.8
Average game performance

	other players	self-empl. entrepreneurs	in real life more successful entrepreneurs	less successful entrepreneurs
Bankrupts	0.37 (376)	0.79 (70)	0.38 (8)	1.4 (16)
No of Games	1.34 (446)	1 44 (75)	1.3 (11)	1.8 (17)
Max. Period	32.76 (443)	30 23 (78)	31.6 (11)	21.9 (17)

(In parentheses the number of valid cases)

The Relationship between real life success and game performance

A most interesting question is, if the more successful real life entrepreneurs behave different and finally show a different game performance than those self employed who are less successful in real life.
Some indicators of real life entrepreneurial success were collected by questionnaire distributed to each participant before the game The used indicators were number of employees, the yearly turnover and the yearly profit in both the year of start-up and each of the following five years. The following differentiation between more or less successful entrepreneurs is based on the turnover in the first complete year after the start-up Those with lower or equal 200,000 DM turnover were considered to be less successful and those with more than 200,000 DM as being more successful.

The group of less successful entrepreneurs reached a need of achievement score of 34.2 while the more successful entrepreneurs got a group mean of 36.3 (see table 18.6). That also means that there is a highly significant relationship between the level of need of achievement and game performance (r = 0.15 ***).

Ninety-three per cent of the less successful entrepreneurs considered the simulation game to be very realistic or rather realistic while only sixty-four per cent of the more successful entrepreneurs did so. Also the general evaluation of the game was more critical by the group of more successful entrepreneurs; only eighteen per cent evaluated the game as excellent while fifty-three per cent of the less successful group did so. But both groups gave (with only below one per cent votes for boring/useless in the less successful group and in the more successful group as well) a positive overall evaluation of the game.
Referring to the average decision making behaviour during the game by groups of more or less successful real life entrepreneurs table 18.7 shows some remarkable differences (personnel, marketing), but these results are based only on a few cases.

One of the most fascinating questions in this study is, if entrepreneurs, who are more successful in real life, are also more successful at playing the business simulation game.

A first answer is given by table 18 8 We can see that the group of more successful entrepreneurs in real life only had an average of 0.38 bankrupts when playing the game while real life less successful entrepreneurs, with 1 4 bankrupts had a rate of nearly three times that. Along with the fact, that the less successful entrepreneurs started more games (1.8 versus 1.3) and the maximum period reached in the best game was a level of nearly thirty-two in the group of more successful entrepreneurs while it only came to twenty-two in the group of less successful real life entrepreneurs

A significant correlation can be found between real life turnover and the number of bankrupts in the simulation game

Conclusion

As a conclusion based on these empirical results the business simulation game 'EVa' seems to be a somewhat realistic model of the entrepreneurial world and therefore - at least partially - of the entrepreneurial task So one can hope that playing this simulation game is helpful for entrepreneurship education and training and may be utilized in the future as a complimentary tool to other teaching methods.

References

Klandt, Heinz (1984), *Aktivität und Erfolg des Unternehmungsgründers. Eine empirische Analyse unter Einbeziehung des mikrosozialen Umfeldes (Activities and performance of new business founders: an empirical analysis of the entrepreneurial personality concerning also the micro-social context)*, Eul Verlag, Bergisch Gladbach, Germany

Klandt, Heinz (1991), 'The computer simulation of the business start-up phase as a tool for entrepreneurship' in Leslie G. Davies, Allan A. Gibb, (ed.), *recent research in entrepreneurship*, Avebury Publishers, Aldershot, Brookfield USA, Hong Kong, Singapore, Sydney, p. 324-334.

Klandt, Heinz (1993a), 'Real and potential entrepreneurs playing a business simulation game' in Heinz Klandt (ed.), *entrepreneurship and business development*, Avebury Publishers, Aldershot, Brookfield USA, Hong Kong, Singapore, Sydney, p. 101-120.

Klandt, Heinz (1993b), *'EVa', Das Computer-Planspiel für Unternehmer und solche, die es werden wollen. Einführung und Beschreibung der Entscheidungsmöglichkeiten ('EVa', the business simulation game for entrepreneurs and would-be entrepreneurs. Introduction and description of possible decisions*), Verlag Förderkreis Gründungs-Forschung, Köln-Dortmund, Germany.

Szyperski, Norbert, Klandt, Heinz (1990), 'Diagnose und Training der Unternehmerfähigkeit mittels Planspiel (Diagnosis and training of entrepreneurial abilities by business simulation games)' in Norbert Szyperski, Paul Roth (ed.), *Entrepreneurship - Innovative Unternehmensgründung als Aufgabe,* C.E. Poeschel Verlag, Stuttgart, Germany.

19 Computer based methods in entrepreneurship education: An overview

Rolf Alexander Teubner

Introductory notes

The objective of this paper is to give a brief overview about current uses of computers in (entrepreneurial) education. It is mainly written for readers new to this research field with emphasis on the practical importance concerning the education of entrepreneurs this lectures tries to develop a 'taxonomic guide' to qualify existing systems Three main issues are discussed: purpose, performance and technology

Electronic teachers for entrepreneurs?

The role computers should play in education has been a topic in the scientific community for years Recently first systems are in practical use. The reasons for using such systems are obvious: On the one hand, an increasingly complex and specialized world (often denoted as 'information-' or 'knowledge-society') stresses the need for continuous further development On the other hand, computer systems are flexible and cost effective, computer-based teaching is accessible at any time, (nearly) any place and enables individual, self-responsible and anonymous studying

These arguments are of great importance regarding the working situation typical for entrepreneurs/owner managers is taken into account:

- the need of accumulating broad knowledge, gather both management and technical skills
- the involvement in daily work creates difficulties in reserving fixed time for qualification

This situation suggest that tackling the theme 'computers in teaching' might be extraordinarily fertile with respect to the entrepreneur's needs.

Purposes of teaching software

There is a whole variety of acronyms Terms such as teachware, CAI (computer assisted instruction), CBT (computer based training), CBE (computer based education) CMI (computer managed instruction) are used - not always consistently Because each term (ideally) describes the special instructional task performed by the systems it denotes, a look at the work of human teachers appears to be helpful to get a better understanding of what is meant Referring to the typical work a teacher does we take teaching as a superimposed concept. Whereas education and training can be identified as main teaching tasks. Unfortunately the terms 'training' and 'education' are frequently used synonymously in the context of computer-based teaching Because such a poor definition is a violation of the main principles of scientific language (i.e redundancy and richness) we want to adopt a differentiated use of those terms Figure 19.1 synoptically defines them by contrasting significant attributes.

education	**training**
descriptive	procedural
theoretical	practical
abstract	contextual
make the student 'learn by heart'	make the student 'learn how to do a job'

Figure 19 1 Contrasting education to training

Besides education and training computer software can provide instruments supporting teacher or student. Services of this kind are often called 'job aids'.

These three possible products of teachware as a whole constitute an applicational point of view Technical terms indicating the purposes of CAI (computer assisted instruction) are shown in figure 19.2 Computer based education denotes systems which assist the student to obtain knowledge Computer based training assists the student in the practising and deepening of knowledge This can be done or accomplished, for example, by exercises or by simulating real world problems and making the student solve them Computer managed instruction covers all tools that assist preparation, organisation and administration of the teaching subject.

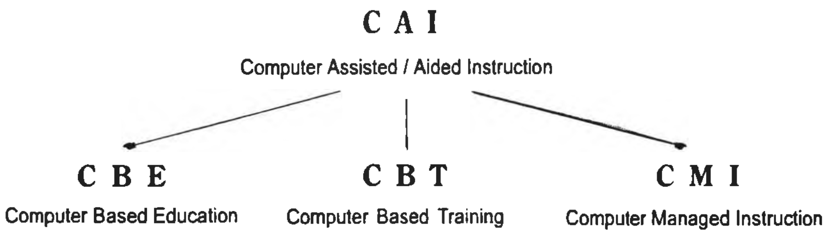


Figure 19.2 Purposes of computer assisted instruction

Performance of teaching software

Another important dimension of teaching software is the performance and internal representation of the teaching tasks Those tasks are in general:

- to transfer knowledge,
- to check attainment of lesson aims,
- to allow individual repetition and explanation

The presentation of knowledge by itself is not sufficient to identify a computer system as a CAI system.; otherwise a word processing software used to read a script would be qualified as a CAI program Therefore, a second criterion requires the verification that the student has reached the teaching goals. Finally, based on the level of success of each student the software has to provide further explanations and repetition adapted to the students needs

Conventional systems

A strong but typical classification on this layer of performance can be drawn by distinguishing 'conventional' and 'intelligent' systems A metaphor for conventional CAI systems might be the 'electronic page turner' because knowledge is presented sequentially and the explanation facility only provides pre-stored answers and remedial comments Figure 19.3 summarizes these performance criteria of simple CAI

✗ transfer knowledge ⟶ linear, fixed

✗ check success ⟶ test questions, exercises

✗ repeat / explain ⟶ result triggered branched off paths

Figure 19.3 Performance of simple CAI

Limitations resulting from this kind of internal representation include the following:

- inability to understand the subject being taught, as a consequence, these systems cannot react on unanticipated responses
- inability to understand why the student failed
- inability to 'learn' from experience of consultation.

As a result: Conventional CAI programs have little capabilities to adapt to the individual needs of the student In order to avoid those limitation mentioned CAI software 'has to become intelligent'.

Intelligent systems (ICAI)

While a simple CAI system only present predesigned lessons, an ICAI system has the ability to construct lessons tuned to the student's needs This flexibility is established by a lot of domain and pedagogical knowledge which are explicitly defined in two distinct knowledge bases.

The domain knowledge base enables the ICAI system to interpret the knowledge it presents This is the basis for the ability of the system to evaluate the quality and correctness of the student's answers (by this it performs the ability of a 'diagnostic expert'). The pedagogical knowledge base covers the didactic knowledge (for example teaching strategies) the system needs to construct lessons. The main questions are: What knowledge shall be presented? When and how shall it be presented? To answer these questions the system has to have an impression of the student's knowledge level and abilities.The information necessary to perform this feature are collected during the session based on the students actions. They are stored in a student model.

Domain knowledge base, pedagogical knowledge base and student model finally give the ICAI system the capability to 'know what it does' in contrast to the simple CAI system, that only is able to 'turn pages in a book electronically', ICAI systems can construct lessons based on the students know how and learning abilities

The question which now might arise is: How can those capabilities described be created? It is not possible to answer this question in detail in this paper. But this opportunity will be taken to mention the third important dimension for which teaching software is often considered: the technological-methodical aspect of system development.

Technologies for CAI

Terms such as 'expert or knowledge based instruction system' or 'multimedia training system' point out differences in the software-technological dimension of system development Principally the developer is free to choose a technology (at minimum one) to implement the CAI application But it can be stated that there are certain technologies more efficiently applied to perform certain tasks For example,

- knowledge based techniques are powerful to mediate knowledge by setting up a pedagogical dialogue
- hypertext and hypermedia is useful for handling non-linear knowledge references
- multimedia techniques offer multiple presentation media and their integration
- spreadsheet programs as end-user tools are helpful in developing simulation models

and so on.

At least four factors have to be taken into account when software tools for system development are selected. First the hardware the system will run on limits the use of tools which will affect in the end effects the capabilities of the CAI application. Besides the decision for a technically feasible development software package the purpose, the performance and the target group of the CAI system should also be taken into account.

The following two papers tackle these aspects in greater detail. They concentrate on the benefits provided by multimedia systems and artificial intelligence.

20 Artificial intelligence in entrepreneurship education

Susanne Kirchhoff and Rolf Alexander Teubner

Introduction

The first generation of CAI applications - currently already used in practice - tried to simulate a simple process of knowledge transfer: present knowledge, ask questions and based on the success go on or repeat special themes. The striking deficit of those simple CAI systems is that they do not have any idea about the knowledge they present. The second generation of CAI systems - described as intelligent ones (ICAI) - provides more flexible programs by giving them explicit domain and didactic knowledge. By this, they are able to adapt to the students needs instead of presenting only predetermined lessons (Teubner, 1993).

It seems to be very promising to the authors to make use of the progresses made in the research field of artificial intelligence (AI) - especially in the development of expert systems (XPS) - when going to implement an ICAI application.

The central thesis of this paper is, that experiences in the field of expert system development are a very fertile basis for implementing intelligent computer aided instruction systems for teaching entrepreneurs.

There are two major arguments for this insight: A technical argument is that expert system architecture is closely related to that one of ICAI systems. A more practical argument aims at synergetic effects of developing ICAI applications. Expert systems are widely employed today and good knowledge models have been built for different problem classes and domain areas. Perceptions in expert system research on these fields are likely to reduce development expenses for ICAI systems.

We like to illustrate our main thesis by

first:	Presenting expert and ICAI developments as a field of artificial intelligence describing what they have in common
second:	Presenting typical applications of expert systems
third:	showing the use of know how derived from XPS (and ICAI) development for entrepreneurship education
fourth:	Presenting selected systems dealing with themes of entrepreneurial interest

AI-Systems: XPS and ICAI

How are XPS and ICAI systems intelligent

'Artificial Intelligence is the science of making machines do things that would require intelligence if done by man.'

This early definition of AI by Marvin Minski points out the fundamental feature of intelligent in contrast to simple programs: 'They enable computers to do things that normally only intelligent human beings are able to do' (Kurbel, 1989).

Expert systems perform this by modelling the expert knowledge of a certain domain and simulating the reasoning of a human expert.

As a result XPS should be able to come up with the specific problem solving capabilities of a human expert in a limited and clearly defined domain area (Kurbel, 1989).

This performance in most cases is established by using the knowledge based technology The term 'knowledge based' stresses a structural aspect of a software system, the distinction between knowledge representation and reasoning The performance of expert systems is so closely related to the knowledge based technology that the term 'knowledge based system' is often used synonymous for the term 'expert system'. Some authors therefore call ICAI systems which are implemented knowledge based an 'instructional expert system' (Mertens et al., 1990).

ICAI systems behave intelligent, since they do not only apply domain but also didactic knowledge for designing teaching lessons that they present to the student By this they perform tasks of a domain and pedagogical human expert, a teacher

System architectures

Expert Systems. The main components of an XPS are the knowledge base that explicitly defines the knowledge and an inference engine, that applies the reasoning strategy to the knowledge. In order to make the knowledge base more powerful, it is often given access to databases and / or conventional programs by interfaces. To make the reasoning process more transparent to the user, the use of knowledge has to be explained to him This is done by an explanation facility. A user interface manages the dialogue between end user (during the development also between knowledge engineer) and XPS A typical, simplified architecture as described here is shown in figure 20.1.

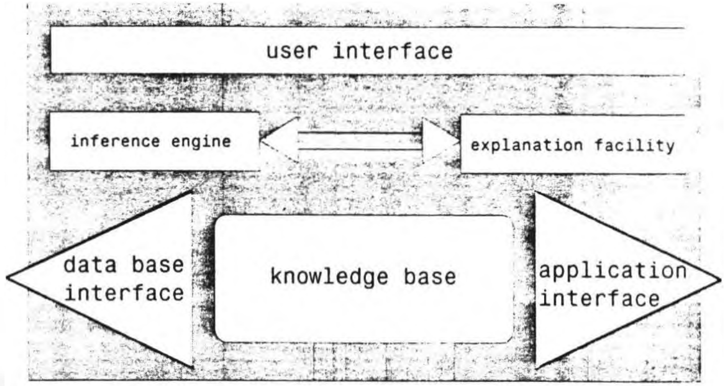


Figure 20.1 Architecture of an expert system

Intelligent computer aided instruction systems. Ideally, intelligent computer aided instruction systems consist of four components: a domain knowledge base, a tutoring model, a student model and a user interface (see figure 20.4). ICAI systems work with expert knowledge about domain and didactic methods. This didactic knowledge is managed by a tutoring component, a central element in the ICAI system architecture. It decides which knowledge has to be presented in which situation and in which way. The knowledge base supplies the tutoring component with domain knowledge and the students model assists it in establishing a student-oriented teaching process. For this purpose information about the user, especially about his knowledge level, learning behaviour and success are collected and managed in a student model. Finally, the quality of each CAI system, intelligent or not, also depends on such aspects as user guidance, presentation techniques and the simplicity of handling the software. Components, that provide these features are realized in a user-interface (Bodendorf, 1988).

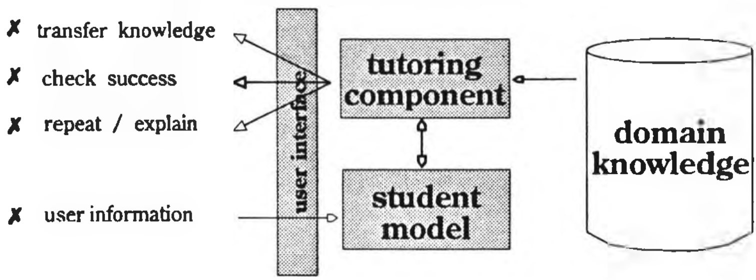


Figure 20.2 Architecture of an ICAI system

What do XPS and ICAI systems have in common? It becomes obvious that a well structured XPS is able to perform important instructional tasks similar to those of a ICAI systems: An XPS applies the knowledge represented in the knowledge base to a problem. Domain knowledge is also needed in a ICAI system. It serves as a knowledge resource but furthermore it is a basis for evaluating the students educational level and the correctness of his answers.

The explanation facility tells the user how knowledge is applied to the problem. By this it helps him to understand the problem solving process. In ICAI systems the knowledge presentation is managed by a didactic component. This module plans the instructional actions based on the students state of knowledge modelled in a students model

The realization of the knowledge transferred as planned by the didactic component is done by a user interface. The quality of the user interface is of great importance for using complex systems: Simple use and little acquaintance efforts are prior conditions for the practical use of both, XPS and ICAI systems But especially during the development of ICAI systems special attention has to be paid to the user interface because: the student has to learn the contents of the domain knowledge but not the use of the system.

Applications of expert systems

First of all the actual use of expert systems shall be demonstrated Figure 20.3 shows world-wide existing expert system prototypes in different application areas.

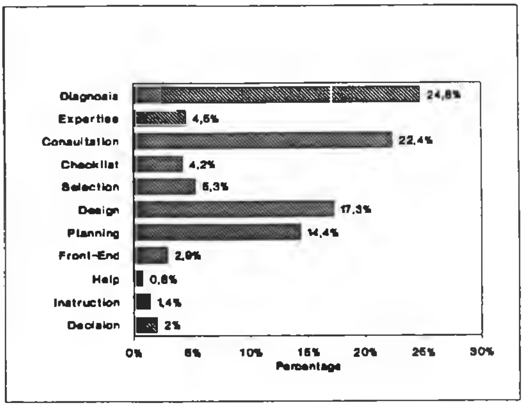


Figure 20.3 Applications of expert systems (Mertens et al., 1990)

Diagnosis, consultation, design and planning are the dominant fields of application Diagnosis means: Inferring system malfunctions from observables, e.g. medical diagnosis Consultation systems support consultants by giving advice to solve particular problems, e.g. in the field of investment consultation Design means: Configuring objects under constraints, e.g. configuration of computer systems according to user requirements. Planning systems design actions, e.g planning complex laboratory experiments (Waterman, 1985).

The four above mentioned application areas are the most typical ones 1.4 per cent of the systems are used in the field of instruction: They mostly combine features of expert systems and intelligent computer aided instruction systems. The low percentage underlines that instruction is still an unexplored field concerning development of expert systems In addition not a single instruction system is a running system, which is actually used in practice (Mertens et al., 1990) And moreover no system exists which has been especially developed for entrepreneurship education.

Expert system prototypes in the field of instruction up to now concentrate on

* management science methods,
* data processing training and
* fault diagnosis of technical machines (Mertens et al., 1990).

Nevertheless our thesis is: Systems, which combine features of XPS and ICAI systems, can be used very efficient in entrepreneurship education

In the following this thesis is illustrated.

How can expert systems and intelligent computer aided instruction systems support high quality entrepreneurship education?

Figure 20.4 points out requirements for high quality entrepreneurship education with regards to didactics and contents.

Entrepreneurship education	
Didactics	Contents
* Orientation on the entrepreneur's knowledge level	* Knowledge, which is not written in textbooks
* Testing the learning progress	* Start-up specific knowledge
* Active learning => 'Playing through' real situations	* Business knowledge
	* Technical knowledge
* Stimulating comprehension of the decision and problem solving process	* Knowledge of entrepreneurial skills
* Interdisciplinary teamwork	* Knowledge from different domains => Holistic view

Figure 20.4 Requirements for high quality entrepreneurship education

Concerning **didactics** there should be an orientation at the entrepreneur's knowledge level He should neither become overstressed nor stressed too few with respect to his motivation. Furthermore the entrepreneur's learning progress has to be tested Active learning means: the entrepreneur should be trained on real situations, he should 'play through' case studies Moreover it is relevant to stimulate comprehension of the decision and problem solving process as complex problems will often occur in the later life of the entrepreneur Last but not least the entrepreneur should be trained on interdisciplinary teamwork to multiply team start-ups and to support the success of team start-ups.

With regards to the **contents** a high quality entrepreneurship education should teach knowledge, which is not written in textbooks, e.g experiences, heuristics, rules of thumb.

Moreover entrepreneurs have to acquire start-up specific knowledge (e.g. knowledge about public subsidiary programs, about the choice of legal form), business knowledge (e.g. financial accounting), technical knowledge (knowledge specific to the branch of industry in which the start-up takes place) and knowledge of entrepreneurial skills (e.g. personnel management, management techniques, negotiation techniques). Quality entrepreneurship education enables the entrepreneur to integrate different knowledge types and knowledge from different problem domains. He has to learn a holistic view of entrepreneurship. E.g. establishing a deed business plan integrates knowledge of finance, marketing, accounting etc.

Which of these requirements could be supported by the features of XPS and ICAI systems?

Didactics:

* ICAI systems orientate on the entrepreneur's knowledge level, because they contain a user (student) model.
* They are also provided with test units to control the learning success.
* Expert systems enable to 'play through' real situations by running the system on different case studies.
* They also stimulate comprehension of the problem solving process, because they are provided with an explanation facility which explains the way of reasoning to the user.
* Interdisciplinary teamwork is neither taught by using expert systems nor by using ICAI systems. Instead teamwork can be supported by simulation games, that often can be played by more than one player.

Contents:

* Expert systems typically model knowledge, procedures and experience of experts, which are not written in textbooks. (This knowledge is derived by interviews or observation of experts).
* It is possible to model start-up specific knowledge and business knowledge by an expert system, even knowledge of entrepreneurial skills. (An expert system which gives advice in international negotiation already exists) (Rangaswamy, 1989)).
* It would not be efficient to train technical knowledge of a certain branch of industry by the help of an expert system The knowledge is too specified and addresses only a small user group, which would not justify the expensive development of an expert system for instruction.
* A further feature of expert systems is the integration of knowledge from different sources, e.g. from different experts in various problem domains or from experts, books and rules.

So, regarding didactics and contents the features of XPS and ICAI systems meet the most requirements of a high quality entrepreneurship education. Didactic requirements are met by both system types, contents are especially supported by expert systems, because they typically model expert knowledge in a knowledge base

Examples for expert systems and intelligent computer aided instruction systems applicable to entrepreneurship education

In the following chart examples for existing expert system prototypes in the field of instruction are listed, which might be applicable to entrepreneurship education (Mertens et al., 1990; Fuller, 1989).

Not all of them combine features of XPS and ICAI systems, e.g PROFITWISE is an XPS, on which an entrepreneur can learn about the reasons of unprofitability.

Expert Systems in the field of instruction	
JA-TUTOR	Financial Accounting (Switzerland)
ECONOMICS TUTOR	Price-Demand-Theory (USA)
ICAAC	Personnel Planning (USA)
MIRIAM	Personnel Management (France)
PROFITWISE	Ways to improve the profitability of a business (GB)

Figure 20.5 Examples for expert systems in the field of instruction

bifego - Betriebswirtschaftliches Institut für empirische Gründungs- und Organisationsforschung e.V. at the University of Dortmund has developed two expert system prototyps (without features of ICAI systems), especially to support start-up consultants (Müller-Böling et al., 1989, Müller-Böling, Bröckelmann, 1989, Kirchhoff, 1990):

* The System REFOWEX supports the choice of legal form of a start-up firm
* GEFOVEX helps the entrepreneur to establish a deed of partnership (business deed) with regard to the chosen legal form .

Though both are developed for business consultants, we believe they could be used to support a high quality entrepreneurship education. This should be demonstrated by having a closer look at the system REFOWEX

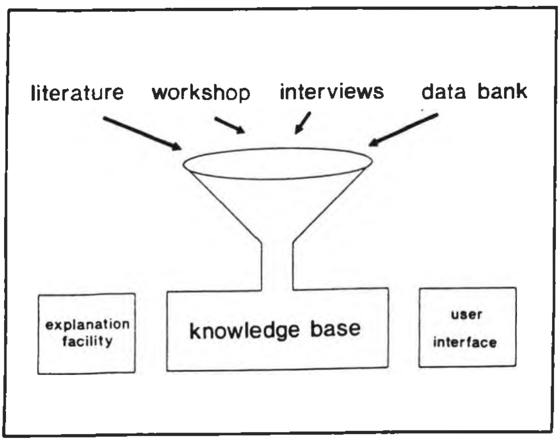


Figure 20.6 The structure of REFOWEX

Figure 20.6 shows the structure of the expert system: Knowledge of different sources (literature, workshops, interviews, data bank) is integrated in the knowledge base

The relevant criteria for the choice of a legal form (e.g. minimisation of tax burden, liability) are derived from different experts (tax advisors, business consultants, bankers, lawyers) to acquire a holistic view of the problem

The user interface rules the dialogue between the user and the computer. An important component of the user interface is the help provided by the program. It explains technical terms (concerning the choice of legal form) which might be unclear to the user.

In the explanation facility the conclusions suggested by the system are justified. REFOWEX e.g explains why in a particular case the legal form of a limited liability company has to be chosen (decision process)

So, in playing through several cases with the system (active learning) an entrepreneur can collect knowledge about

* relevant criteria for the evaluation and choice of legal form (in a holistic view),
* special legal forms,
* technical terms, and
* the decision process.

Summing up it might be said that expert systems like REFOWEX or GEFOVEX or intelligent computer based instruction systems or better a combination of the features of both are new, alternative and very promising methods to achieve a high quality entrepreneurship education

References

Bodendorf, F.; Wittmann, S. (1988), 'Benutzermodelle in Expertensystemen', *Information Management*, vol 3, no 1, pp 30-39

Fuller, T. (1989), 'Implications of the Reactions of Owner Managers to Expert Adviser Systems' in *EIASM: Third Workshop on Recent Research in Entrepreneurship* , in Collaboration with the European Council for Small Business, Durham University Business School, 30 Nov.-1 Dec. 1989

Kirchhoff, S. (1990), 'Expertensysteme in der Gründungsberatung' in Ehrenberg, D., Krallmann, H., Rieger, B (Hrsg.), *Wissensbasierte Systeme in der Betriebswirtschaft. Grundlagen, Entwicklung und Anwendungen*, pp. 433-451, Berlin

Kurbel, K. (1989), *Entwicklung und Einsatz von Expertensystemen*, New York Berlin Heidelberg

Mertens, P., Borkowski, V., Geis, W (1990), *Betriebliche Expertensystem-Anwendungen*, 2, völlig neu bearbeitete und erweiterte Auflage, Berlin Heidelberg

Müller-Böling, D., Bröckelmann, H., Kirchhoff, S., Sudhaus, H.-J. (1989), *Expertensysteme in der Gründungsberatung - REFOWEX und GEFOVEX*, F&E-Bericht Nr. 4 des bifego - Betriebswirtschaftliches Institut für empirische Gründungs- und Organsationsforschung e.V., Dortmund

Müller-Böling, D., Bröckelmann, H. (1989), *Entwicklung eines Expertensystems zur Gestaltung und Formulierung vorteilhafter Gesellschaftsverträge - GEFOVEX*, F&E-Bericht Nr. 5 des bifego - Betriebswirtschaftliches Institut für empirische Gründungs- und Organsationsforschung e.V., Dortmund

Rangaswamy, A., Eliashberg, R., Wind, J. (1989), 'Developing Marketing Expert Systems: An Application to International Negotiations', *Journal of Marketing*, vol. 53, October, pp 24-39

Teubner, R.A. (1993), *Computer Based Methods in Entrepreneurship Education - An Overview*, Published in the same proceedings

Waterman, D A. (1985), *A Guide to Expert Systems*, Reading, Mass

21 Multimedia systems as teaching-systems

Angelika Heinrike Heil

Introduction

The aspects of communication which a PC of today works with, mainly text and charts, are just two aspects of the bandwidth of media. Yet, a PC can do much more than this as the multimedia concept shows us.

The vague term 'multimedia' is getting more and more popular. Scientific periodicals are occupied with that theme, they report about new applications. At fair markets like the 'Systems' in Munich or the 'CeBIT' in Hannover, multimedia also becomes the main theme.[1] Both, theorist and practitioner are interested and engaged in it.

What hides behind 'multimedia'?

A short and often used definition of multimedia says that it is a 'Synchronized combination of text, charts, pictures, sound, animation and video on one screen'.

Today the term multimedia is standing for 'the marriage between TV and computer', the fusion of audio visual expressions with data processing. It describes a concept how to manage to get two different medial expressions together, to integrate them into one instrument: the computer.

But nowadays, every program that links two aspects of media is called a 'multimedia application', so one has to look carefully at the details. The multimedia concept is more than a combination between charts, business charts and text on one screen, as we learn from the mentioned definition Multimedia rather means the combination of various types of information like text, picture, sound and video in just one application. Not only the reproduction of the various types of information, but also the processing is very important.

The aims of multimedia are ambitious. It is not the task to get a few sentences on the screen or to control a video recorder by a PC. On the contrary, there should be the same possibilities for the production, storage and manipulation of moved charts and sequences of sound and pictures as they already do exist for the preparation of texts, charts and pictures. It would be perfect if both, pictures and sound, can be stored on the same data medium and be transported in the same network This possibility is already given concerning text and charts

Although a lot of people think so, you have to consider that behind the term of multimedia does not hide an independent technology or a group of hard- or software products. Multimedia is the point of intersection between other techniques. Consequently, the essential renewal is the co-operation of the different techniques and therefore to establish them.

The method of multimedia systems - hypertext

If you get into the details of multimedia, the question how the system works will raise without doubt.

In contrary to articles or essays, information is not treated as a sequence of text, but as independent objects The elements of multimedia - text, charts, pictures, speech, music, animation or video - are connected by so called 'hyperlinks'. Hyperlinks are references to associated information. So, a complex of knowledge is built Another characteristic of multimedia is interactivity. It is possible for the user to interfere into the expiration at any time and in difference to video or demonstration programs, he is able to jump from one link to another one. It's up to the user to get more details, for example if he wants to look at a chart explaining the text he read, or if he wants to hear a spoken explanation The handling of multimedia is similar to the handling of a lexicon Therefore, not the presentation of the contents of the element is interesting to us but its arrangement in the context This principle of connection between independent but related objects of data is called 'hypertext principle'.[2]

Hypertext systems and principles will be mainly used to administrate a great amount of different elements of data in a flexible and useful way.

So they are especially suited for:

* database in non-standard forms, which will serve to the management of multimedial information or to such information with structures not being strictly defined or being dynamic,
* tutorial systems, e g online help-systems or flexible multimedial courseware,
* new forms of knowledge representation, which are enabled by the development of interactive hypertext interfaces for knowledge-based systems (expert systems),
* co-operative forms of working like it is in project-teams [3]

In recent times, the hypertext principle is practised more and more in combination with multimedia The connection between both is often shown by the word 'hypermedia'

Hardware and software requirements

Multimedia applications set a high standard towards the hardware and the software of a computer system A lot of different data formats have to be analyzed in various ways. Thus, the biggest problem concerning media-integration consists of the large amount of data which is caused by digital sound and picture processing This is one reason, why multimedia did not get that interesting in former times. Until now, the performance of computer systems has been insufficient to deal with such an amount of data A few examples shall illustrate the situation:

* Digital sound recording in CD-quality and stereo causes a dataflow of 10 MB per minute, corresponding to 170 KB per second
* Digital picture recording even demands 1.3 MB per picture Using the PAL video standard with a transmission rate of 25 pictures per second, the dataflow grows to 32.4 MB per second.

If you put up with worse resolution and worse quality concerning the colour of a picture, the amount of data may be reduced to a quarter (at about 8.1 MB/sec) indeed, but even by this reduction the amount of data still keeps too large for a computer's memory or its transmission channels. Yet, these problems seem to be almost unsolvable in the very near future.[4]

Nevertheless, the idea behind media integration is not doomed to fail The compression of data represents a solution of the problem Single pictures and motion picture as well as sound contain, if they are digitalized, a lot of redundant data, so that the original size of these data can be compressed to a fraction. Several compression methods are in the state of development. While CD-I (Compact Disk - Interactive), DVI (Digital Video Interactive) and ADPCM (Adaptive Delta Pulse Code Modulation) are determined for the compression of audio-data, JPEG (Joint Photographic Experts Group) is considered to compress single digitalized pictures Last, but not least, MPEG (Motion Picture Experts Group) tries to realize the compression of motion picture.

Applicabilities of multimedia

Multimedia does not only promise new applicabilities but, above all, a more efficient use in the existing application fields, for example in bureau-communication, in the manipulation, management and presentation of data and information, in training and instruction. In the following, some aspects of using multimedia are specified. A few of these aspects already have been mentioned within the scope of the hypertext conception:[5]

* training- and teaching-software (teachware, courseware),
* electronical presentation of information,
* help-systems, improved user-guiding-systems,
* storing to archives, database of pictures,
* visual communication,
* supervision.

Trainings of every kind and teachware/courseware represent a domain, in which multimedia already has an enormous significance In this context, rendering complex relations visible had a great importance ever since. Multimedia applications may contribute to the facilitation of knowledge in schools and universities, they may be applied to simulate dangerous procedures or they may support the repair service in a repair shop (like it is realized by Renault) or the installation of a new tool (by describing the installation process with spoken words and/or motion picture). However, until now, applications connecting text, graphics, animation and sequences of pictures often require well equiped, expensive 'learning stations', which consist of many hardware components and which can hardly be transported. In opposition to this, a multimedia computer allows to integrate various media in only one PC and, certainly, to use all those possibilities which result from this integration.

Actually, the most important aspect of multimedia applications lies in the sphere of multimedial supported presentations. The presentation of a company's history, structure or philosophy as it is for example intended by the RWE AG in Essen, the presentation of products on fairs (called POI = Point of information) or the presentation of ideas, developments and papers are some examples for the width of possibilities. In contrast to an isolated use of video, slide or foils, the integration of text, graphics, pictures, video, music and voice admits a much more effective communication of information and advertising Another advantage is the ability to construct an interactive system In former times, interested people had only the possibility to ask questions after a company's presentation by video ended. Unfortunately, at this time a lot of people had forgotten their questions and those questions to be asked are often difficult to understand because of the missing context Nowadays it is possible to react immediately at the point of interest in order to answer questions and to solve problems and misunderstandings.

As one aspect of multimedia, voice-processing is suitable to improve online help-systems In this case, the program provides the user with information corresponding to his problems, telling him what to do. As an imaginable application, this could ameliorate the user-guiding-system in an expert system, in an interactive banking terminal or in electronical guide-books etc Multimedia also fits for the electronical documentation of replacement catalogues or for database of picture in several fields. The following examples can only give an extract of the various possibilities that the mentioned databases offer:

* calendar of cultural events,
* journey survey,
* museum guide,
* to support real estate agents,
* to support assurances and press agencies,
* video-microscopy.

Another field to be improved by multimedia is the whole sphere of communication For example, voicemail represents an enlargement of the well-known electronic-mail conception Here, in addition to or instead of written notes, spoken remarks can be sent to another person. Word annotation works in a similar way: Here, it is possible to make a spoken remark to any element (word, picture etc.) or position on a computer screen Besides text and voice, multimedia includes pictures Certainly, it soon will be possible to send single digitalized pictures by electronic-mail or to connect pictures with text et vice versa.

A further applicability can be seen in supervision- and security-systems, on the one hand to control the production process, on the other hand to supervise buildings, restricted areas or the traffic on dangerous or busy roads

Computer Based Training (CBT)

The most interesting elements of the field 'multimedia learning systems as instruments of education and instruction' are represented by training-, teaching- and learning-systems

Considering the situation at the universities, it is getting more and more obvious, that the daily problems students have to get on with are characterized by overcrowded lecture-halls, by tutorial exercises with much too much participants and waiting-lists wherever you have a look. Because of these bottlenecks concerning almost every kind of capacity in the university (professors, assistants, rooms etc), the study of economic and social sciences gets more and more difficult in all aspects. This phenomenon is not restricted to the university of Dortmund. Thus, all people being concerned do agree: The remedy of these problems is a task of great interest. The question is now, if the multimedia conception is able to offer a solution to the situation. A first attempt into this direction has been done by Prof. Dr. Rainer Thome and his academic assistant Dr. Eric Schoop (business economics and business informatics, University of Würzburg). They have developed a hypermedia based information system called HERMES (Hypertextbasiertes oEkonomie-orientiertes Retrieval Multimedial Erklärter Sachverhalte). As in interactive teaching-, learning- and information-system based on optical data-mediums it is its task to enrich scientific education in the fields business economics, business informatics and business logistics. Besides its use as an electronic reference book, HERMES is appropriate for the first contact with unknown themes in the mentioned fields. Further, you can use it to check the knowledge of your own, restricted of course to the themes the system deals with.

A similar object in view pursues the program MILES (Multimediales Informations- und Lehrsystem), which is developed by Dr Wolfgang Wiemer, professor for physiology in Essen. At first, this system had been planned to support students of medicine. For example, a student may recall a text about voice production and then, afterwards, select a video which shows the articulation in an optical and acoustical way All these information is stored in the database of MILES. The aim of developing MILES had been to create a database system which is independent of its place of use Thus, a university professor should be in a position to handle data of all kinds (text, picture, video etc.) individually, in every place where he is able to transport his computer with a running program of MILES He should be able to store and process these kind of data and to make it available to students in the form of teaching-programs or information database [6]

Further, multimedial teaching- and information-systems in the medical field are still in the state of development.

On the basis created by MILES, Prof. Dr. Uwe Großmann of the technical college in Dortmund produced a program called SIB (Studien-Informationssystem Betriebliche Datenverarbeitung) In his lectures he uses the system regularly to instruct students of business economics The system includes a database, a collection of examination papers and a text-book. The information which is offered by the system extends from lecture-oriented applications to overlapping fields of knowledge.

The department of empirical research in social and economic sciences of the university in Dortmund is engaged in several fields One of its points of main effort is the training of persons who are interested in founding an enterprise. In this context arises the question, in what respect multimedia and especially multimedia teaching-systems may be used as an instrument of entrepreneurship instruction. The contents of such an instruction can be described as extremely extensive. A list of themes would have to include accountancy, cost accounting, controlling, taxes, marketing, production, investment and financing, personnel management, organization, electronic data processing, logistics as well as statistics and empirical research In this field, the multimedia conception seems to give an effective support concerning two different aspects

First, most of the multimedia application conceptions will probably be designed by software toolkits which require and support object-oriented programming, particularly if they want to suffice for professional demands. Thus, it is easier for the producer of the application to program and illustrate complicated relations between the individual fields and systems of an enterprise And, on the other side, the user profits from the well-structured presentation, because for him, these relations will get more evident, too.

Second, the combination of several media can be regarded as another advantage, especially if one considers the amount of data. In Germany we say: 'A picture says (explains) more than a thousand words.' and we refer to the better clearness of a picture compared with the abstractness of words and sentences Numerous tests and analysis prove: at least seventy-five per cent of the information a person notices by simultaneously hearing, watching and acting with, remain in the memory of that person If the perception is restricted to ones eyes, this rate will be reduced to forty per cent, if it is restricted to ones ears, it will even go down to twenty-five per cent. By addressing various sense organs simultaneously, multimedia usually improves the efficiency of the learning process. In addition, it is up to the user to decide, at what time he wants to learn and if he wants to repeat an exercise So, the moment as well as the speed of learning are independent from other persons, e.g. from a professor or from other students.

Moreover, deficits of those media traditionally used in education processes may be compensated by multimedia. The most important deficits represent:[7]

* limitation of data forms,
* narrow-mindedness of materials and application concepts,
* impossibility of local adaptation,
* high production efforts,
* deficiency of materials.

Last but not least, another aspect has to be considered In the course of their education the 'entrepreneurs to come' will often come into contact with computers, so that they are more or less forced to use this instrument In doing so, the restraints concerning the personal use of a computer may be reduced Because especially managers look open-minded at new techniques, but they hardly use computers by themselves.[8]

The advantages mentioned up to here are at the same time valid in scientific instruction and in business-oriented further education But in business, add to this, that the costs for a stay and the running-time caused by external trainings will be omitted. Besides, the participants may work up the lessons at the PC just when they have time to do so and in the course of which they are nevertheless available in case of need

Remembering hypertext as the principle which the multimedia conception is based on, one can recognize that hypertext especially fits for complex-structured, large amount of data which has to be flexible to handle with and which has to be prepared for a graphical application surface, being suitable for the user. In other words, the multimedia conception is very suitable for instruction. By that, this conception is not designed to replace existing instruments, but to use its own advantages so that any disadvantages of different learning conceptions may be compensated. Thus, training, self-instruction and CBT will be a complementary entirety.

It is because of all these reasons, why multimedia is forced at the department of empirical research A presentation of the department, its co-workers and its main points of interest exists as a ready-to-use-application Furthermore it is planned to support lectures and exercises in empirical research by multimedia applications In order to achieve these aims, several separated program-modules shall be developed - for example in the form of a diploma-examination These modules shall concentrate on different fields in business economics, but at the same time the various modules shall be integrated under one surface. This surface and a first module (concerning the field of empirical research) are almost ready.

Future = multimedia?

The multimedia conception is an application of the future This is, last but not least, made clear by the activities of the high-tech-industry, spending much efforts in multimedia Almost every well-known company like Apple, IBM, Intel, Microsoft, NEC or Sony investigates in software and hardware components of multimedia

As a summary, it has to be recognized that the multimedia conception yields chances and problems The latter concerns in the first rank technical aspects, because the use of all possibilities of multimedia leads to an amount of data which is difficult to process by the PC-systems of today On the other hand, the activities of various companies show, that a solution to these problems can soon be expected. Once the technical and psychological (concerning the 'manager-syndrome') problems are removed, the applicabilities of multimedia learning systems may be taken advantage of - for example to inform oneself or to work with the system whenever one wants to do so respectively one needs to do so. Although experience with continuous long-run utilization of multimedia systems are not yet available, the applicabilities in science, study and in company's further education do exist in any case.

Notes

[1] 'Messeschlager Multimedia tönt aus allen CeBIT-Ecken' in *CeBIT-Aktuell*, März 1992, p 6

[2] Gloor, Peter; Streitz, Norbert (eds.) (1990), 'Hypertext und Hypermedia: Von theoretischen Konzepten zur praktischen Anwendung', Berlin-Heidelberg; Hofmann, Martin, 'Hypertextsysteme - Begrifflichkeit, Modelle, Problemstellungen', *Wirtschaftsinformatik*, vol. 33, no. 3, June 1991, p. 177-185

[3] Schoop, Eric (1991), 'Hypertext - Organisation schlecht strukturierbarer Information', *technologie & management*, 1/91, p. 20-25, here: p. 24
Schoop, Eric (1991), 'Hypertext Anwendungen: Möglichkeiten für den betrieblichen Einsatz', *Wirtschaftsinformatik*, vol. 33, no 3, June, p 198-206

[4] Breuer, Markus (1991), 'Rechner mit fünf Sinnen', *online*, 6/91, p 18-21, here: p. 18

[5] Breuer, Markus (1991), 'Rechner mit fünf Sinnen', *online*, 6/91, p 18-21, here: p 20 f, Thome, Rainer (1991), 'Hypermedia - Lehrer Lämpels Nachfolger?', *Wirtschaftsinformatik*, vol 33, no. 3, June, p. 207-212

[6] Wiemer, Wolfgang (1990), 'Computerausbildung in der Physiologie' in Baur, Max P , Michaelis, Jörg, *Computer in der Arzteausbildung*, München-Wien, p. 123-146

[7] Wiemer, Wolfgang (1990), 'Computerausbildung in der Physiologie' in Baur, Max P., Michaelis, Jörg, *Computer in der Arzteausbildung*, München-Wien, p. 123-146, here: p. 123 ff

[8] Müller-Boling, Detlef, Ramme, Iris (1990), *Informations- und Kommunikationstechniken für Führungskräfte - Top-Manager zwischen Technikeuphorie und Tastaturphobie*, München-Wien, p 157 and 161

22 Perceptions of skills and qualities needed to be enterprising

Kate Murray and Hildegard Wiesehöfer

Abstract

This paper reports on some empirical research being undertaken at Derbyshire Business School. It compares the perceptions of the skills and personal qualities needed to be enterprising of business studies students in three institutions in the UK and three in the Netherlands The nominal group technique was used to ascertain a group view on: a definition of enterprise; skills and qualities needed to be enterprising; well known entrepreneurs who were seen as role models; constraints felt to be necessary to curb enterprise and normative views on enterprise Cross country differences are noted, as are differences between staff and students and between males and females.

These views were then contrasted with those of samples of small and large businesses and aspiring entrepreneurs in the UK The normative group technique was applied to ascertain the views of small companies and would-be entrepreneurs, whereas telephone interviews and written statements were utilised to obtain views on enterprise large companies

A comparison was then drawn between students' perceptions regarding necessary skills and qualities to be enterprising, the views of their teaching staff, future entrepreneurs and those responsible for training graduates in large corporations.

Backround

The research builds on work carried out at Leicester Polytechnic and Leicester University by Chris Gore and Kate Murray. This work concentrated on identifying differing perceptions of enterprise of staff and students in the University and the Polytechnic, and between subject areas. One of the main conclusions of the study was that there were considerable differences between subject areas so that, for example, chemists across the binary divide had more in common in their views on enterprise than chemists, economists or surveyors in the same institution. There were also considerable differences between the subject areas about what skills and qualities were considered to be necessary to be enterprising. There was only universal agreement on the importance of good communication skills. Given this wide disparity of beliefs about what is important for enterprise, we were interested to discover whether or not there was general agreement amongst students and staff from one discipline area, but from different institutions, and different national and cultural backgrounds. The discipline area chosen was business studies because it is our area and enabled us to extend work already carried out in the teaching of business skills. It is intended to further extend the work, if it appears useful, to other countries so a wider perspective can be achieved.

Methodology

The sample of institutions was not random. The institutions involved were Derbyshire College of Higher Education, Wolverhampton Polytechnic, Leicester Polytechnic in the UK and Ichthus, West Brabant and Hogeschool Holland in the Netherlands. The survey work was undertaken by Ranald Macdonald, Dalvir Fredericks and Chris Gore as well as the authors. The students were all on Business Studies degree courses with a strong European or International component The staff were their teachers. The sample of students was stratified by gender as this had earlier been found to sometimes affect the selection of skills considered important - males stressing more active skills and females more reflective and consultative personal qualities. By stratifying the sample we could ensure the group view reflected any such differences if they existed. All students were full time and so it was not necessary to stratify the sample for this attribute Earlier work had shown a very marked difference in attitudes from those with work experience, for example, many felt enterprise was discouraged at work or that enterprising junior staff were difficult to manage, (Gore and Murray, 1990) Staff were seen separately from students.

The nominal group technique was used with a semi structured questionnaire. The nominal group technique encourages everyone to contribute, as they write their ideas down prior to the discussion. The group size was between six and seven to enable everyone to contribute. The aim is to prevent a dominant person leading the discussion and the interviewer takes the role of a facilitator A questionnaire was developed after a literature search which showed skills, personal characteristics and cultural background were important. A pilot questionnaire was designed and further refined after an initial survey. It begins with a discussion on definitions of enterprise and is followed by views on skills and qualities. It can be seen that once participants have identified a personal list of skills and qualities, these are then discussed and a group view emerges. Having noted these, participants are asked to rank skills and qualities which emerged as being important from the literature and subsequent pilot study. Thus a comparison of what different groups felt to be important was possible The cultural aspects are difficult to incorporate in a questionnaire or group discussion but were approached by seeking role models which encapsulated enterprise, and by asking for an assessment of the importance of enterprise both personally and at work. The discussions could then be widened out to more normative matters to try to ascertain the importance and acceptability of enterprise in society.

In total 68 students were interviewed, 32 Dutch and thirty-six English 16 members of staff were interviewed. The discussions appeared to be enjoyed by the participants, partly because, somewhat surprisingly, it was not a topic that had been discussed in this way before despite the fact that, according to one participant, 'it went to the heart of a business studies course'. It was difficult to keep the discussion to two hours a group. Six groups of aspiring entrepreneurs were interviewed, using the same methodology. The owners of four small businesses were interviewed using the questionnaire as a basis for the discussion. The views of five large companies were collected, based on details provided by them. The choice of companies was not random but an attempt was made to stratify the sample by industrial sector.

Findings

The concept of enterprise

The definitions or concepts of enterprise varied between a narrow view which concentrated on market orientated activity or profit making and a wider view which involved purposeful and co-operative behaviour by a number of people. Examples of the narrow definition were 'an organisation producing goods and services to meet objectives such as profit or employment 'or' using strengths of individuals to form an organisation which meets customers' needs and has the purpose of profit'. The key words mentioned included profit and organisation. Examples of wide definitions were 'initiative directed towards a desired end', 'any organisation with a purpose where people work together'. The key words mentioned included initiative, creativity, working together and stakeholders. All the UK students (six groups) adopted a wide definition whereas only 2 of the six groups of Dutch students used a wide definition. Both of these consisted of women. Staff definitions of enterprise were all wide and included references to initiative, purposeful behaviour, working together and risk taking.

Personal qualities and skills

The split in the survey between skills and qualities was based on literature research, where views range from 'entrepreneurs are born not made' (Hannah, 1984), that is, only personal qualities matter, to different modes of training are needed for different target groups of potential entrepreneurs (Curran and Stanworth, 1987), that is skills predominate. The middle approach of (Crombie, 1985), that both are likely to be important, adopted for the pilot survey, found this to be the approach taken by most people. However the split is important, and is taken up later, because people appear to believe skills can be taught or learnt whereas personal qualities are what one is born with. It is sometimes difficult to persuade people that qualities can be enhanced. It is crucially important that educationalists in the enterprise field are aware of this because previous research showed that educationalists were the only respondents to believe that skills and qualities could be taught or enhanced. Business studies students were unsure initially if any learning in this area was possible (Gore and Murray, 1990).

There was universal agreement about some of the personal qualities needed to be enterprising. Every group thought determination was 'most important'. Only two groups (one Dutch and one UK) did not think decisiveness was ' most important '. However apart from some agreement on the need for innovation, the other characteristics or qualities identified were quite wide ranging (see table 22.1). All groups agreed on the need for good oral communications as a skill necessary to be enterprising Problem recognition and solving was identified as 'most important' by half the Dutch groups but not by the UK groups. Some of the Dutch emphasised team working and effectiveness whilst none of the UK groups did Table 22 1 summarises these results and shows a wide variety of skills as being identified as important. There did not seem to be marked differences between males and females. Dutch males and females selected the personal qualities of determination and decisiveness as being most important to enterprise UK males and females selected determination and innovation as being most important to enterprise So cultural differences appeared to be more important in that in the Netherlands decisiveness prevailed over innovation. Again for skills, gender was not important The spread of skills selected was so wide that apart from oral communication skills there was little agreement

Staff views varied but the Dutch selected innovation, decisiveness and determination as the most important qualities and team working, good communication skills and creativity as the most important skills. UK staff felt the most important qualities were decisiveness, risk taking and leadership. Independent thought was also suggested to be important. The skills they identified were problem solving and analysing team working, communication and financial awareness Creativity and creating and seizing opportunities were also felt to be important There seems to be a very similar approach taken by UK and Dutch staff.

Table 22.1

The number of groups identifying the following as 'most important'

Personal qualities	**Dutch** Max =6	**UK** Max =6	**Skills**	**Dutch** Max =6	**UK** Max= 6
Determination	6	5	Team working	2	-
Innovation	2	4	Good Communication	6	-
Imagination	-	-	Problem recognition and solving	3	1
Decisiveness	5	2	Decision techniques	2	1
-	-	-	Creative thinking	2	-
Pleasant personality	1	-	Creative and seize Opportunities	2	2
Enthusiasm	2	-	-	-	-
Confidence	-	1	Management of resource	1	-
Ambition	1	2	Effectiveness (get things done)	2	-
Initiative	-	2	Ability to take risks	1	-
Charisma	1	-	Self motivation	-	2
Economic insight	1	-	-	-	-
Flexibility	-	2	-	-	-

Company views on essential personal qualities and skills

Research was carried out into views of a range of UK companies, which included multi-international firms, small companies and would-be entrepreneurs, to discover what essential skills and qualities they believe graduates should be equipped with to be successful in business These findings are summarised in tables 22.2 (large companies), 22.3 (small companies) and 22 4 (aspiring entrepreneurs).

Views of large companies

It can be seen that some organisations concentrate on skills not qualities (BP and Ind Coope), but that most recognise the need for certain personal qualities as well as skills. The qualities associated with innovation and imagination are not looked for, neither are the skills of creating and seizing opportunities, creative ability or risk taking ability, nor the ability to manage resources These skills and qualities were identified by staff and students as being necessary to be enterprising (if not as 'most important'), yet do not appear to be looked for by large UK companies Leadership was mentioned by three of the five organisations but had not been identified by staff or students as being essential to be enterprising although one Dutch group recognised charisma as being important The companies are all looking for team working, good communication and problem solving and recognition skills, as well as self motivated graduates. Students interviewed agreed on communication skills but only two-thirds of the groups felt problem solving skills were important and only half the groups felt team working was very important. In the case of the last two skills the Dutch students seem more in tune with the requirements of UK firms than the UK students. The personal qualities companies sought included determination, decisiveness and enthusiasm Students agreed but replaced enthusiasm with innovation. The views of staff on skills came closer to those of companies with the exception of stressing creativity as being more important than problem recognition and solving The qualities staff felt were necessary to be enterprising, determination, decisiveness and innovation, were those of the companies except again innovation was replaced by enthusiasm

Table 22.2
What large UK employers look for in graduates

Personal qualities	BP[1]	Prudential[2]	WH Smith[3]	Marks &Spencer[4]	Ind. Cooper.[5]
Determination	+	+	-	+	+
Flexibility	-	-	-	+	+
Innovation	-	-	-	-	-
Imagination	-	-	-	+	-
Decisiveness	-	+	+	+	-
Enthusiasm	-	+	+	+	-
Confidense	-	+	+	+	-
Ambition	-	+	+	-	-
Hard work	-	+	+	-	-
Skills					
Team work	+	+	+	+	+
Good communication.	+	+	+	+	+
Problem recogn & solv	+	+	+	+	+
Data presentation	+	-	-	-	+
Create & seize opport.	-	-	-	+	-
Think creatively	-	-	-	+	-
Manage resources	-	-	+	-	+
Effectiveness	-	+	+	+	+
Risk taking	-	-	-	-	-
Critical thought	+	-	+	+	+
Self motivation & others	+	+	+	+	+
Literacy	+	-	+	-	-
Attention to detail	-	+	-	-	-
Leadership	-	-	+	+	+
Negotiation	-	-	-	-	-

1. Speech by Christopher King , Director of Administration BP Plc at a CNAA/Hatfield Polytechnic Conference 'Skills Development for the 1990s' 1.6.89.
2. Prudential Corporation information from Personnel Department 1992.
3. H Smith - Personnel Departments 'Assessment of Graduate Recruits' 1992
4 Marks & Spencer - Commercial, Administration and Personnel Management 'Careers for Graduates 1992'.
5. Ind Coope subsidiary of Allied Lyons - information from Personnel Department 1992.

The entrepreneurs' views on skill and qualities to be successful

It was not possible to employ the normative group technique to ascertain perceptions of essential skills and qualities to be a successful entrepreneur However, the questionnaire was used as a basis for discussion with individual entrepreneurs, active in different sectors of industry. Two are manufacturers and two provide services to various industries The views expressed may not be typical of the sector, because of varying market environments, company sizes and structures. Further research is needed in this area to ascertain whether or not such variables affect the skills and qualities needed.

There was considerable consensus of opinion between interviewees regarding the skills necessary to be a successful entrepreneur. Research skills, time management, process skills, communication and negotiating skills, confidence, problem solving and decision making skills were seen by all entrepreneurs as essential to be successful. Knowledge of markets, products and services were emphasized by entrepreneurs but not by students or staff. These are not normally considered skills. Resource and financial management were considered by three out of four interviewees to be important Those not considering them important delegated these functions to an outsider. The need for foreign language skills was only considered important by a company which is considering entry to other European markets and by another, which considers foreign language skills a resource. Team leadership and delegation skills were seen by two out of the four companies as important skills, which may be the result of the structure of the firms questioned

The future entrepreneurs' views

Six groups were interviewed, three male and three female, each consisting of six or seven members. Each interviewee had reached the threshold of setting up in business, having been screened by government agencies for their suitability of becoming self-employed and to receive financial assistance. Everyone had received government sponsored training on essential skills to run a business, which they had utilised to produce their business plans Asked about the essential qualities to become a successful entrepreneur, both male and female groups agreed that determination and motivation are of prime importance All female groups also believed that persistence and dedication were significant qualities of an enterprising person, whereas the male groups felt that decisiveness, the ability and willingness to make decisions were of greater importance There was consensus on the importance of ambition and creativity, with two male and two female groups believing these to be essential qualities. Male groups also emphasised competitiveness, whereas more female groups than male groups believed common sense and imagination to be essential Leadership and team work were perceived by only one male and one female group to be essential to be a successful entrepreneur or an enterprising person. This may be due to the fact that most group members intend to set up either as sole traders or in partnerships, but was nevertheless surprising.

After discussing in groups the essential skills required to become a successful entrepreneur (see table 22 4), it was found that more male groups (3) perceived risk taking and risk analysis of prime important than female groups (2), whereas good communication skills were seen by all female groups as essential, but only by two male groups There appeared to be no difference in the perception of importance when it came to decision making and negotiating skills. Two out of three male and female groups found these to be important skills. Creative problem solving, confidence, team working were considered to be essential skills by two of the female groups, but only one of the male groups considered these important skills However, two of the three male groups believed that resource management skills were vital, whereas only one female group thought so When asked to rank the predefined skills, it was interesting to note that all groups felt the ability to create and seize opportunities as well as getting things done was very important, whereas critical thought was perceived as neutral. None of these had previously been identified by the groups The finding that leadership and delegation were not seen to be vital skills for entrepreneurs may be associated with the nature of the intended businesses, but was also confirmed in the discussion which followed about role models.

Value judgements about enterprise

The next section of the interview tried to ascertain the cultural background and respondents' normative views about enterprise. Drawing on the work of Gibb, discussions began by asking students and staff to identify role models or famous entrepreneurs. They were asked to name role models who embodied the skills and qualities of an enterprising person, as defined previously by the group. Dutch students and staff all named the following:

- Jan Timmer - V P of Phillips
- Freddy Heineken
- Joop van den Ende - TV Production
- Van den Niewenhuizen - Begeman Group
- Van Oostuan - Volmach

whereas the list of people mentioned by UK staff and students contained:

- Richard Branson - Virgin Group
- Anita Roddick - The Body Shop
- Alan Sugar - Amstrad
- Donald Trump - American Property Developer
- Clive Sinclair - inventor of zx spectrum computers and C5 electric 'car'.

The Role models of Dutch students were considerably older than those mentioned by UK students. In addition to this, all UK role models came from the business environment and were founders of successful companies, whereas the Dutch role models were from a variety of backgrounds and/or successful as managers of existing companies rather than entrepreneurs.

When asked whether they admired these role models, the majority of Dutch respondents replied that they respected, not admired, these people for their strong personality, their ability to create business opportunities and markets, their control over the environment and their power. In contrast to this, UK students admired the qualities of 'Get up and go' (Richard Branson), charisma (Donald Trump), self-motivation and dedication (Clive Sinclair) and wider concerns coupled with business success (Anita Roddick) It appears that Dutch students and staff respected their role models for the tangible successes they created, their power and authority, whereas UK students admired individuals for possessing the qualities to achieve this success It was not possible to establish views of role models in large companies. Small firms, when asked this question, often named founders of larger organisations in their own industry sector. The role models of interviewees about to set up their own businesses coincided with those of students and staff in the UK, with the exception of Michael Hesseltine. The discussion of role models also clarified why team work and delegation were not considered essential skills of an entrepreneur or enterprising person, as interviewees believed that the media presented these successful entrepreneurs very much as 'their own people' , who do not extol the virtues of team work or delegation but do things in their own way

When asked 'how important is enterprise at work' ? respondents all felt it was essential that top management was enterprising but expressed reservations about how important it was lower down the hierarchy The Dutch students felt it was necessary if one was ambitious and wanted to be promoted but otherwise those further down the hierarchy did not usually need to be enterprising UK students suggested it varied and depended on the type of company, the task being carried out or on the stage of growth of the company, only young growing companies needing enterprising personnel. Staff felt enterprise was essential at all levels if the best results were to be achieved. Asked if they were personally enterprising, Dutch students all said 'yes' or 'of course' but two groups suggested it varied, with some seeming to be naturally more enterprising than others UK students, all except one group, said they were enterprising and the group responding 'no' said they wanted to be enterprising The 'yes' responses were modified by comments like 'learning to be', 'not yet reached full potential ' All staff except one person, felt they were enterprising! Earlier research (Gore and Murray, 1992) showed that students and in some discipline areas (accounting, surveying, information technology, education) did not wish to be enterprising and did not believe it was very important.

Opinions about the importance of different economic environments varied. The recent collapse of planned economies in Eastern Europe led several groups to suggest that free market economies were essential for enterprise to flourish. One group of Dutch females felt women were not encouraged to be enterprising in the Netherlands Several groups felt EC competition policy would encourage people to be more enterprising. Every group felt there should be constraints on enterprise. Two UK groups thought some criminal activity, for example, large scale fraud, was very enterprising but needed to be curbed. Constraints necessary included ethical, legal, moral, religious and cultural Specific suggestions included curbs on pollution, and protection of consumers. All groups thought enterprise was a good thing, except one male Dutch group who felt it could either be a good or a bad thing The bad element associated with the impact of business on the environment Staff had similar views to students, stressing that enterprise was a good thing as long as it was constrained. Environmental and social issues were considered important. Staff additionally mentioned obligations to developing countries and one suggested (Dutch) that the policy of the survival of the fittest sometimes leads to a waste of resources. A UK member of staff stressed the need for sustainable development.

Only two of the entrepreneurs believed that they were enterprising, the other two believing that they were content with ' earning a living ' . A similar view was expressed in the group discussions with would be entrepreneurs Female groups believed themselves to be slightly more enterprising than male groups.

Table 22.3
The entrepreneurs views on skill and qualities required to be successful

Personal qualities	**Midi** [1]	**Woodworks** [2]	**DAX** [3]	**BUSICOM** [4]
Persistence	+	+	+	+
Motivation	+	+	+	+
Imagination	+	+	+	+
Confidence	+	+	+	+
Risk taking	-	+	+	+
Creativity	-	+	+	+
Tenacity	+	+	-	+
Flexibility	-	+	+	+
Flair	-	+	-	+
Skills				
Research skills	+	+	+	+
Time management	+	+	+	+
Appropriate process skills	+	+	+	+
Communication	+	+	+	+
Negotiation	+	+	+	+
Confidence/ Assertiveness	+	+	+	+
Problem solving	+	+	+	+
Decision making	+	+	+	+
Financial managm.	+	+	-	+
Resource managm.	+	+	+	-
Foreign langu. skills	+	-	-	+
Team leadership	+	+	-	-
Delegation	+	-	+	-

1. Manufacturer of fishing and other nylon lines, nine employees, established since 1983.
2. Designer and manufacturer of wooden shelving systems, one employee, established 1988.
3. Software designer, one partner, established 1989.
4. Promotion design and translations, sole trader

Information based on individual interviews with owners/ founders

Table 22.4
The future entrepreneurs' view on essential skills and qualities

Personal Qualities	**Male** Max= 3	**Female** Max= 3
Determination	3	3
Motivation	3	3
Persistence	2	3
Dedication	2	3
Decisiveness	3	1
Ambition	2	2
Creativity	2	2
Competitiveness	2	1
Common sense	1	2
Imagination	1	2
Leadership	1	1
Skills		
Good communication	2	3
Risk taking	3	2
Negotiating	2	
Decision making	2	2
Process skills	2	2
Creative problem solving	1	2
Confidence/Assertiveness	1	2
Team work	1	2
Resource management	2	1
Leadership	1	1
Delegation	1	1

Student, employers and small firms' perception of skills and qualities

There appeared to be considerable consensus between students and staff on the one hand, and employers on the other (see table 22.5), with employers stressing the need for team work, good communication, self motivation, effectiveness, critical thought and leadership as of paramount importance, and students and staff considering good communication, problem recognition and solving as important However, unlike employers, some students and staff believed that skills such as creating and seizing opportunities, creative thinking and the ability to take risks were also important.

Entrepreneurs and would be entrepreneurs, too, stressed that communication skills are vital, but unlike large companies, they believed skills such as risk taking, decision making and negotiating to be vital to be enterprising

A similar picture emerges when comparing the perception of what are believed to be important qualities. There is consensus between employers and students/ staff on the importance of determination and decisiveness. However, unlike employers, student and staff also believed innovation, ambition, initiative to be important for an enterprising person. As with perceptions on skills, small firms and would-be entrepreneurs agree with large companies, but also believe motivation, persistence, dedication, ambition and creativity to be very important to be enterprising.

Staff and student perceptions in the Netherlands matched expectations of UK employers more closely than those of UK students and staff. However, staff and students in both countries considered a wider range of skills and qualities than the large and small companies to be important for an enterprising person.

Issues Raised

There is as yet no prevailing paradigm to suggest how educationalists and trainers decide what skills to teach and personal qualities to develop. The work done so far indicates that student and staff expectations and perceptions in large and small organisations vary. One explanation for this difference is that large companies are looking for entrepreneurs whereas students, particularly those in the UK, are looking for entrepreneurial characteristics. This may explain the greater consensus between student and staff perceptions and those of small companies and would-be entrepreneurs.

Educationalists need to decide just exactly what role they are preparing students to take up for the maximum benefit to be obtained.

Figure 22.1 and table 22.5 show the areas of agreement between the groups interviewed. They show broad agreement about the need for the personal qualities of determination and decisiveness. However, large companies are looking for enthusiasm and confidence, as are entrepreneurs. Staff and students did not stress these highly. This may be because they took them as 'given'. Figure 22.1 suggests large UK companies are looking for abilities such as effectiveness and critical thought, usually associated with academic work, yet students and staff mostly ignore these. It seems that inculcating traditional academic values may be what large companies are looking for in graduates with management potential. Small companies considered persistence, motivation and imagination to be vital qualities.

All parties interviewed agreed on the need for good communication skills. However, whereas large organisations stressed the need for team work, self motivation and effectiveness, small firms considered research, time management, negotiating, decision making and problem solving skills very important. Would-be entrepreneurs believed that the qualities of persistence and dedication are vital and agreed that risks taking abilities are essential for an enterprising person.

It appeared that the range of skills and qualities considered important by some students and staff spans the requirements of large organisations and small firms. Staff and student perceptions in the Netherlands matched expectations of large UK employers more closely than those of UK students and staff. Large UK companies concentrated on the skills necessary to work at the operational and lower managerial levels, whereas students and staff, as well as small firms and would-be entrepreneurs looked for skills required at all three of Ansoff's levels and so included strategic decision making skills. Presumably large organisations prefer to develop their own management styles to suit their corporate cultures.

An interesting matter which arose from the research was a view expressed by some respondents that personal qualities could not be taught and some were sceptical about the extent to which they could be enhanced The fatalistic approach of accepting that some people had the necessary talents and others did not was not uncommon Almost all accepted that skills could be taught but views did vary about whether or not certain items identified were skills or qualities. For example, creativity and the ability to think creatively or decisiveness and the ability to use decision making techniques These views may be very important because it is difficult to teach something if students do not believe it can be learnt. Work analysing the way people undertake certain tasks, for example the skills of argument, could be very useful in enhancing the effectiveness of skills teaching and ascertaining the personal qualities to develop.

Table 22.5a
Personal qualities

	Large UK Employers					Small Companies				Students/Staff	
	BP	Prudential	WH Smith	Marks & Spencer	Ind Coope	Midi	Woodworks	DAX	BUSICOM	UK	NL
Personal Qualities											
Determination	+	+	-	+	+	-	-	-	-	5	6
Flexibility	-	-	-	+	+	-	+	+	+	2	0
Innovation	-	-	-	-	-	+	+	+	+	4	2
Persistence	-	-	-	-	-	+	+	+	+	0	0
Imagination	-	-	-	+	-	+	+	+	+	2	0
Decisiveness	-	+	+	+	-	-	-	-	-	2	5
Enthusiasm	-	+	+	+	-	-	-	-	-	0	1
Creativity	-	-	-	-	-	-	+	+	+	0	0
Confidence	-	+	+	+	-	+	+	+	+	1	0
Ambition	-	+	+	-	-	-	-	-	-	2	0
Hard working	-	+	+	-	-	-	-	-	-	0	0
Initiative	-	-	-	-	-	-	-	-	-	2	0

Table 22.5b
Skills

	Large UK Employers					Small Companies				Students/Staff	
	BP	Prudential	WH Smith	Marks & Spencer	Ind Coope	Midi	Woodworks	DAX	BUSICOM	UK	NL
Skills											
Team work	+	+	+	+	+	+	-	+	-	0	2
Good Communications	+	+	+	+	+	+	+	+	+	5	6
Data presentation	+	-	-	-	+	-	-	-	+	0	0
Problem recognition and solving	+	+	+	+	+	+	+	+	+	1	3
Creative thinking	-	-	-	+	-	-	-	-	-	1	0
Manage resources	-	-	+	-	+	+	+	+	+	0	1
Effectiveness	-	+	+	+	+	-	-	-	-	0	2
Risk taking	-	-	-	-	-	-	+	+	+	0	1
Create and seize opportunities	-	-	-	+	-	-	-	-	-	2	2
Time management	-	-	-	-	-	+	+	+	+	0	0
Critical thought	+	-	+	+	+	-	-	-	-	0	0
Decision making	-	-	-	-	-	+	+	+	+	1	2
Literacy	+	-	+	-	-	-	-	-	-	0	0
Leadership	-	-	+	+	+	+	+	-	-	0	0
Negotiation	-	-	-	-	+	+	+	+	+	0	0
Self motivation (& others)	+	+	+	+	+	-	-	-	-	2	0
Attention to detail	-	+	-	-	-	-	-	-	-	0	0

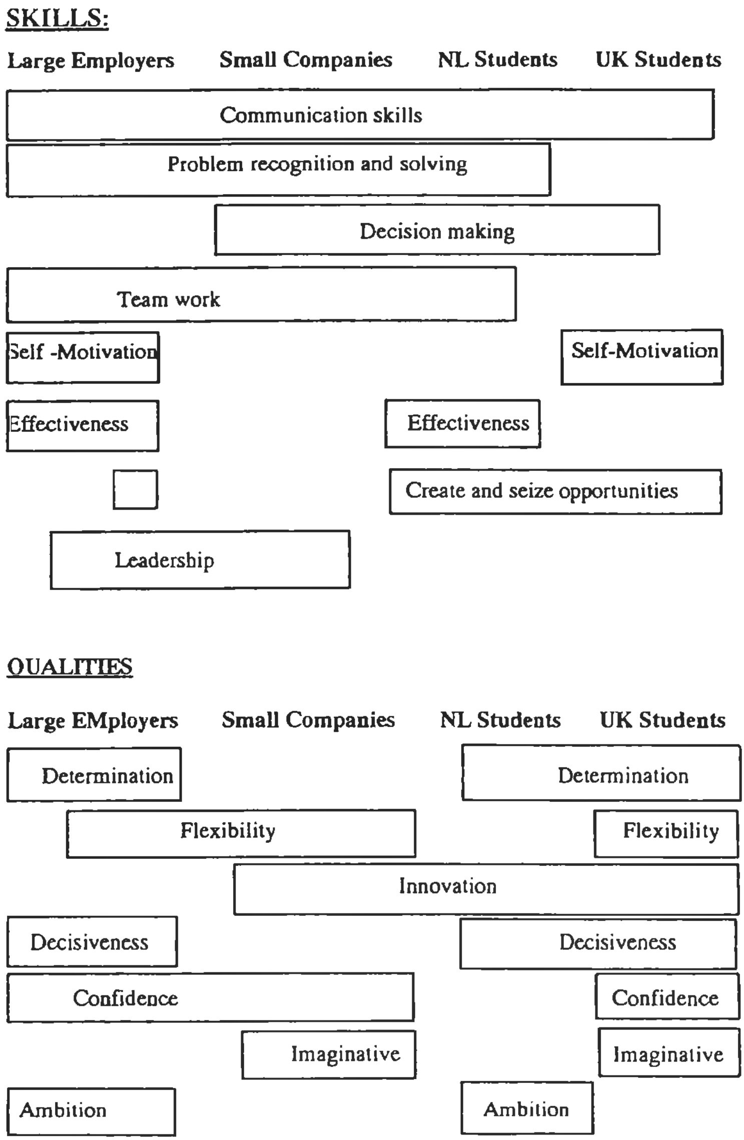

SKILLS:
Large Employers
Small Companies
NL Students
UK Students
Communication skills
Problem recognition and solving
Decision making
Team work
Self -Motivation
Self-Motivation
Effectiveness
Effectiveness
Create and seize opportunities
Leadership
QUALITIES
Large EMployers
Small Companies
NL Students
UK Students
Determination
Determination
Flexibility
Flexibility
Innovation
Decisiveness
Decisiveness
Confidence
Confidence
Imaginative
Imaginative
Ambition
Ambition

Figure 22.1

The work does not show very great cultural differences between Dutch and UK students. There seems to be a greater emphasis in the UK on innovation and self motivation, whereas the Dutch place greater stress on decisiveness and problem recognition and solving Additionally, the Dutch seem to see entrepreneurial activity in terms of large, well established companies whereas the British are chiefly concerned with setting up new businesses. It may be that the UK government policies towards new businesses over the last ten years have affected students' views on enterprise However, given that the majority will work for big businesses the perceptions of the Dutch may be more realistic. The work here could be usefully extended to other countries where the cultural differences could be expected to be greater. Comments in the financial press in the UK when the British Airways and KLM merger was being discussed included 'there are really very little differences in cultures. The Dutch may be keener on consensus. The Dutch style is a comfortable half-way house between the British financially driven Anglo-Saxon approach and the regulated Germanic system of supervisory boards.' (Financial Times, 27 November 1991) If an extension of the research were undertaken, it would be possible to ascertain the extent to which there is general agreement on the personal qualities and skills needed to be enterprising. Furthermore, it should be possible to get a better match between the needs of increasingly international industry, small firms and the graduates being produced by higher education

References

Gore, C., Murray, K. (1989), *Enterprise Report in Higher Education Initiative*, Leicester Polytechnic and Leicester University

Gore, C., Murray, K (1990), 'The Development of Enterprising Personnel', *International Journal of Manpower*, vol. 6

Hannah, L. (1984), 'Entrepreneurs and Social Science', *Economics*, August

Curran, J., Stanworth, J (1987), 'Training for Enterprise', *Business Education*, vol 8, no 1

Crombie, S. (1985), 'The Aptitudes of Aspiring Male & Female Entrepreneurs', *National Small Firms Policy and Research*

Gore, C., Murray, K (1991), 'Training for Enterprise', *The Journal of European Industrial Training*, vol 5, no 3

Gibb, A A (1987), 'Enterprise Culture', *The Journal of European Industrial Training*, vol. 11, no. 2

Kahn, D (1991), 'The Skills of Argument', *Cambridge University Press*

23 Role and importance of entrepreneurial internationalization: The experiences of small / medium firms of mature sectors in Southern Italy

Antonio Minguzzi and Renato Passaro[1]

Introduction

The growing internationalization processes that appear from the recent economic scenario and the trends to a larger and larger globalization of the market, widely investigated by the scientific debate (Levitt, Porter, Ohmae), set the firms of every size and country to face the need to cope with international competition As it is known, in fact, also those firms who do not bring about planned and pre-arranged projects to enter the foreign markets, are compelled to defend themselves from the growing competition of those enterprises which organize their development strategies on a world-wide scale

This dynamic, which force to the context also those enterprises oriented, so far, only to their local market, increases the interest in those researches which study the relations between the variables influencing the firm's internationalization and the determinants of the entrepreneurial culture of the people managing the enterprises themselves.

In the economic-industrial reality of Southern Italy, one can observe specialized productive areas (such as preserved tomato food, tanning of hides, olive's transformation, silk and coral manufacture, etc.) which are formed mainly by small and medium size firms with a high territory concentration In many cases these firms have achieved a high export tradition that has placed them within an international productive chain. The increased competitive pressure due to the increase in the globalization pushes has emphasized the cultural deficiencies of the internationalization model widely adopted (indirect exporting[2]) for those small enterprises, family run, which can appear structurally anomalous if compared to the world standards of the enterprises with a high exporting orientation. There is a growth, therefore in the interest of analysing the relations between the firms' internationalization problems (above all from the indirect internationalization model point of view) and the settled characteristics of an entrepreneurial culture which (on the basis of already carried out researches) has proved to have never developed its relations with foreign markets as a key to cultural learning and improvement

Moreover, the identification and breaking down of the relationship between internationalization and entrepreneurial culture into its basic determinants, would allow us to implement education programmes aiming at raising the level of the managerial capacity component of those firms which long for competitive success but which often, nowadays, in Southern Italy, undergo the difficulty of identifying the causes of their lack of competitiveness

The theoretical debate

The economic literature has given much importance to the role played by the entrepreneurial figure in the enterprise growth paths Some scholars have analysed the role of the entrepreneur as to the technological development (Schumpeter, 1934), some others have developed the role as to the birth of new firms (McLelland, 1971, Rothwell, Zegveld, 1982) or to the economic growth (Leibenstein, 1968, Baumol, 1968).

Other contributions have studied the role of the entrepreneurial learning in determining the firm development (Normann, 1977, Bolognini, 1986) and the entrepreneur education as to the development of the economic system (Leibenstein, 1968) and of small enterprises (Dollinger, 1991).

The growing attention given to entrepreneurial education and learning process appears to be very justified, given the determining role that the entrepreneur may take on, at different levels and with different subdivisions, in the economic context, it can, in fact, determine innovator and evolutionary pushes as well as effects that hold back the development In economic systems such as the Italian one, where the number of small size firms is very remarkable, the entrepreneurial evolution represents an important channel for the development of the single enterprise and, consequently, of the whole national productive system.

Recent trends in the market's globalization processes and firm's internationalization, by determining new competitive settings, compel the firms to measure themselves against new environmental contexts and new economic subjects. In making reference to them, firms are offered the opportunity to learn, to open and develop new relationships (either of competition or co-operation), to gather new information, to contact new information sources Such opportunities augment both the cultural and professional backgrounds of the entrepreneur (and the enterprise) and the possibility of developing new competitive advantages. In this scope, internationalization processes become a mean, through learning, for the firms cultural growth (Bartlett, Ghoshal[3], 1989, Rullani, 1990).

At the same time, the ability to refer to new environmental and competitive contexts, requires the enterprises to achieve a minimum cultural threshold, thanks to which a useful confrontation with new interlocutors is possible and without which the conditions of contact and further development of relationships would not exist

The relationship between the firm's internationalization processes and the professional and cultural learning processes can be seen as a circular, 'virtuous relation' (unlike the vicious circle, in the 'virtuous circle' all components act synergical converging towards an improvement of the starting situation), within which business culture and ability to refer to new environments (foreign markets) strengthen each other

The critical point which might modify this 'virtuous circle' can be identified, on one hand, in the lack of a 'cultural capacity' such as to be able to start the learning process from the new sources of knowledge and, on the other hand, in the presence of internationalization forms which develop when there is a few number of contacts and of direct tangible relations among the subjects. It is known, for example, that the internationalization forms which develop a greater number of more intense relation are the Foreign Direct Investments (FDI) and the so called new forms of international investments (joint-ventures, licensing, management and production-sharing contracts, international subcontracting and turnkey operations, joint production or distribution, etc). The development of mercantile internationalization forms such as export activities are, on general terms, at a lesser level as to the number and intensity of relationships among the economic subjects. Finally, the export activity must be distinguished into direct and indirect exporting, where the former is characterized by the presence of a greater and more intense volume of relations with the foreign market.

The enterprises of smaller size can run into both factors which prevent or limit the starting of the learning/internationalization 'virtuous circle'. They in fact, among the other constraints, (financial, dimensional, communicative), often show a low cultural capacity which turns into a cultural (and managerial) barrier for the development of relations with foreign economic agents. Such barriers increase with the increasing distance from the environmental and economic system where the potential interlocutor is inserted. For this reason, the small size firms are often domestic market constrained Indirect relationships with foreign markets can be developed (i.e. indirect jobbing, indirect export, etc) but they, not allowing the development of a direct confrontation with the new environments, which are potential sources of different and new values for the enterprise, are not relationship forms able to develop the firm cultural growth (in its wider sense) and evolution.

The firm evolutionary process based on the 'cultural component' leadership implies that the entrepreneurial training must be oriented not only towards the professional-managerial characteristics but also towards a larger development of a new business culture which should focus on the capacity to learn and develop relations with new subjects and new sources of knowledge.

All these conditions would allow us to start the 'virtuous circle' between learning and the inclination to research new opportunities which is a competitive advantage source and an economic growth factor for all firms.

Purpose and method of the study

This study has the aim of checking whether the internationalization processes can be cultural growth factors for the firms, as much as they are expressed through the opening of relationships and exchanges which, in different ways and with different intensity, face different cultural and entrepreneurial values The effects on the entrepreneurship can be expressed through improvements of the 'business idea' (Normann, 1977) and, in general, through a greater firm capacity to face new events

The procedures, through which the effects of the learning developed attending new environments are expressed, can be many. Only the facing of new types of customers who put problems and needs different from those on which the prevailing business culture is fixed, represents a moment of potential growth which can turn to real growth (evolution) if the firm is properly open to changes and has a proper cultural capacity (minimum cultural threshold), which enable it to develop an inclination to accept the innovations emerging from relationships, an inclination to self-criticism, and the ability to face and not to escape from situations which appear critical because not known. The more the range of economic and cultural systems is numerous, to which the subject having relationships with belong, the more such opportunities become remarkable and numerous In fact, in this way, learning chances are increased and the entrepreneur cultural and managerial capacity (and the enterprise competitiveness) are also increased

The establishment of profitable exchange and confrontation relations is possible in developing trade relations (manufacturer-customer, company-supplier) among subjects belonging to different cultural, economic and environmental systems. In this study, we would like to check, first of all, how (if) the relations deriving from the development of exporting activities in a sample of small and medium size firms can affect the entrepreneur cultural and managerial evolution and, secondly, how (if) such evolution allows the firms to face, more efficaciously, the relationship with new markets and economic environments

Factors affecting the research

The theoretical reference scheme of the research is significantly conditioned by particular specificity which influence the economic environment where the sample enterprises are located (see figure 23.1). Such specificity, which have been emphasized in the economic debate for a long time, are characteristics of the peculiar reality examined and must, therefore, be considered either to avoid evaluation mistakes as to the results coming out from the analysis, or to point out the possible homogeneity which such situation might have with economic micro-environments located in other countries

In particular, the important specificities can be referred to:

a) **Macro area - regional context** - meant not only as productive district, but also as macro area (Southern Italy) considered as a whole. Such specificity derives from the fact that southern enterprises must face a 'constraint' due to operating in a less developed economic area if compared to other areas of the country (Northern Italy).

b) **Micro area - local context** - Another factor strongly influencing the research consists of the particular location characteristics of the economic sectors analysed The firms belonging to them, which show good exporting performances, show a high territory concentration in limited areas Moreover, such territory concentration rarely determines the birth of economies external to the firm but internal to the area, and of co-operation relationships among firms which, instead, characterize the industrial districts in other highly concentrated industrial areas Such specificity can be spread to the whole South also with reference to the presence of other enterprises industrial aggregates.

c) **Firms size** - Another specificity consists of the firms size variable In our area of investigation, the firms observed are mainly of small or medium size, thus representing the exporting component of southern economy.

d) **Mature sectors** - It seems useful to point out how the target southern economic sectors are, for most part, sectors that can be defined as mature. Within the single sectors, moreover, we should distinguish between the sector specific maturity characteristics from the technological characteristics of the sector's products and processes, because this distinction influences both the definition of the relationship between the demand and supply of services to enterprises and the economic policy.

e) **Entrepreneurial culture** - A lot of studies have already emphasized that the entrepreneurial culture characterizing the majority of southern firms has values which do not encourage the firm evolutionary and learning development and, consequently, its successful international growth. We make reference, above all to the characteristics of being closed to changes and of individualistic behaviour, largely outlined by the related Italian scientific literature (Calvelli, 1990). This evidence, clearly acts as a 'constraint' on the firms international evolution.

f) **Exporting activities aspects** - Finally, it is important to emphasize that, as it is known, the internationalization form preferred by southern enterprises is the mercantile one, especially in its indirect form. In many cases, however, the exporting activity turns out to be the result of a productive decentralization process of those dealers (i.e. Buyers) who control the distribution channels and the products destination foreign markets. This implies that the learning process coming out from the firms acting on foreign markets, is problematic and may cause a vicious circle limiting, again, the firm evolutionary process.

In many cases, it is possible to say that, by giving outside the commercial and distributive function, i.e. to independent operators, the exporting enterprises achieve a relationship with the foreign economic reality and environments poor in 'learning', because they miss the opportunity to face new and differentiated realities.

Characteristics of the sample firms

The sample examined consists of 53 firms belonging to the preserved tomato sauce (29) and the tanning of hides (24) sectors. The firms of the sectors investigated are, in both cases, located in Campania, in a very restricted area, thus determining a high economic specialization of the industrial area. The preserved food companies are located between the provinces of Salerno and Napoli and are the Italian productive pole having the European leadership of the world-wide production and export of such products. The tanning companies are, instead, located at Solofra (province of Avellino) and represent the Italian productive pole, which is among the first world manufacturers of sheep and goat skins.

In 1991, the Campania preserved food firms were 163, the sample observed being 18 per cent of the regional total amount. For the tanning sector, the examined firms are 16 per cent of the whole. Data come from a data-base, which is at the I.R.A.T./C.N.R. (Research Institute on Service Activities of National Research Council) of Naples either for its own institutional research activities, or within the P.F.I./C.N.R.[4], with the aim of carrying out economic-business analysis and monitoring highly exports-oriented firms of some industrial sectors, mainly located in Southern Italy. In particular, the tanning and preserved food firms sample studied was formed on the basis of interviews performed at two different moments. The first survey was carried out in 1988 and involved 42 preserved food and 47 tanning firms within the institutional research activity of I.R.A.T. In 1991, a second collecting programme (still in progress) was started within the research programme P.F.I./C.N.R. In order to evaluate homogeneously the variables dynamics that we wanted to investigate, we have drawn, from the set of available data, a sub-sample of 24 tanning and 29 preserved food firms, coinciding with the sample previously selected, which presented the highest degree of structural homogeneity and exporting activity. The survey, whose results are reported here, has been carried out on this sub-sample.

The sample consists mainly of small and medium size firms, frequently family run, and highly exports-oriented. It must be pointed out, however, that the enterprises of the examined sample perform their exporting activity through indirect exporting procedures, that is using independent distribution channels and independent channels for marketing their products on foreign markets[5].

The questionnaires given to the firms at two different moments, were prepared taking into account different sections concerning, respectively, the entrepreneur, the firm activity and its quali-quantitative internationalization level.

The purpose of this study being the evaluation of the relations existing, on terms of mutual influences, between internationalization activities and entrepreneurial culture characteristics, the data collected have been worked out in order to obtain a representative variable of the entrepreneurial culture present in the sample and an exports orientation indicator of the observed enterprises.

Analysis results

On the basis of the knowledge deriving from the monitoring activities developed, we have related the exporting experience of the firms examined to the exports sales revenue percentage, in order to emphasize an interpretation about the importance that the relation with foreign markets has, on terms of strategy, for the sample firms (figure 23.2). This remark derives from having observed that not all exporting firms mature, over the time, a strategic path leading to a stable presence on foreign markets. Figure 23.2 shows, in fact, how the sample firms are placed in the four quadrants identified by the average values of the foreign export share as to total revenue (57 per cent) and by the average (21.7) of the exporting years of the observed enterprises The high exports orientation of the examined enterprises appears clearly.

In particular, it can be observed that the firms in the top right-hand side quadrant represent those firms which have a consolidated export orientation (**export consolidated**). On the contrary, the firms in the top left-hand side quadrant are those which realize abroad more than half of their sales revenue but have a more recent experience in being present on foreign markets (**export oriented**). The firms in this quadrant may either evolve towards firms with a more consolidated position on foreign markets, or suffer exports' failures, thus consolidating on the local market represented by the low right-hand side quadrant (**domestic consolidated**) In the low left-hand side quadrant, finally, there are the potential exporting firms which have less experience and low sales revenue quotas realized abroad (**domestic oriented**), these firms can evolve highwards, thus becoming strong exporters, or towards the low right-hand side quadrant where those enterprises which are instead consolidated on the home market are placed

Going on in our inquiry, we have built an index which could represent the entrepreneur culture, either on terms of cultural stock (entrepreneurial culture stock) or on terms of the entrepreneurial pattern opening to changes and cultural growth. Then, we have realized a cultural stock index which could take into account the general education level, the specialized culture level, the foreign languages knowledge, the occupation of the father and the age of the entrepreneur[6]. On the other hand, an index of the entrepreneur opening to cultural changes has been realized in order to point out the entrepreneur availability to identify the limits of his own culture, meant as the ability to self-criticism and, therefore, as a positive value of open-mindedness and widening of one's own cultural horizon[7].

The usefulness of this relation lies in the fact that the interaction between the cultural stock and the opening to changes represents a real cultural condition of dynamic type. Being open to changes, in fact, is a multiplicative factor which increases the value of and develop the entrepreneur cultural stock, this takes on a special importance in an environmental context which, as previously indicated, turns out to be poorly advanced

Figure 23.4 shows the positioning of the sample firms on the basis of the relation between the entrepreneurs weighted cultural stock indexes and the values of their opening to cultural changes This relation quantifies their entrepreneurial culture meant, conceptually, as a stock of knowledge and the availability to increase one's own professional and cultural wealth

In figure 23.5 there are, with reference to the same variables, the sample firms divided as to the industrial sectors to which they belong The main evidence in comparing the firms of the two sectors seems to be the trend of the tanning enterprises sector to cover, mainly, the left-hand quadrants, in opposition to a larger presence of the preserved food enterprises in the quadrants representing a greater opening to changes. Differences in the cultural stock between the two groups seems to be smaller and can be read as the positioning polarization as to the vertical axis

The reading of the quadrants in figure 23.4 allows us also to evaluate how the first low right-hand side quadrant identifies the entrepreneurs with a low business culture and open to changes (17 per cent of the sample firms). They show an availability to changes from the very low cultural levels and therefore, an evolutionary process which must fill a long distance between the cultural capacity level present and the cultural capacity minimum threshold, (which can be identified with the cultural capacity average level of the sample firms), but which, having they a good opening to learning, can become faster.

In the low left-hand side quadrant there are the entrepreneurs with a low cultural level and no opening to changes (21 per cent). For these subjects, the two factors influence each other negatively, thus generating a barrier which presses the firm into a marginal position from which it is very difficult to emerge, unless some important events occur, which transform the business organizational and entrepreneurial order (new partners entry, generation succession, crisis condition, etc.). In this case, the distance separating the entrepreneur cultural capacity from the minimum cultural threshold is remarkable and, because of the poor availability to learning, the speed needed to recover such disadvantage, is very low.

35 per cent of the enterprises show an entrepreneurial culture higher than the average together with a closing to changes (top left-hand side quadrant). These entrepreneurs are inclined towards a slow impoverishment of their own culture which, lacking confrontation and renewal, gradually becomes obsolete and not suitable to lead the business The quickness of such gradual impoverishment increases with the increase of the changes phenomena, which, at different levels and with different procedures, influence the firm life (technological innovation, changes in the competitive scenario, changes in the reference economic environment, etc.). For these firms, the widening of the cultural gap over time becomes a problem of up-dating their own entrepreneurial and professional culture. Being shut up to changes hinders the up-dating process, thus extending the gap over time.

The fourth quadrant, on the top right-hand side, includes 27 per cent of the firms of our sample and consists of firms which have both a good cultural level and a high opening to changes. These are the enterprises for which the two variables act synergical, increasing their value one another. These entrepreneurs are not only ready and able to face and manage the dynamics of the changes coming from outside, but are urged by them, thus taking up, according to the business needs and objectives, a position of continuos dialogue with the sources generating or transmitting the changes They follow, with a good stock of internal consistency, an evolutionary process of learning and adjustment to the external environment.

Next step we have faced concerned the relation between the index combining culture and opening to entrepreneurial changes on one hand, and, on the other the export orientation evaluated on the basis of the relation coming out from figure 23.2 If, as we have already outlined, a firm internationalization process is a transfer and cultural growth vector for the enterprises, as much as it allows the development of an evolution process through the exchange and confrontation with environments and subjects belonging to a variety of social, economic and cultural milieus different from one's own reference environment, the firms characterized by a strong commitment in exporting activities should be mostly distinguished for the high values of the variables considered here

Figure 23.6 shows the position of the examined sample firms on the basis of the relation between culture[8] and exporting activities[9]. The description of the various quadrants allows us to give shape to a conceptual reference framework of the first results of this study.

Starting from the low right-hand side quadrant and moving clockwise, we find the firms with a high culture and learning index and a poor quantity of exporting activities These entrepreneurs have a sufficient quali-quantitative cultural store to enter the foreign markets, which allows them to start the 'learning virtuous circle' urged by the new environment. They can therefore be defined as **aware** entrepreneurs, that is potentially able to establish a positive dialectic confrontation with new and different interlocutors. Their permanence on the local market is mostly a choice that they make on the basis of the exploitation of the economic opportunities consistent with the business goals.

The second quadrant includes the enterprises which work mainly on home markets and have a poor cultural capacity Possibly, for these enterprises, the permanence on local markets is a constraint determined by their scarce cultural inclination to approach new markets The limited per cent sales revenue volume exported by these enterprises, is got only through relations and situations (indirect exporting) which, allowing them to by-pass the barrier formed by the lack of a systematic research of contacts and access to foreign markets, do not bring any learning to the firm These firms can therefore be defined as **passive**, meaning that their poor opening and learning capacity force them to work on the home market, where they hold positions and behaviours which relegates them far from the possibility to evolve jointly, either on cultural terms or on new outlet markets.

The third quadrant includes those firms which have an exporting orientation higher than the average, but which have, however, a low cultural capacity, since they are strongly shut up to changes. Though these enterprises work in contact with environments and subject which bear innovator values with respect to their own culture, they are not able to start the 'learning virtuous circle', which, besides, could lead them also to a more efficient and profitable relationship with foreign markets They are therefore characterized by the absence of any ability to receive stimuli and to seize the opportunities deriving from having commercial relations on new markets These firms can be, therefore, defined **short-sighted**. The fact that they export a remarkable part of their sales revenue is due to non-systematic factors or to factor which, anyway, are not generated by an active behaviour.

Finally, the top right-hand side quadrant collects the enterprises which positively connect the exporting activity commitment to a high entrepreneurial culture. Such firms actively look for an expansion of their presence abroad, urged by their own cultural capacity (culture stock and opening to learning) and are, therefore, the ones which succeed in starting the knowledge accumulation mechanism, which gradually strengthen their capacity to join new international markets. The capitalization of the learning process results allows the classification of these enterprises as **advanced**.

Next step of the study has been to analyse the firms behaviour over an evolutionary path marked by exporting and cultural orientations, in order to acquire a more differentiated view of the interrelation, in the sample, between culture and international activity. The analysis has consisted basically of identifying how the firms final position was influenced by the cultural stock and the opening to changes variables on one hand, and the opening to exporting activities on the other, so that it has been possible to identify the firms different evolutionary paths.

Table 23 8 represents the different paths followed by the sample firms, together with the respective percentages of relative importance referring, either to the whole sample, or to each single quadrant The result has been that 24.53 per cent of them was in the same quadrant also as regards the variables making up figures 23 2 and 23 4, thus giving evidence of holding the positions acquired More interesting for the analysis is instead the evolution of the firms (75 47 per cent) which are in figure 23.6 in quadrants different from the one where they were in relation to the analysis previous variables (Figures 23.2 and 23.4)[10]. These situations, in fact, indicate that an evolutionary (negative or positive) process has occurred, and that it was affected either by the firm international experience or by the entrepreneur's cultural attitude.

Moreover, the analysis of the dynamics of each enterprise belonging to the four different quadrants allows us, by assessing the evolutionary paths as to their connection to the variables of the study, to identify the possible intervention initiatives aiming at optimizing the growth of the firms themselves.

In particular, the events when there is a dynamics in the firms positions between the quadrants of figures 23.2 and 23.4 towards the positions of figure 23.6, have been divided, among the events that could be grouped, into:

- positive paths (13.21 per cent), because they go towards the **advanced** enterprises quadrant;
- negative paths (33.96 per cent) represented by those firms which are placed in the passive enterprises quadrant;
- stable paths (28.30 per cent) represented by those firms which, from a different starting quadrant, are going to be positioned in the **short-sighted** and **aware** firms quadrants, thus emphasizing growth dynamics of a more composite interpretation.

In particular, for the 'advanced' quadrant there are four different dynamics which can be estimated as successful paths. To be more precise, 30 per cent of the 'advanced' firms combine an 'export consolidated' activity (figure 23.2) and an 'uncultured/open' entrepreneur figure (figure 23.4) who, however, achieving a final advanced position, determines the occurrence of that 'learning virtuous process' which is influenced by the firm international activity. In the other cases, the 'advanced' position is obtained starting from 'export oriented' firms with 'cultured/open' entrepreneurs (20 per cent of the enterprises in the quadrant), thus proving how culture and open-mindedness strengthen the enterprises opening attitude towards foreign markets. In 10 per cent of the cases, also 'cultured/closed' entrepreneurs achieve an 'advanced' position because they become open to learning through the international experience. Finally, in this quadrant, 30 per cent of the firms consist of enterprises coming from 'homogeneous' quadrants ('export consolidated' and 'cultured/open') so classified 'static'.

In the 'short-sighted' and 'aware' quadrants of figure 23.6, which represent the cases when the different influence of the variables determine non-optimal results for the firms (because of cultural deficiencies in the 'short-sighted' quadrant and of lack of internationalization in the 'aware' quadrant) the evolutionary paths are concentrated into two particular negative typologies (see table 23.8).

For 35.3 per cent of the 'aware' enterprises, the starting quadrants were determined by conditions of 'domestic oriented' linked to a 'cultured/open' entrepreneur. This brought to a situation in which the high entrepreneurial culture present does not significantly interact with the foreign markets (because of the mostly homewards orientation) and therefore cannot exploit the opportunity to be strengthened by the learning acquired through the internationalization previously described.

66.7 per cent of the 'short-sighted' firms come, instead, from the 'export consolidated' group combined with a 'cultured/closed' entrepreneurship. In this case, the result is determined, however, by the variables-mirror condition if compared to the preceding situation. In fact, the unsuccessful starting of the 'virtuous circle' due to internationalization learning is determined by the closing to changes of the entrepreneur, who does not realize the cultural exchange potentialities, thus under-optimize the internationalization experience of his firm

Conclusions: implications for the entrepreneurial education

The analysis of the firms origin and positioning determinants in the quadrants of figure 23.6 allows us to draw some clear implications about specific cultural wants and international orientation problems for the enterprises called **short-sighted** and **aware**.

As concerns the education initiatives for the 'aware' firms, where there is a relative lack in the firms international presence with reference to the high entrepreneurial cultural level and learning capacity, it seems possible to fill the gap through the organization of a joint supply of training services to develop managerial knowledge (for entrepreneurs), and of real services to support the internationalization development (i.e exports) and the international competitiveness (for enterprises) Given the characteristics and peculiarities of these enterprises, it is necessary for the interventions to focus on the services of the second type, in order to start the formative and evolutionary 'virtuous circle' (figure 23.7).

As regards the quadrant where there are the 'short-sighted' firms and where an entrepreneurial cultural lack occurs, the formative interventions should mainly aim at the supply of services for training the entrepreneurial culture, and secondly at services suitable to increase the managerial capacities and the exporting activity competitiveness In this case, the objective should be not only to increase the entrepreneur managerial knowledge, but also and chiefly, to make him aware of the constraints enforced on to the firm by a poor availability to evolve the present entrepreneurship model or business idea through the confrontation with different realities. Education, above all, should increase the entrepreneur opening to changes, because such characteristic is a basic factor to hold and increase the firm competitiveness over times, such as the present and future ones, of growing turbulence.

For the enterprises called 'passive' it is possible to assume that combined services are needed, which gradually make the **business environment** approach either the minimum cultural threshold or the development of the first trade experiences with the international market, so that they are introduced to an evolutionary path 'tailored' on their own peculiar needs

To sum up, we would like to underline two points concerning the real nature of the firm evolutionary path, caused by the development of international relations, and the policy implications for the entrepreneurial education.

1) The positive relationship between learning and internationalization is limited by the ways which the enterprise uses to contact the international markets Working in a context of international productive and trade exchanges does not ensure in itself the occurrence of processes of knowledge transfer and firm evolution The lack of a direct relation, not intermediate by other subjects, does not allow the learning and exchange process to take place The result of the case we have examined has been that the indirect exporting procedure limits the enterprises managerial and cultural evolution process

2) Entrepreneurial education services can efficaciously allow the firms to fill in the gap which separates them from the minimum cultural threshold, so that they can profitably work on foreign markets. Such services however, should be offered in a selective way, checking what the priority problems are, that the firms show in carrying out their own growth paths, in order to start the most proper formative levers.

As to the resolutions, the result of these remarks is that the specialistic training for the firms of sectors with a high exporting orientation should aim, jointly, at increasing the culture and technological-managerial knowledge, but it should selectively and mainly play upon raising the entrepreneurial cultural training, meant as the entrepreneur capacity to interact with the surrounding environment, or, alternately, upon the supply of supporting services for the firms internationalization processes (increase of the international competitiveness), in order to determine the 'learning virtuous circle' and, indirectly, the entrepreneurial cultural growth and firm evolution.

Notes

[1] The authors carried out jointly the whole research but, in writing phase, Minguzzi wrote Introduction, 'Purpose and method of the study' and 'Characteristics of the sample firms', while Passaro wrote 'The theoretical debate', 'Factors affecting the research' and Conclusions. They wrote together 'Analysis results'.

[2] This approach, as it is known, being carried out through the introduction of independent dealers among the foreign firms and final consumers, does not allow the firm to monitor fully and in real time the evolution of the final consumption market with the consequent difficulty of defending itself from the competition growing competitive pressures.

[3] See Bartlett, Ghoshal pp 77-78 and p 269.

[4] The National Research Council (Consiglio Nazionale delle Ricerche, C.N R.) has started a research programme on a national scale called Finalized Project 'Services and structures for the internationalization of Italian enterprises and development of exports' (P.F.I./C.N.R.) This programme lasts four years and, on the basis of a unitary co-ordination, involves researchers of C.N.R., universities and private industry, in order to analyse the determinants of the Italian firms international competitiveness and the demand and supply of real services for firms internationalization.

[5] As it is known, the exportation is defined indirect when it is not the manufacturing firm to look after the marketing and distribution of its product on foreign markets but the product is acquired by international dealers (import-export buyers, trading companies, distribution chains), who look after its transfer and placing on foreign markets The large scientific debate on this subject has emphasized that this exporting typology, though it is a form of internationalization of the manufacturing firm, relegates the firm in a passive position because of the lack of a direct contact with the final consumer. This, besides being a potentially unstable presence position on foreign markets, prevents the enterprises and entrepreneurs to learn from this experience in order to increase and evolve the entrepreneurial knowledge and culture.

[6] The indicator of cultural stock used in figures 23.4 and 23.5 has been obtained by summing the scores assigned to the determinants of the general, specialistic and social education of the subjects interviewed about the entrepreneurial activity. In particular, data relating to:

- school-attendance level achieved,
- foreign languages known;
- father's occupation;

have been worked out

To each of the answers, an increasing score has been assigned according to how these experiences/knowledge have positively contributed to determine, in the subjects, an inclination and capacity to carry out an entrepreneurial activity.

Score assigned to the school education level achieved	
ATTENDED SCHOOL	SCORE
elementary school	1
low secondary school	3
high secondary school	6
university degree	10
post-university specialization (i.e. M B A)	15

Score assigned to foreign languages knowledge	
NUMBER OF LANGUAGES KNOWN	SCORE
Italian	1
one foreign language	4
two foreign languages	8
three foreign languages	13

Score assigned to the occupation of the father's interviewee	
FATHER'S OCCUPATION	SCORE
entrepreneur	4
trader	4
professional	3
artisan	3
farmer	2
employee/teacher	1
workman	1

Summing the values obtained by the interviewed subject, according to the answers given, we have got, for each entrepreneur, a score representing his cultural stock, stock resulting from the formative, family and/or social experiences made during his life Because of the high range existing between the minimum and maximum age of the interviewed entrepreneurs (27-61), we have noticed that data contained an inverse correlation between age and school-attendance level significantly due to the growth in the population average school attendance level, occurred in the last forty years. In order to eliminate this phenomenon, the school attendance and linguistic knowledge values of the interviewees have been considered with reference to the age of the interviewees themselves, thus obtaining the **weighted cultural stock** index which shows a variable high homogeneity within the sample (figure 23.3).

[7] The **opening to changes index** used in figures 23.4 and 23.5 has been obtained by summing the scores assigned to the interviewees after a series of questions about their inclination to modify and increase their knowledge store and professional behaviour. Since we did not think, in fact, that a stock value like the one obtained quantifying the cultural stock, was enough to achieve the purposes of the research, that is to measure, in the sample, the cultural learning generated by the firm internationalization, we have measured the availability to learn (opening to changes) in order to point out the dynamic characteristics of such a cultural stock (Calvelli, 1990) This objective has been achieved working out the answers given by the entrepreneurs with reference to a series of questions scattered in the questionnaire but aiming at identifying a series of positive (opening to changes) or negative (closing to changes) attitudes relating to: a) vocational training, b) updating on the conditions of one's own activity sector, c) firm expansion

processes; d) public intervention initiatives.
In particular, we have summed the marks (from 1 to 10) assigned by the entrepreneurs to the above mentioned questions, placing before a positive or negative sign, according to groups of questions preordained on the basis of the above mentioned principles.

[8] The variable representing either the entrepreneurs cultural stock and their opening to changes has been called **entrepreneurial culture compound index** and consists of the algebraic ratio between the opening to changes index and the cultural stock weighted index of entrepreneurial culture. This variable allow us to quantify the entrepreneur capacity to be a means for transmitting the learning and increase of entrepreneurial culture.

[9] The firms export orientation has been measured through the **export orientation index** that, for each firm, is the result of the product of the number of years for which the firm has been exporting, by the abroad sales percentage with reference to the firm total sales revenue. It also represents the relative importance of exports for the firm development.

[10] It is useful to remember that the study hypotheses and the variables representation system expects that, given the orientation of figures 23.2 and 23.4 quadrants, if an enterprise characterized for example, by export consolidation (top right-hand side quadrant in figure 23.2 and by a cultured/open entrepreneur (top right-hand side quadrant in figure 23.4 determines an advanced entrepreneur in figure 23.6 (top right-hand side quadrant), it means that the enterprises which hold their position between the origin and destination quadrants, represent an event of evolutionary static nature (positive or negative) as to the tested variables.

References

Bartlett C.A. , Ghoshal S. (1989), *Managing across borders*, Harvard Business School Press

Baumol W.J. (1968), 'Entrepreneurship in economic theory', *American Economic Review*.

Bolognini B. (1986), *Il mito come espressione dei valori organizzativi e come fattore strutturale*, in Gagliardi P

Calvelli A. (1990), *Profili manageriali e sviluppo di impresa. Le piccole e medie imprese meridionali*, Studi monografici dell'Istituto di Ricerche sulle Attività Terziarie, Consiglio Nazionale delle Ricerche, Napoli

Coda V. (1985), 'Entrepreneurial values and enterprise success', *Economia Aziendale*, no.3

Dollinger M.J. (1991), 'Teaching entrepreneurship and small business: the contents areas', *Piccola Impresa/Small Business*, no. 2

Gagliardi P. (a cura di) (1986), *Le imprese come culture*, Isedi, Torino

Leibnstein H. (1968), 'Entrepreneurship and development', *American Economic Review*

Mc Lelland D.C. (1971), *The achieving society*, Van Nostrand, New York

Minguzzi A. (1991), *I fattori di competitività internazionale di un comparto dell'agroindustria italiana*, Working Paper IRAT-PFI-CNR, Napoli

Minguzzi A., Vellecco I. (1990), *Entrepreneurship and management in southern Italy: the alimentary pasta and the preserved tomato sectors*, Frontiers of entrepreneurship research, Babson College

Normann R. (1977), *Management for growth*, John Wiley & Son, Chichster

Passaro R. (1990), *Indagine sull'attività esportativa delle imprese del polo conciario di Solofra*, Working Paper IRAT-PFI-CNR, Napoli

Rothwell R., Zegveld W. (1982), *Innovation and the small and medium sized firms*, Chapter VI, F.Pinter, London

Rullani E., Grandinetti R (1990), *L'internazionalizzazione incompiuta: apprendimento ed evoluzione nell'esperienza internazionale di un campione di di piccole e medie imprese*, Universita di Udine, Rapporto di Ricerca PFI-CNR

Schumpeter J A (1934), *The theory of economic development*, Harvard University Press, Cambridge, Mass.

Statistical appendix

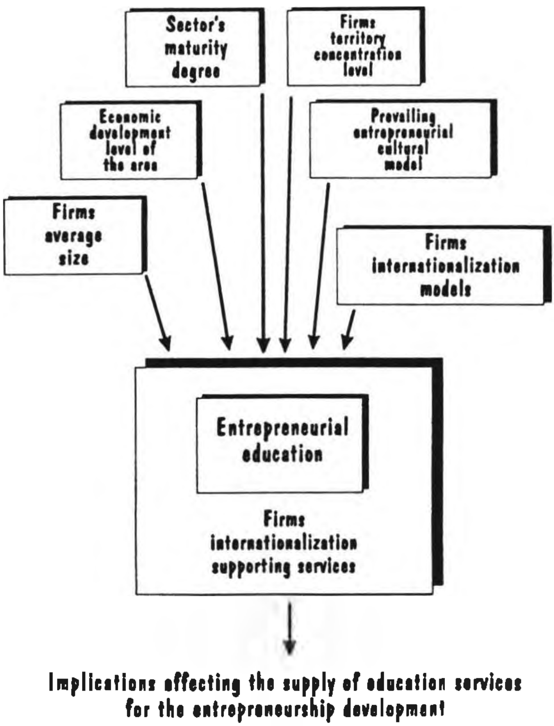


Figure 23.1 Demand services for firms internationalization: factors affecting the entrepreneurial education

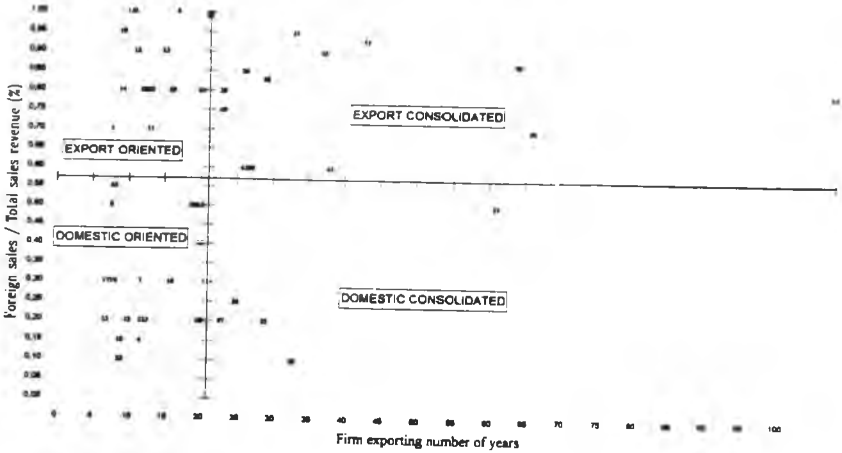


Figure 23.2 Importance of foreign markets for the sample firm

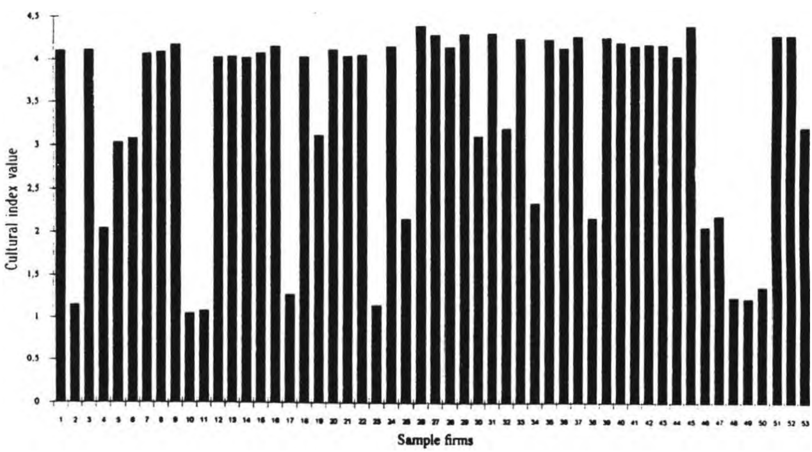


Figure 23.3 Representation of the entrepreneurs cultural stock values

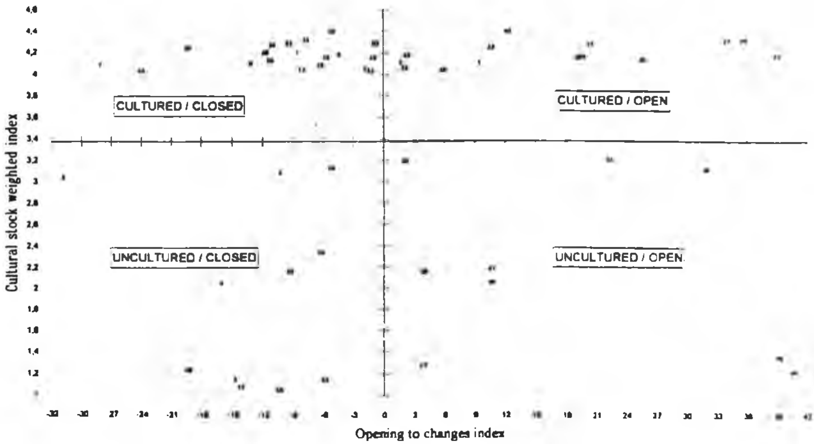


Figure 23.4 Representation of the sample entrepreneur according the entrepreneurial culture parameters

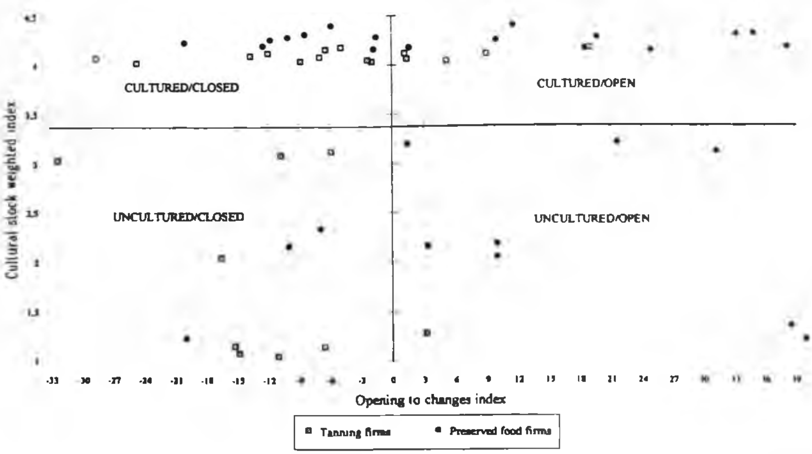


Figure 23.5 Representation of the two sectors entrepreneurs according the entrepreneurial culture parameters

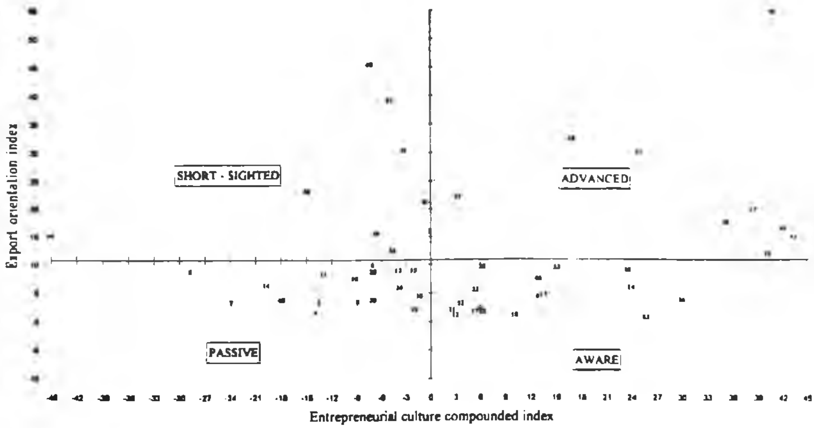


Figure 23.6 Typologies of entrepreneurs present in the sample according to their availability to learn from internationalization

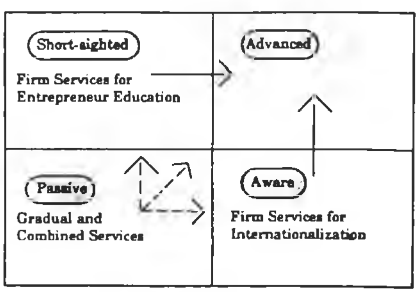


Figure 23.7 Firms evolutionary path and type of firm services

Table 23.1
Sample firms: school-attendance distribution level of entrepreneurs

	%
Elementary school	20,75
Low secondary school	11,32
High secondary school	45,28
University degree	16,98
Post-university specialization	5,66
	100

Source: our computation

Table 23.2
Sample firms: foreign languages knowledge of entrepreneur

	%
Italian	39,62
1 Foreign language	13,2
2 Foreign languages	26,41
3 Foreign languages	20,75
	100

Source: our computation

Table 23.3
Sample firms: entrepreneur father's occupation

	%
Entrepreneur	50,94
Trader	11,32
Farmer	11,32
Workman	9,43
Professional	1,89
Artisan	9,43
Employee/teacher	5,66
	100

Source: our computation

Table 23.4
Sample firms: age ranges of entrepreneurs

	%
0 - 30	11,32
31 - 40	28,3
41 - 50	24,53
51 e oltre	35,85
	100

Source: our computation

Table 23.5
Sample firms: distribution of the weighted cultural stock index

	%
0 - 1	3,77
1,1 - 2	15,09
2,1 - 3	11,32
4 and more	69,81
	100

Source: our computation

Table 23.6
Sample firms: distribution of the opening to changes index

Index ranges	%
(-30) and more	3,77
(-29) - (-20)	7,55
(-19) - (-10)	20,75
(-9) - 0	24,53
1 - 10	20,75
11 - 20	7,55
21 - 30	3,77
31 and more	11,32
	100

Source: our computation

Table 23.7
Sample firms: distribution of the entrepreneurial culture index

Index ranges	%
(-30) and more	1,89
(-29) - (-20)	5,66
(-19) - (-10)	11,32
(-9) - 0	30,19
1 - 10	20,75
11 - 20	9,43
21 - 30	9,43
31 - 40	7,55
41 and more	3,77
	100

Source: our computation

Table 23.8
Sample firms. Static and dynamic path.

Firms evolutionary path		75,47%
Positive path (+)	*13,21%*	
Negative path (-)	*33,96%*	
Stable path (=)	*28,30%*	
Firms static path		24,53%

Sample firms - Path map

Destination (Fig. 6)	**Export map origin (Fig. 2)**	**Culture map origin (Fig 4)**	N.	% Sub group	% TOT	**Path**
Advanced	Export Consolidated	Uncultured/open	3	30,0	5,66	Positive (+)
Advanced	Export Oriented	Cultured/open	2	20,0	3,77	Positive (+)
Advanced	Export Consolidated	Cultured/closed	1	10,0	1,89	Positive (+)
Advanced	Domestic consolidated	Cultured/open	1	10,0	1,89	Positive (+)
Advanced	*Export Consolidated*	*Cultured/open*	*3*	*30,0*	*5,66*	*Static*
		Total sub group	**10**	**100,0**	**18,87**	
Aware	Domestic Oriented	Cultured/open	6	35,3	11,32	Negative (-)
Aware	Domestic Oriented	Uncultured/open	3	17,6	5,66	Stable (=)
Aware	Domestic Oriented	Cultured/closed	2	11,8	3,77	Stable (=)
Aware	Domestic consolidated	Cultured/closed	1	5,9	1,89	Stable (=)
Aware	Export Oriented	Uncultured/open	1	5,9	1,89	Stable (=)
Aware	Domestic consolidated	Cultured/open	1	5,9	1,89	Negative (-)
Aware	Export Oriented	Cultured/open	1	5,9	1,89	Negative (-)
Aware	*Domestic consolidated*	*Uncultured/open*	*2*	*11,8*	*3,77*	*Static*
		Total sub group	**17**	**100,0**	**32,08**	
Short-sighted	Export Consolidated	Cultured/closed	6	66,7	11,32	Negative (-)
Short-sighted	Export Oriented	Uncultured/closed	1	11,1	1,89	Stable (=)
Short-sighted	*Export Oriented*	*Cultured/closed*	*2*	*22,2*	*3,77*	*Static*
		Total sub group	**9**	**100,0**	**16,98**	
Passive	Export Oriented	Cultured/closed	4	23,5	7,55	Negative (-)
Passive	Export Oriented	Uncultured/closed	4	23,5	7,55	Stable (=)
Passive	Domestic Oriented	Cultured/closed	3	17,6	5,66	Stable (=)
Passive	*Domestic Oriented*	*Uncultured/close*	*6*	*35,3*	*11,32*	*Static*
		Total sub group	**17**	**76,5**	**24,53**	
		TOTAL	***53***		***92,45***	

24 Entrepreneurs and managers in the tourist sector: The case of the Sorrentine-Amalfitane coast

Clara Stefania Petrillo

Introduction

The Italian hotel entrepreneurship owes the positive results achieved so far mainly to the position private income of the country, which is in the middle of the Mediterranean Sea, to its remarkable artistic, monumental, cultural and environmental wealth, as well as to the levels of inflation, which, in the 60' and 70's, were continuously high if compared to the ones recorded in the countries giving rise to the demand flows

Presently, however, the strong home and international competition, the gradual increase in importance of the demand versus the preceding dominion of the supply, the difficulties in keeping the traditional market shares or in acquiring new ones, mark a delay which is due above all to an enterprise culture deep-rooted in traditional holiday patterns, which do not take into account the new and original motives of the demand, trying to meet it only in its final expressions As a consequence of such an approach, the Italian tourist entrepreneurship has emphasized mainly the receptive aspect, thus neglecting the factors connected to the inter mediation, loisirs and complementary services On one hand, this has endangered either the competitiveness of the receptive supply or the technical validity and tourist functionality of the receptive wealth, which has deteriorated and now requires to be urgently restructured and up-dated On the other hand, the management, during a decreasing stage of the demand 'spontaneous flows', has been forced to foster radical rationalization processes and to adopt modern business management techniques.

Moreover, the technological progress is not able to give a positive contribution to the sector productivity because of the nature of the services offered by the receptive enterprises, the ways in which the services are offered and the predominance of man over machine. The economic efficiency and effectiveness of the system can be increased through the improvement of the organization criteria, work methods and management techniques These instruments, however, can be applied to a limited degree because of the poor professionalism of the sector operators and the extreme fragmentation of the business structures, thus stressing the productivity gaps between the tourist industry and the economy remaining divisions.

The structures providing hospitality services form a productive section of remarkable importance which represents a typical example of fragmented industry, as much as it is formed by a myriad of small firms. The big international hotel chains, although present in the sector, cannot affect the management practices of the enterprises belonging to the sector itself. Both the small and medium firms and the large trusts, though facing an international demand, act, in fact, on a market which has the characteristics of a multidomestic sector, since the competition in each country is determined by local factors and is, therefore independent of the competition occurring in other nations. Consequently, they must modify and adapt their own action strategies and policies with reference to the peculiar internal situations, thus developing their own international strategy on the basis of a series of local strategies.

The product offered by the single receptive enterprises[1] is affected, first of all, by the size of the firms structure: the large integrated receptive plants can live completely isolated from the surrounding environment whereas the medium-small ones need a very developed environment, not only from the tourist but also from the social-economic point of view, so that they can make use of all those differenziated and qualified complementary services which a medium-small unit cannot provide.

As it is known, the natural endowment of a country - that is its natural, historical and economic characteristics - influences remarkably the prevailing type of tourism and receptivity, since it decisively affects the tourists' motives underlying their choices.

In fact, the so called 'typological choices', regarding the type of activity that tourists want or must undertake during their transfer (holiday or business, travelling or residential, for a congress or cultural updating) intervene in a continuous evolution, tuned in to the more and more sophisticated needs of the consumers, upstream their locality choices.

In particular, the geographical and cultural features of Italy - more than 7000 km of coast, numberless historical/archaeological, environmental and recreational resources - have always enforced, and continue to do it, a mainly prevailing 'holiday character' to the tourists flows both from home and from abroad; thus justifying, within a study having as its object Italian tourism, a greater interest in the analysis of the 'holiday' strategic area rather than in other specialization typologies of the tourist supply.

On the other hand, every strategic business area of the tourist sector shows specific features and competitive forces. This leads to the impossibility to define behaviour models and management principles having a general value.

The receptive structures of sea-resorts, for example, as well as the resorts which benefit from thermal resources which can be both defined as residential hotels, must meet the needs of a relatively long stay and get organized to face a demand characterized by a strong seasonal concentration. If, in fact, during the high season the market is ruled by the supply - tourists fill up any hotel without being sensible to the characteristics of each one of them - during the low season, the demand, being largely greater than the supply, can turn to those hotels which better meet its expectations[2]. The crucial point, then, finds expression in the plants average utilization increase, with reference, above all, to the low season and taking into account the high season only for the constraints enforced by the congestion and overcrowding phenomena and for the problems caused by supplies and staff availability. It is necessary, therefore, to choose the receptive dimension which ensures the best plants average utilization, even giving up the possibility to meet the high season demand peaks, in order to avoid serious image problems or substantial change in the customers' trend.

The main risk is, in fact, to change completely the environmental characteristics of the area, enforcing on the territory a tourist flow greater than its capacity In this way, the environment resources in the area where the activities take place would be 'exploited' by the tourist operators and the gradual destruction of the environment would inevitably imply a reduction in the area attractiveness, consumptions satisfaction and, therefore, in the development possibilities of the sector itself. For the tourist industry, in fact, the environment is not only the context in which the service is offered, but also an integral part of the service itself, a critical factor in its supplying: the environmental characteristics of an area have a determining influence on the motives of the tourists' choises, since, by giving expression to specific needs and requirements, they launch precise signals that the operators must understand and get done exploiting the natural environment not as a position private income but as a strategic factor.

For this purpose, it is absolutely necessary for the hotels management to become aware of the importance of exploiting and utilizing, for the enterprise's aims, the business opportunities offered by the environment and the territory where they must be integrated

Within the scope of what has been described, we thought it interesting to carry on a survey in one of the Italian areas with the highest tourist inclination such as the Sorrentine-Amalfitane area, which, both for its physical-morphological and economic characteristics, reproposes, in one way and on a smaller scale, the same tourist/receptive structure and the same problems of the Italian seaside tourism.

The hotel undertakings of this area, in fact, - which fall within a very widespread enterprise pattern having handicraft features and being essentially autochthonous - come out from a number of factors among which the locality one is prevailing, their occurrence being allowed by a concomitant presence of factors such as environmental, human and financial resources In this case, the occasion 'tourism' becomes the focal point of the expectations, of the expression of new creative abilities and of personal success.

The main objectives of this study have been the analysis of the organization and management aspects of the receptive enterprises in the Sorrentine-Amalfitane area, the realized and potential strategic actions more suitable for achieving, not only the most profitable results, but above all results which can create a greater financial and seasonal balance between the demand flow and the supply capacity.

The hotel entrepreneurship on the Sorrentine-Amalfitane coast

Survey methods

The quali-quantitative analysis of the tourist/hotel supply on the Sorrentine/Amalfitane coast has been based on a sample survey supported by questionnaires whose structures was broken down into five basic parts, each one aiming at observing the various aspects of the hotel business management and organization.

The first part concerns general and dimensional information and aims at measuring the capacity of the unit considered, whereas the second part regards more specific aspects of the organization and management. Within this scope, we have tried to emphasize the quali-quantitative composition of the staff and the quality of the business relationships inside the firm, without neglecting the characteristics of the commercial and financial functions.

The third part 'Competitiveness determinants' together with the fourth 'Strategies' try to survey the position of the enterprise within the market and the policies and strategies carried out to find the customers and to reduce the gap between the low and high season attendances. The mentioned aspects have been analized either as to the contingent situation or as to the future perspective.

Finally, we thought it appropriate, in a fifth part, to collect information aiming at outlining the entrepreneurial profile of the managers of the single receptive units. The aim of this last survey was to identify their strength and weakness points as well as their ability to seize the opportunities offered by the territorial, morphological and climatic characteristics of the whole surrounding environment.

The sample - at first formed by 220 hotels selected at random and on the basis of their class out of 301 hotels and later reduced because of not reliable questionnaires (with a final representativeness of 64.8 %) - has been further subdivided according to the provinces, since this is the basis for a distinction between the Amalfitane coast, belonging to the Salerno province and the Sorrentine coast, belonging to the Napoli province.

The territory morphology, especially in its complex orohydrographical and coast systems are factors which strongly affect the location, the lay out and the aggregative character of the human settlements.

The Sorrentine versant, including the coast of the Naples gulf and its immediate hilly and piedmont hinterland, consists of a system of terraces and upland plains which have a more or less steep slope; the only examples of real city structures being Sorrento and Vico Equense, the remaining settlements being formed by hamlets spontaneous systems on the hilly territory or in some inlets of the coast. The Amalfitane versant, instead, including the coast of the Salerno gulf and its immediate hinterland, shows a discontinuous and irregular aspect with rocky groups which submerge into the underlying water, and hilly ridges which degrade joltingly towards small coastal resorts. The versant, rocky and inaccessible almost everywhere, is interrupted only by short beaches located at the streams' outlet. The settlement structures of this versant appear much more linked to the natural roughness: the settlement original nuclei are at the outlet of narrow and crooked deep valleys and widen like a fan near the sea, without a preordained plan.

Such physical-morphological configurations have decisively influenced the economic and especially the tourist-receptive development of the area itself: whereas, in fact, sity-six per cent of the whole receptive supply is concentrated on the Sorrentine versant, with an average size for each hotel of fourty-nine rooms, on the Amalfitane coast the average size is twenty-seven rooms.

Moreover, the greater space availability enables the Sorrentine hotels to provide all those services such as sport, recreational, congress and parking areas facilities, which are, on the contrary, very difficult, if not impossible to develop on the Amalfitane versant. The same basic differences are unavoidably reflected also in the flows source affecting the stay length: on both coasts, foreigners come mainly from Great Britain, the United States and France, even if the international tourist phenomenon takes on a decisively greater importance on the Sorrentine coast. The average tourist stay on the Sorrentine coast is longer than the one on the Amalfitane coast, since seventy-four per cent stops for a period ranging from one to two weeks, whereas on the Amalfitane coast sixty-nine per cent stops for a period shorter or, at the most, equal to one week[3]

A first interpretation of the results: the predominant enterprise cultures

From a first quali-quantitative analysis of the questionnaires[4], it has come out that the typical hotel of the Sorrentine-Amalfitane coast is generally of a three stars class[5], without a complex legal procedure (figure 24.1) and with both the managerial and most part of the executive functions carried out by the proprietor and the members of his family[6], in sixty-one per cent of cases the hotel having been inherited from the parents or other relatives.

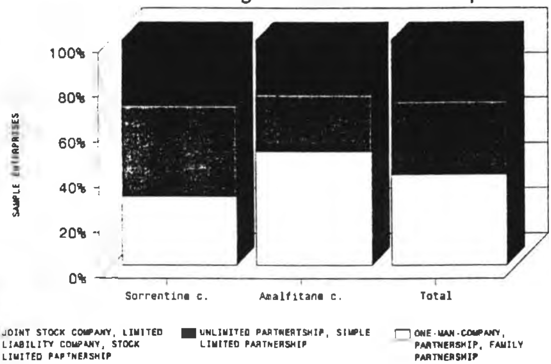


Figure 24.1 Distribution as the legal procedure

It is a one place location structure, open all year long, with the help of the members of the family living there, which employees additional staff only for the summer period. In figures 24.2 and 24.3, concerning the economic results declared by the interviewed enterprises, it is possible to observe how most of them declare a sales revenue ranging from 0 to 500 millions liras and a return lesser than 100 millions, in this way confirming the small and medium sizes of the examined structures. Also the number of the enterprises which have a sales revenue higher than 500 millions and a return higher than 200 millions (25,7%) is, however, remarkable[7].

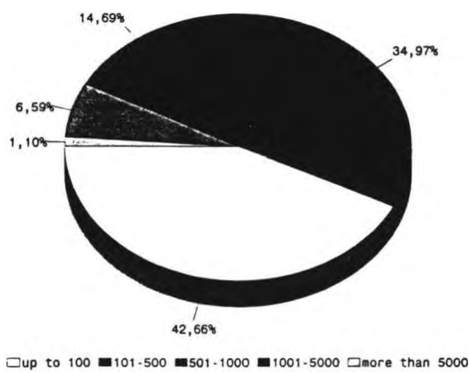


Figure 24.2 Sales revenue of the sample companies (in million of Italian liras)

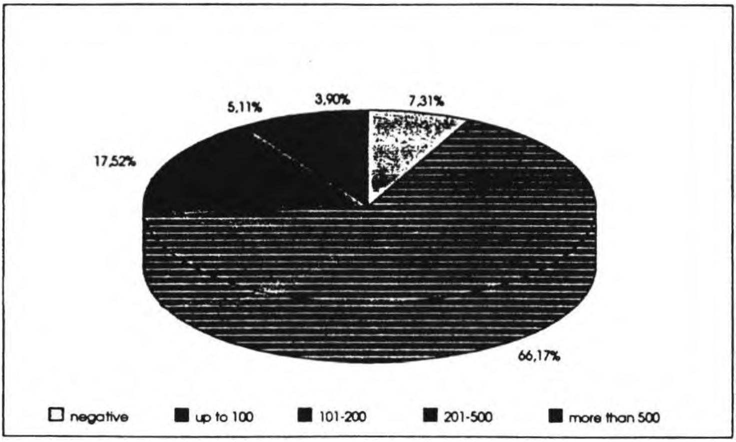


Figure 24.3 Return of the sample companies (in million of Italian liras)

Its customers are 'devoted' ones, with a high coming back percentage[8], mainly coming from the Centre-North of Italy and from abroad, present above all in August, while during the other months the structure is utilized only for the week-ends and by customers coming from Campania itself or neighbouring areas

The management, therefore, is the typical one of the Southern family small enterprise, where the southern entrepreneur-manager - forty-four years old on average, with a diploma (figure 24.4), and co-opted by the father/entrepreneur soon after the end of the Scuola Media studies[9] (first years of secondary school, figure 24.5) - concentrates on himself all the functions, the only proxy accepted being the administrative one which is given to the public accountant, and controls personally the activities, mainly executive, of the other members of the family He follows a decision power distribution pattern connected more to the idea of belonging to the family group than to an idea of professionalism This emphasizes the limits enforced upon the development possibilities by the enterprises, when, on the contrary, it would be necessary a more substantial contribution of highly qualified staff.

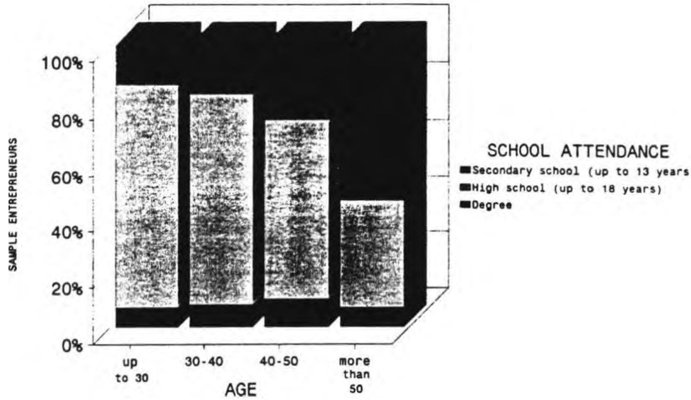


Figure 24.4 Age and cultural development

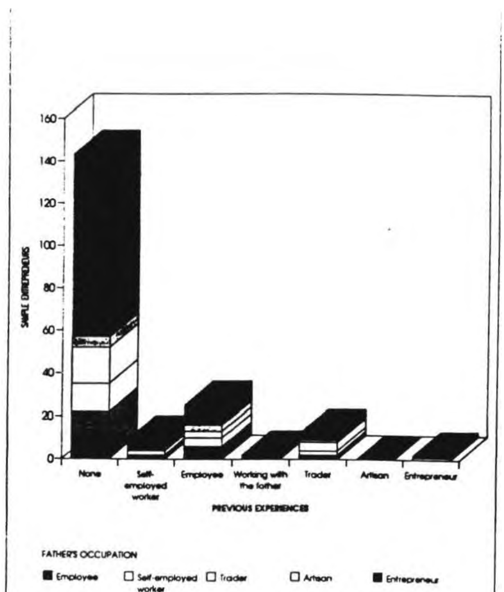


Figure 24.5 Professional and family training

This is exactly the typical figure which confirms the model 'of the southern entrepreneur of small and medium size local units, often manager and only key-actor of his own company., intuitive, individualist and not so much inclined to develop around himself a shared system of values. The intuitive behaviour often makes also the enterprise decisions become devoid of a technical-scientific content, generating a back insecurity which leads to a slackening in the decisions and response times referring to external inducements. The adaptation to the environment is therefore pragmatically determined and is generally realized as a response resolving the problems met in the daily routine[10].

In fact, the most characteristic aspect identified in the analysis of the entrepreneurs is their extreme narrow-mindedness towards the environment: such an attitude has been evaluated through the analysis of the values which lead the sample entrepreneurs in their activity and in the relationships with their public. A contradictory figure emerges, which is extremely kind and friendly with his own guests, but deeply suspicious not only of the other rival entrepreneurs but also of all the other public with which he may come into contact.

The fifty-nine per cent which denounces many difficulties in finding worthy collaborators and the lack of professionalism of the entrepreneurs of the sector, proves to be very narrow-minded towards those same competitors to whom he imputes a lack of co-operation and an individualism of which he is however, the first representative[11].

He is polemic towards the State of which 70,8% of the sample complaints, because it is absent or does not carry out efficacious actions, either for the existing services and infrastructures management, or for the creation of new services, or for a direct intervention supporting and protecting the sector, such as, for example, a suitable promotion abroad of the image 'Italy' and/or financing and direct assistance to the operators.

He believes neither in courses of management specialization, which would be simply a distraction from the daily business activity, nor in training services (figure 24.6), which - theoretical and useless because only the experience got on the field is the means to develop one's own professionalism - sometimes he does not even know the existence of, so that the only learning form accepted is learning by doing.

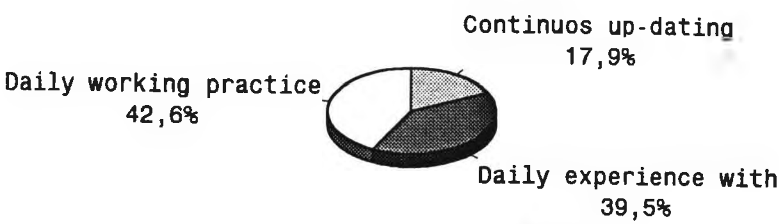


Figure 24.6 Main factors affecting professional success

He is sceptical also about the benefits of intermediary operators, who might enforce their conditions, limiting the enterprise sphere of action. Most hotel-keepers, in fact, though stating that they have entered into an agreement with travel agencies - which often means only that they are irregularly sent explanatory brochure - shave a passive attitude, awaiting the tourist flows and being satisfied with the mediocre results achieved, thanks to an advertising carried out by the customers themselves when they come back to their countries, rather than yielding up part of their own 'sovereignty' to the outside.

These are the short-sighted-inertial entrepreneurs, who represent the so called 'dominant culture ...... a strong culture, which, just for its high cohesion degree cannot but represent a barrier against changes and an obstacle for developing an entrepreneurship more ready to seize the innovatory pushes coming from the environment[12]'.

On the other hand, however, another group emerging within this framework has been noticed; it is twenty per cent of the sample, the so called 'counter-culture', with a degree, preceding work experiences, open to external services, which could be defined 'competitive' especially for what concerns the marketing In fact, besides managing the hotel with managerial criteria, delegating and employing specialized staff, travelling often in search of professional updating chances, this type of entrepreneur tries, more and more, to fill in the seasonal gaps by contacting agencies, tour operators and even actively looking for the co-operation of other hotel-keepers of the area[13].

In general, however, they are persons who have breathed in the family circle a widespread business culture and for whom founding a company - or taking over and transforming the family one - is a very natural life change. They are a consolidated force with new characteristics which make them competitive They learnt the job from their fathers, especially for what concerns the management and market and then studied at the university, thus becoming plaintiffs of an innovatory dynamics

The analysis of the formative characteristics of these young entrepreneurs, who are more open to changes and on whom we can rely to have a modern and dynamic development of the sector, brings to the conclusion that first of all, training services aiming at increasing the enterprise culture are needed On one hand, unfortunately, there is a lack of such services and on the other hand, the entrepreneur is deeply convinced that a medium-small size hotel management does not need a knowledge different from that which is necessary to run a family business so that he thinks he himself has all the knowledge necessary for a successful management of his activity, this bringing to the refusal of further training and school The greatest efforts should be therefore directed towards the achievement of a better balance between the theoretical systematization and the training more strictly connected to the receptive enterprises management problems For the tourist operators training, it is necessary, in fact, to get to a compromise solution, which, though giving a certain preponderance to the theoretical study, does not neglect the managerial and operational aspects, which, without any doubt, have remarkable effects on the development of the business activity.

Vocational schools for the executive staff are not lacking, but on the managerial level, the tourist managers training should be carried out in state or private universities[14], the rate of graduates among the high level tourist managers is however still low, because the university and parauniversity training initiatives carried out in the past have not always completely involved the enterprises of the sector or groups of them. Moreover, a proper state university organization is lacking, but also the private initiatives, which act in a very competitive situation, show the same lack the tourist entrepreneur takes part to university courses or to private initiatives of professional training only now and then and consider them only as an integration of their daily working experience[15].

Conditions for a defensible and lasting development

Some remarks come out from the examination of the winning enterprises, that is that twenty per cent of the sample open to changes, the strength point for relaunching the local tourist activities First of all, since the sector is based on small or very small size enterprises, family run, the instinctive sensitivity, the availability and spontaneous collaboration of the family nucleus together with the friendliness of the human relations should be emphasized in order to achieve favourable competitive positions[16]. The contact between the customers and the front-line hotel staff is, in fact, one of the few data for a qualitative judgement: it personifies the firm and is the only tangible thing, since it is mainly on its basis, together with the structures qualitative level - which clearly appears from the equipment, rooms, hall, salons, type and state of the fittings - that the consumers evaluates the 'quality' of the structure and therefore of the service offered.

These remarks are particularly worthy for the small size businesses, which not only should ensure the staff professionalism and efficiency but should enhance the family atmosphere, so that for the customers staying there, the hotel takes on the function of the family. In this way these enterprises can succeed in creating a style which differentiates the whole concern in the eyes of the customers: it is really a matter of 'industrializing' that 'Italian way of life' which the foreign tourists so much admire and which is known also abroad thanks to the export of Italian hotel managers all over the world.

Considering the small size of the hotel enterprises, the industrialization of the tourist services cannot be completely obtained if the operative units act shut up in their individualism. The agglomeration of small businesses and the birth of interfirm centres, with the possible participation of the public tourist organization, would let the enterprises to outsource that group of services which it is not possible or convenient to realize in the single business scope. They could, in particular, provide services specialized in supplying the receptive businesses, distributing the reservations and offering training and assistance.

The creation of 'pilot receptive plants' serving firms aggregates, would fall within the sphere of a services network supporting the enterprises of the sector and aiming at starting the entrepreneurs vocational training processes and making it easier to introduce new operative technologies and more modern managerial philosophies. Such plants could act as a constant and concrete permanent reference pattern for the operators, simply providing the whole surrounding receptive community with some basic services Alongside with them could come either the activity of the local authorities, with the supplying of some basic general services, or of the local tourist operators syndicate, which could co-ordinate the management policies and start common initiatives concerning the supplying, reservations and marketing.

In short, many small and medium size firms located in the same area and pooled together to manage the sport, recreational and complementary services, could provide the same services at the same prices as a large plant, though preserving their own typically Italian family features, and the human, personal relationships which are peculiar to them

In this way, the ecosystems balances, settlement networks, scenic values, mentality and enterprise cultural atmospheres which can function as external elements that are neither renewable nor reproducible once destroyed, could be fully exploited Some distinctive features of a place, though being there as simple physical or historical-cultural factors, suddenly become also economic values or conditions good enough to produce value. In fact, they develop synergys which must be positively exploited by encouraging and supporting the birth of a qualified entrepreneurs generation, cadres and staff for local tourism, preserving, however, either the medium-small size or the family management, which is comfortable, hospitable and tied to the area tradition but which should be integrated, for the structures, reservations and marketing in a network including all enterprises.

Notes

[1] The tourist-receptive product is a complex product, consisting of all those activities which the tourist does since he leaves his house until he comes back home. The main reason which induces a customer to turn to a hotel or a village, that is his need to stay overnight, forms the so called basic service, which, however, does not justifies the choice of an equipment rather than another. For this decision, instead, the whole 'peripheral' services play an important role because they make it easier to use the basic service or increase its value. Finally, such fundamental services, both basic and peripheral, are strictly connected among each other and form and qualify the so called 'global service', which is worked out and realized to meet the requirements of a specific segment of customers. At the end, the product quality is expressed in a global way because the customer, in judging the service provided, fuses the heterogeneous whole of the fundamental services received into a single service, without going into the details of each service used but expressing, instead, a global satisfaction.

[2] In order to acquire customers, it is very important that the enterprise offers a service which includes not only the several expectations of the customer, thus meeting the minimum characteristics expected by the customer, but which goes beyond what the customer is ready to receive at that moment In this way, the promise made when acquiring the package or receiving the advertising message is exceeded.

[3] D'Anna R., Cappelli C., 1992,

[4] For further details, please see the tables in the Appendix

[5] Following the new classification, confirmed by the 1984 Tourist Law, the present statistical revelations classifies the receptive businesses into:

a) hotels (including motels, hotel villages and hotel-tourist residences) with:
   -five stars luxury and five stars; four stars, three stars, two stars, one star.

b) other receptive structures.

The previous classification of receptive businesses followed other criteria and turned out to be:

a) hotel businesses:
   - luxury hotels, I class, II class, III class, IV class.
   - I, II and III class pensioni (guest-houses)
   - lodging houses.

b) extrahotel businesses

[6] The high percentage of family businesses influences negatively the data concerning the employed staff (table 24.5) since, in most cases, the interviewees answered that they did not consider as employed, and consequently they did not want to declare the family members working in the business activity; eighteen per cent of the interviewees did not even want to answer to this question In many cases, however, data have been completed considering other questions, such as, for example, the number of the co-operating members of the family, thus obtaining a higher degree of representativeness.

[7] Such data, however, should be checked again through the business balance-sheet analysis. The high number of small and medium size firms, mainly organized as partnerships, made it difficult either the direct tracing of these balance-sheets or that through data bank or court.

[8] The repeaters phenomenon - which comes from the security need, the certainty of the services level, the pleasure to meet again friends and to find a family atmosphere without many acclimatization problems and problems of starting new social relatios - affects the whole policy of services and hotel staff as well as that directed to mantain the same customers profile and to continue the relationship with them also outside the holiday period.

[9] In fact, whereas 90.4 % of the sample declares that they have lived in Southern Italy, 61.4 % inherited the business from relatives, 23.3 % bought it from a third party and 15.4 % wass its founder.

[10] The enterprise pattern outlined derives from the research activity developed by Calvelli within the Project 'Structure and Evolution of Italian Economy' by National Research Council (see in particular Calvelli A., 1990).

[11] 46.1 % of the sample declares that they do not think there are perspectives favourable to co-operation forms among operators of the same sector, whereas 29.7 % attributes the failure of any initiative undertaken to the lack of the co-operation spirit among the colleagues.

[12] Calvelli A., 1990.

[13] Syndicates or volunteer hotel chains such as, for example the 'Hotel-keeper Association of the Amalfi Coast' - useful for promotion and advertising actions, centralized reservations, supply assistance and outside management organization - have a strong will to carry out co-operation forms which can contribute either to a reduction of the management costs or to a better distribution of tourists during the periods of the year and in the different receptive structures, or to the overcoming of the administrative, financial and operative deficiencies found during the local or central interventions supporting the sector enterprises activities. Such initiatives, for example, would allow the common realization of those structures, such as indoor common premises; sport, recreational and congress equipment, which otherwise could not be individually prepared because of the space limits enforced by a particular geographical configuration.

[14] Presently, at university level for example, there are in Italy a post-degree specialization course (Bocconi, Milano), the Higher Studies Centre for Tourism in Assisi and various schools with special aims (Rimini, Bologna, Venezia, Trieste, Gorizia, Firenze, Napoli, Messina and others are about to be started).

[15] Among the others, we remember the International School of Tourist Sciences in Rome, the School of Commerce, Tourism and Services in Milan (with the Managerial Training Course on Tourist Disciplines), the Free Faculty of Tourist Sciences in Naples, the Free University of Tourist Sciences in Milan, The Academy of Commerce and Tourism in Trento, the Tourism School in Verona, the International Institute of Tourist Sciences in Florence.

[16] Italian tourism, in fact, supported by natural attractions and one of the best cultural heritage in the world, has always found in the open and friendly character of its people an appeal to international tourist flows. The successful formula is therefore the small size traditional firm which offers to the customer a family, friendly atmosphere and which is, however, managed through innovatory systems, in co-operation, overcoming those individualistic attitudes of the dominant culture which, up to now, have kept it shut up from external novelties

References

Becattini G. (1989), *Modelli locali di sviluppo*, Il Mulino, Bologna

Boniface B. G., Cooper C. P. (1988), *The geography of travel & tourism*, Heinemann, Oxford

Bornet C. (1974), 'Tourisme et environnement: faut-il souhaiter une concentration ou une deconcentration touristique?', *Centre Des Hautes Etudes Touristiques*, Aix - en Provence

Burkart A. J., Medlik S (1981), *Tourism, past present and future*, Heinemann, Oxford

Calvelli A. (1990), 'Profili manageriali e sviluppo di impresa - Le piccole e medie imprese meridionali', *Studi monografici dell'Istituto di Ricerche sulle Attività Terziarie n. 2*, Consiglio Nazionale delle Ricerche, Napoli

Cesdit (1985), 'I dati del turismo in Italia, vol I, Dati nazionali e regionali (1961-83), vol 2, Dati provinciali e comunali (1961-83). *CESDIT*, Milano

Coda V. (1985), 'Entrepreneurial values and entreprise success', *Economia Aziendale*, vol. IV, no. 3, pp. 377-407

Cooper C. P (1991), *Progress in tourism, recreation and hospitality management*, Belhaven Press, vol. 2, London

Crozier M., Normann R. (1990), *L'innovazione nei servizi*, Edizioni Lavoro, Roma

D'Anna R , Cappelli C. (1992), 'Aspetti del comportamento della domanda turistica nella costiera sorrentino-amalfitana: risultati globali di un'indagine sul campo, Atti in via di publicazione del IV Workshop del Campo P. S.', *Clima, Ambiente e Territorio nel Mezzogiorno*, CNR, Lecce

Deal T. E, Kennedy A. A. (1982), *Corporate culture. The rites and rituals of corporate life*, Addison Wesley, Reading Mass

Di Mico A. (1991), 'Recenti evoluzioni dell'imprenditorialità meridionale', *Small Business*, no. 3, Genova

Gambino F. (1978), 'Turismo e sviluppo del Mezzogiorno', *SVIMEZ*, Giuffrè, Milano

Grasso M (1990), 'La produzione turistica: tendenze dell'organizzazione di un mercato in crescita', *Economia e Diritto del Terziario*, no 2, F Angeli, Milano

Isida (1985), *Promozione del turismo e formazione manageriale*, Isida, Palermo

Lorenzoni G., Zanoni A. (1988), *Gli studi sull'imprenditorialità in Italia*, Bulzoni Editore, Roma

Middleton V. T (1988), *Marketing in travel & tourism*, Heinemann, Oxford

Ministero del Turismo e dello Spettacolo (1991), *Quarto rapporto sul turismo italiano*, Mercury, Firenze

Pagani, A (1964), 'La formazione dell'imprenditorialita', *Edizioni di Comunità*, Milano

Pearce D (1981), *Tourist development*, Longman, London

Peroni G. (1988), 'Economia e management delle imprese alberghiere', *Centro Italiano di Studi superiori sul Turismo*, F. Angeli, Milano

Reilly R T. (1988), *Travel and tourism marketing techniques*, Delmar, N Y

Ryan C. (1991), 'Tourism and marketing - a symbiotic relationship?', *Tourism Management*, no. 2

Schein E H. (1984), 'Cultura organizzativa e processi di cambiamento aziendali', *Sviluppo e Organizzazione*, no. 84

Sessa A (1987), 'Megatrends nel turismo internazionale', *Scuola Internazionale di Scienze Turistiche*, Agnesotti, Roma

Sessa A. (1988), 'Il sistema turistico nazionale', *Scuola Internazionale di Scienze Turistiche*, Agnesotti, Roma

Williams A.M., Shaw G. (1991), 'Tourism and economic development. Western European experiences', *Belhaven Press*, London

Appendix

First results of the survey carried out over the period May-October 1990

Table 24.1
Subdivision of the sample hotels examined as to the communes

NAPOLI		%	SALERNO		%
Agerola	2	1,9	Amalfi	12	13,0
Massalubrense	21	20,8	Conca dei Marini	2	2,2
Meta di Sorrento	1	0,0	Furore	1	1,1
Piano di Sorrento	4	3,9	Maiori	13	14,1
Sant'Agnello	12	11,8	Minori	6	6,5
Sorrento	52	50,9	Positano	27	29,3
Vico Equense	1	10,7	Praiano	14	15,2
			Ravello	9	9,8
			Scala	2	2,2
			Vietri sul mare	6	6,5
Total	*103*	*100*		*92*	*100*

Table 24.2
Subdivision of the sample hotels as to the class

	Sorrentine c. %	Amalfitane c. %	Total %
1 star	10,7	18,5	14,3
2 stars	23,7	33,7	28,2
3 stars	46,7	29,3	38,5
4 stars	18,8	15,2	16,9
5 stars	0,1	3,2	2,0
Total	*100*	*100*	*100*

Table 24.3
Size of the sample hotels

	Sorrentine c coast	%	Amalfitane coast	%	Total	%
number of rooms	5.047	66.5	2.539	33,5	7.586	100
average of rooms/hotel	49,0		27,6		38,9	

Table 24.4
Distribution of the sample hotels as to the legal procedure

	Sorrentine c. %	Amalfitane c. %	Total %
Joint-stock company, limited liability company, stock limited partnership	29,4	23,1	26,4
Unlimited partnership, simple limited partnership	39,4	25,3	32,6
One-man company, partnership, family partnership	31,2	51,6	40,9
Total	*100*	*100*	*100*

Table 24.5
Staff of the sample hotels

	Sorrentine c.			Amalfitane c.			Total		
	n.	%	average	n.	%	average	n.	%	average
(Total) staff	1431	50,5	16	1400	49,4	16	2831	100	17
Permanent staff	822	48,7		866	51,3		1688	100	
Seasonal staff	609	53,3		534	46,7		1143	100	

Table 24.6
Opening period of the sample hotels

	Sorrentine c. %	Amalfitane c. %	Total %
4 months	1,0	0,0	0,1
5 months	3,0	0,0	2,1
6 months	4,0	4,4	4,3
7 months	21,2	30,0	25,4
8 months	27,3	11,2	19,8
9 months	4,1	3,4	3,7
10 months	4,1	1,0	2,8
11 months	2,0	0,1	1,1
all year long	33,3	48,9	40,7
Total	*100*	*100*	*100*

Table 24.7
Reception capacity utilization rate of the sample hotels as to the season

-low seasons

% utilization	Sorrentine c %	Amalfitane c %	Total %
0	2,2	1,1	1,7
0-19	17,4	31,0	24,0
20-49	47,8	46,0	46,9
50-99	32,6	19,6	26,2
100	0,0	2,3	1,1
Total	*100*	*100*	*100*

- festivities

0	0,0	0,0	0,0
0-19	4,5	3,4	3,9
20-49	17,0	18,0	17,5
50-99	65,9	37,1	51,4
100	12,5	41,6	27,1
Total	*100*	*100*	*100*

- high season

0	1,0	0,0	0,5
0-19	0,0	1,1	0,1
20-49	0,0	0,0	0,0
50-99	45,4	35,5	40,7
100	53,5	63,3	58,2
Total	*100*	*100*	*100*

Table 24 8
Analysis of the sample hotels business performances

- Sales revenue (in millions of Italian liras)

	Sorrentine	Amalfitane	Total%
up to 100	41,7	43,7	42,7
101-500	37,5	32,2	35,0
501-1000	12,5	17,2	14,7
1001-5000	7,3	5,7	6,6
more than 5000	1,0	1,1	1,1
Total	*100*	*100*	*100*

Return (in millions of Italian liras)

negative	7,6	7,0	7,3
up to 100	66,3	65,9	66,1
101-200	18,5	16,5	17,5
201-500	4,3	5,9	5,1
more than 500	3,3	4,7	3,9
Total	*100*	*100*	*100*

Table 24.9
Sample hotels customers as to their coming back percentage

% coming back	Sorrentine c. %	Amalfitane c. %	Total %
0-19	17,6	3,5	10,7
20-49	30,8	40,7	35,6
50-99	50,6	54,7	52,5
100	1,0	1,1	1,1
Total	*100*	*100*	*100*

Table 24.10
Sample hotels percentage as to the facilities offered

Additional or comforts facilities

	Total of the	sample	of	which	Total
			Sorrentine c.	Amalfitane c	
	n.	%	%	%	%
Drawing room	79	40,5	55,7	44,3	100
Bar	77	39,5	46,8	53,2	100
Air-conditioning	58	29,8	44,8	55,2	100
Heating	156	80,0	53,9	46,1	100
Television	88	45,1	50,0	50,0	100
Wireless radio	32	16,4	52,4	65,6	100
Lift	107	54,9	56,1	43,9	100
Writing room	62	31,8	48,4	51,6	100
Nursery	32	16,4	31,2	68,8	100
Animals admittance	78	40,0	48,7	57,1	100
One's own health service	18	9,2	72,2	27,8	100

General equipment

Catering

Exclusive restaurant	66	33,8	53,1	46,9	100
Mixed restaurant	99	50,8	56,6	43,4	100
Total of restaurants	165	84,6	55,1	44,9	100
Number of covers	21189	100	61,8	38,2	100
Room service	142	72,8	45,8	54,2	100
Banquet service	105	53,8	52,4	47,6	100

Transports

Guarded car park	79	40,5	59,5	40,5	100
Not guarded car park	67	34,4	44,8	55,2	100
Total car park	146	74,9	52,7	47,3	100
Number of car spaces	6156	100	71,5	28,5	100

Cleaning

Clothes internal	74	37,9	39,2	60,8	100
Clothes: external	29	14,9	65,5	34,5	100
Clothes: mixed	36	18,5	63,9	36,1	100
Shoes: mechanical	6	3,0	83,3	16,7	100
Shoes: manual	55	28,2	56,4	43,7	100
Hairdresser's	5	2,6	80,0	20,0	100
Barber's	5	2,6	60,0	40,0	100

Recreational and sports equipment

Bar	166	85,1	53,6	46,4	100
Snack-bar	69	35,4	59,4	40,6	100
Rustic restaurant	23	11,8	43,5	56,5	100
Dance-hall	18	9,2	66,7	33,3	100
Disco	16	8,2	62,5	37,5	100
Living room	122	62,6	50,8	49,2	100
T.V. room	165	84,6	52,7	47,3	100
Children games equipment	21	10,8	76,2	23,8	100
Solarium	94	48,2	43,6	56,4	100
' square metres	17105	100	49,3	50,7	100
Equipped garden	55	28,2	52,8	47,3	100
''square metres	25630	100	75,9	24,1	100
Indoor swimming-pool	3	1,5	66,7	33,3	100
Outdoor swimming-pool	55	28,2	65,5	34,5	100
Tennis courts	10	5,1	60,0	40,0	100
Private beach	35	17,9	28,6	71,5	100
Number of bathing huts	277	-	33,6	66,4	100
Equipped port	7	3,6	42,8	57,2	100
Boats	10	5,1	25,0	75,0	100
Equipped conference room	53	27,2	47,2	52,8	100
Number of seats	11910	-	63,8	36,3	100
Number of rooms	78	-	25,7	74,3	100

Table 24.11
Professional and family training of the sample entrepreneurs

FATHER'S occupation	PREVIOUS EXPERIENCES							
	None	Self-employed worker	Employee	Working with the father	Trader	Artisan	Entrepreneur	Total
Employee	22	2	6	0	2	0	0	32
Self-employed worker	13	2	4	0	2	0	1	22
Trader	17	0	3	0	4	0	0	24
Artisan	5	0	3	0	1	0	0	9
Entrepreneur	86	5	9	2	3	0	1	106
Total	*143*	*9*	*26*	*2*	*12*	*0*	*2*	*193*

Table 24.12
Sample entrepreneurs. Age and cultural development

	Degree	High school (up to 18 years)	Secondary school (up to 13 years)	Total
Less than 30	3	30	5	38
31-40	4	33	7	44
41-50	8	35	15	58
More than 50	5	19	28	52
Total	*20*	*117*	*55*	*192*

Part C

Central and Eastern Europe

25 Germany's assistance in education and training of entrepreneurs and managers from the former USSR

Alexej Schulus

Strategy of Germany's assistance.

Importance of assistance in this area

There are at least three reasons why such assistance is important:

Firstly, this type of assistance requires some activity on behalf of the assisted side. It is actually an assistance stimulating self-assistance. Secondly, this assistance in reality enhances the integration of Russia and other countries of the former USSR into world economy, which can be done only if there are enough specialists trained abroad. Thirdly, to make sure that the changes have become irreversible, to achieve political stability, a critical mass of people, occupying key political and economic positions, capable of new way of thinking and having western experience, are necessary. It is much more profitable for the West (and Germany) to invest hundreds of thousands of marks and dollars in the education of a new generation than to waste billions on another spiral of an arms race in case reforms in the former USSR fail.

Priority countries

It is obvious that Russia and two other major slavic countries - Ukrain and Belorussia,- should be placed on top of the priority list. Cooperation with Baltic states in the area of training managers and entrepreneurs also seems promising Though relatively small in seize, these countries can act as catalysts of new ideas in the relations with their slavic neighbours, as a link between East and West

Types of assistance

There are four major groups of measures to be taken in this area. Firstly, this is training of managers, secondly, - training of entrepreneurs, thirdly, this should be a 'train-the-trainer program', and number four - establishment of new institutes and centers in the former USSR.

Levels of contacts

Cooperation between federal governments of the interested countries ensures an inter-state level for appropriate programs. Besides, cooperation based on inter-regional relations (cooperation, for example, between Lands in Germany and republics or regions in Russia) should be also developed Most important, in my opinion, should be direct links between companies, univercities, funds, associations, etc.

Problems related to training managers

The process of training managers goes through the following 4 major steps:

- selection of students out of a large number of candidates;
- basic training in Russia and other countries of the former USSR,
- educational programs in the Federal Republic of Germany,
- post-educational phase

Selection

Selection already now faces a number of problems. Firstly, major state-run enterprises, rather than small or medium-seize ones are the main source of students Secondly, regretfully, selected candidates are oftenly far from being the best ones Even now only well-connected candidates are selected as students, and decisions as to who in particular should study abroad are made confidentially, behind closed doors. Thirdly, people still have to go through red tape to obtain all necessary documents to go abroad Bureaucratic obstacles are created by both - local officials as well as by German embassy employees.

Basic training

Basic training in Russia and other republics should focus on two priorities: 1. crash course of busuness German, 2 'philosophy' of market economy, it's spirit and underlying principles This second priority has direct bearing on the problem of changing mentality of a manager. Recent polling of managers of 1500 Russian enterprises by the Russian Union of industrialists and entrepreneurs indicates that even now majority of top-level managers believe it 'unethical' to charge their fellow-managers very high prices for their products, to demand immediate payment for sold goods from their colleagues who may be in a difficult financial situation The majority of managers believe that it is still more 'unethical' to dismiss 'their' employees; most of them would like to keep them on the pay-roll at any cost.

Educational programs in Germany

After basic training in Russia most able students should be identified and sent to Germany by a joint German-Russian commission. Various forms of training may be available in this case: week-long seminars, two up to four week seminars, short-term (four up to six weeks) and long-term (six ore more weeks) practical work. 'Learning by doing' should be the main principal of teaching. Practical forms of teaching should be given top priority, in combination, of course, whith a possible interrim exchange of views and summaries.

Post-educational phase

After training in Germany students should take exams and be issued a certain certificate. It is very important that all interested sides - the German and the Russian sides, the student himself - be informed about the results of such examinations and conclusions made by examining boards. To find out of what practical use such training is, it seems plausible to poll full-course graduates three to six months after they complete their courses

Typical problems of entrepreneurs training

Initial phase

The main problem of training entrepreneurs is as follows: when a potential entrepreneur is starting his own business he is usually poor and can not afford taking a course in Western countries. Having set up his own business and accummulated some capital, he is unlikely to leave his business unsupervized for a lengthy period of time. Active involvement of the Union of entrepreneurs of the industry might be a possible solution to this problem The Union could choose potential entrepreneurs and pay for their training in the form of low-interest credits

Training prospects of Russian entrepreneurs in Germany

Seminars by chambers of commerce aimed at people willing to start their own businesses or at beginners would be most attractive for young Russian entrepreneurs Familiarizing practical work in banks might be of great importance Finally, practical work in newly established companies, for instance, in the former GDR, might be the most important part of training in Germany.

Return to Russia

Return to Russia turned out to be a problem since many young people do their best to settle down in FRG Therefore to avoid such abuse of scholarships and charity of the partners, before leaving students should sign a contract stipulating the duration of their stay abroad. If a student fails to comply with such contract provisions, he shall return his scholarship and travel allowance.

'Train-the-trainer' program

Selection

Selection of individuals capable of 'multiplying' western experience acquires special significance. Potential 'multiplyers' should be looked for first of all among young Candidates of science, post-graduate students. Inter-univercity relations in this connection prove to be most important. Publications of young scientists, their reports at international conferences can serve as criteria for selection

Forms of training

Six to twelve month long 'Research Fellowship' programs can be central in training Students can take such courses at various departments of leading univercities and receive financial suppoet from various funds

'Follow-up programs'

'Trainers' should be from time to time invited to seminars in FRG, they should also hold such seminars for new 'multiplyers' in Russia and other republics. Talented 'trainers' then could be invited as 'visiting professors'. It would be also reasonable to continuously provide 'trainers' with new books and technical means for training

26 Entrepreneurship in Russia: On from trading to technology

Roy G. C. Damary

'To achieve success you must buck the system.' Such might have been the motto for managers and entrepreneurs in the Soviet Union, during that seventy-four year 'experiment' which has created business conditions peculiar to Russia and the other inheritor states. Russia may have come back into existence as an independent nation on the 25 December 1991, but the people are the product of the USSR Old habits and old ways of thinking now have to be overcome.

To have some idea of the old Soviet Union, imagine a country in which to fulfil duties as a manager or to develop an independent business the prerequisite skill was to work around or in spite of the system, or even exploit it. Salary differentials in this country were very small and goods in such short supply that the temptation to seek fringe benefits was overwhelming. Only the most dedicated, many would say naive, accepted as reward simple professional satisfaction in a job properly done.

A group of civil servants was meant to manage the economy, meaning they had power over shortages, and the means of allocating and freeing resources They already had many privileges (given to themselves by themselves), including better or top-quality apartments and country homes, a wide choice of food, consumer goods and travel The key for managers to manipulate the system, whether to abuse it or to do a job well, was to further cultivate relationships with these people at all levels

An elaborate game of pretence was played. Official data 'exaggerated'. Managers received raw materials without knowing the source, and delivered goods (to Moscow) without knowing the users. Everyone knew the centrally planned economic system was failing but only the wisest realized the need to develop direct relations with other enterprises.

Open criticism eventually appeared, and the failure of the system recognized publicly, there was an aborted putsch, and, suddenly, it was all over, bar, of course, picking up the pieces.

As in any controlled economy there has always been a black market in the USSR and now in Russia. Prices and salaries matched each other in most basic necessities, but people do get bored with 'basic necessities'. The obvious opportunity: use contacts and kick-backs to siphon off goods from official channels and sell them clandestinely at huge mark-ups. This was once dangerous, but the first steps out of the old, controlled system have actually made black (or grey) marketing easier as private trading is legalized with few questions asked. Even the currency is now convertible, and dollars are available in the street. The dollar has become a parallel currency essential for many luxuries, although most products can be bought for 'wooden money' (as the Russians call the rouble), provided the buyer has enough of it. So another means of making money emerges: bring in goods from abroad, sell them in roubles at astronomical prices then recycle the roubles into dollars and into more goods.

To begin this cycle of trading the requirements are primarily personal contacts with the old civil servants and the skill of knowing just how much is needed to pay them off for supplies, clearance or a cheap bank loan (with interest less than inflation). Once it has started, funds build up very quickly. The main besetting problems are dealing with the 'Mafia', and protecting property and cars against vandalism born of jealousy and the resentment by the great majority, who have neither the fortune nor the skills required to break out of the rouble economy and who are now unable even to provide the 'basic necessities' of which the old system was so proud

No wonder that for most Russians, 'entrepreneur' and 'speculator' are synonymous. The trader/entrepreneur is doing well from the weakness of the economic system but is a long way from the Western ideal of an innovator recognizing and meeting a need, devoting his time and money to his business and eventually reaping the fruits of success. Yet it must be said that the trader of today, the cousin of the Second World War 'spiv' of the black markets, may be helpful, even essential, as a way out of a shortage economy. One day, consumer choice will eventually appear and suppliers will need to market their goods and services, instead of simply 'offering' them.

That day is still distant, partly because some of the conditions taken for granted in the West are not yet in place in Russian society. They include the following:

- basic trust in companies' and individuals' bona fides in business negotiations
- proper contract and property laws with a judicial system available for those cases when things go wrong
- reliable and effective banking services
- reasonably stable currency so that money is worth holding and investing for longer-term reward
- a societal attitude that accepts the idea of business risk, taken within established rules without jealousy of the reward for success, or sanction or rejoicing over failure
- a civil service, including customs officers, not prone to corruption.

Reasons for optimism that these conditions will eventually come are to be found in the numerous managers, engineers and a new type of civil servant who are interested in building businesses like 'proper' western-style entrepreneurs. They are mostly 'simple professionals'. The fine level of mathematics, science and technology in the former Soviet Union is no myth. It was directed, and focused, yet poorly exploited in commercial terms. Still the knowledge was and is there What is more, the authorities are now saying that the managers, scientists and engineers of the state enterprises should be developing new, commercial business within or outside their employers' establishment There is certainly powerful motivation. The former modest but guaranteed standard of living for managers, engineers and scientists has gone and will be replaced only by new activities like consulting and the creation of new businesses.

There is great tolerance in Russia of employees devoting time to developing their own ideas and even to their creating legal entities to commercialize them. Western concepts like 'conflict of interest' have not really emerged in Russia. These too will eventually come.

The managers and technologists able to innovate in product and business terms are not necessarily the independently-minded people we think of as entrepreneurs in the West. Russians are accustomed to functioning within an enterprise. Where work under the old system was largely technical, there was a greater trust among colleagues. Teamwork was and remains the preferred mode of operation. In any case, ideas need resources, and employers can provide these far better than the open market Russians are therefore feeling their way towards methods whereby their innovators in enterprises can develop in an entrepreneurial sense within their company. This is not just reinventing 'intrapreneurship', but seeking original ways for both the employer and the employee to benefit from the creation of new business and possibly new legal entities to benefit from the innovation.

Another dimension of this dynamic situation is that the enterprises themselves are being privatized, usually with initiative from within on the part of managers. Many innovators will find a future within their companies, with themselves owning a significant piece of that company and many shares being held by colleagues Others may enjoy the enhanced capital resources of outside investors and be closer to a traditional western manager than to an entrepreneur.

But the main thrust of this paper is to emphasize that it is inappropriate to make a clear distinction in Russia between emerging entrepreneurs and new-style managers/technologists. Both groups innovate; structures will develop to let the more independent innovator take a step away from his enterprise while somehow counting on it as a partner and participant in the new business. This type of entrepreneur, aiming to build a business on innovation, probably technological innovation, is to be found and nurtured within the state-owned but to-be-privatized enterprises of Russia He is not, like his Western counterpart, to be found in a well-paid job that he is ready to quit to risk going it alone because of personal taste and because he has sufficient funds behind him to do it Russian entrepreneurship is developing <u>within</u> the state enterprises

Amusingly enough, the managers and technologists of these state enterprises, as they adjust to a world of financial analysis, competition and marketing, claim that one of their main qualifications in managerial skills is their ability to survive and even succeed in their own way in the old system!

These innovation-based entrepreneurs, perhaps one should say 'real' entrepreneurs, are highly educated They are well read in western management and technological practice. They have studied western product brochures and even prices Their education includes notions of accounting but of a very limited Soviet type with little emphasis on accruals or on the distinction between owners' equity and debt They will also know some economics, although the way it was taught to them was as a demonstration and explanation of the 'failure' of the capitalist system

The main needs in the fresh education of the new entrepreneur include:

- an understanding of marketing. He has to imagine his country with a surplus of supply, competing to offer the customer a choice. He may find that difficult, but he will be able to appreciate that he must think 'marketing' if he is to do business with the West.
- an appreciation of finance. First he will have to 'repair' his concepts of accounting and then go on to understand the importance of cash and the time value of money as well as the myriad of financial instruments he will eventually have in Russia and which he needs already for international trade.
- a knowledge of negotiation, not in the sense of rivals trying to beat each other, but of a customer, a partner or a supplier seeking to express a mutually rewarding relationship and to confirm the agreement in writing.

One of the dominant needs for entrepreneurs' education in the West which may not apply in Russia: learning how to take a small firm through the stages of growth into a corporation. In principle, Russians already know a fair bit about large organizations!

Specific steps taken by the author towards meeting the needs of the emergent technology-based entrepreneur are:

- a book in Russian published in Nizhny Novgorod by 'Yelin' and entitled 'Finance and the Entrepreneur'
- assistance in preparation of a book and cassettes published by the same firm and designed to teach English in a business setting
- adaptation of the new Webster University 'Entreprenariat' programme to Russian needs in collaboration with a group of Russian enterprises formerly linked to the Soviet Ministry for Raw Materials Supply
- a partner search consultancy service for Russian companies.

Problems abound, the largest being the need for some innovative financing as soon as convertible currency is needed But the desire to learn is present on the Russian side and is helping the most massive turn-round in economic thinking the world has ever seen.

27 Main problems of entrepreneurship in Poland in 1992

Bogdan Piasecki and Anna Rogut

Introduction

One of the first stages in the process of transformations of Poland's economy from a centrally planned to a market economy was the phase which is called 'explosion of entrepreneurship'[1] There sprang up hundreds of thousands of new small firms, whose owners should be equipped with a comprehensive knowledge indispensable for a skilful management of firms in conditions of a market economy as soon as possible This poses a special challenge before the entire Polish system of education Drafting curricula and directions of education of entrepreneurs and cadres employed in the entire organizational infrastructure of SME calls for in-depth studies, which should allow to identify the educational needs of SME, as well as the most effective ways of satisfying them The present article sums up the findings of studies conducted hitherto and the didactic experience gained in this field by The Department of Entrepreneurship and Industrial Policy at The University of Lodz

Scale of the problem

The first major decisions aimed at reforming the centrally planned economy taken already at the beginning of the eighties and eliminating many legal barriers to market entries released quite rapid quantitative growth of small and medium-sized private firms

In the mid-eighties, despite a prevailing economic stagnation the value of products and services supplied by this economic sector to the market was steadily increasing by about eight to twelve per cent annually Thus, it was already in that period that there emerged an urgent need to educate and train management cadres for this sector both for newly set up firms and for longer operating crafts and trade firms, which had survived the period of the centrally planned economy and which, to an increasingly greater extent, had to adapt their style of management to the novel conditions, as it was already during that period that the first symptoms of the market economy began to appear.

At that time, that is in 1986, The Department of Entrepreneurship and Industrial Policy commenced regular educational programmes for managers of small and medium firms, and for different units within the organizational infrastructure of the SME sector. The post- and undergraduate programmes were focused on problems of entrepreneurship and management of small and medium firms Most probably they were the first such programmes at Poland's universities

A major political upheaval occurred in Poland in mid-1989. As a result of the free elections, new democratic groupings linked with the Solidarity movement took over the political power. A period of rapid liberalization of the economic policy accompanied by a period of 'explosion of entrepreneurship' took place. Such period will probably appear in all the countries of Central and Eastern Europe during the initial phase of transformations in the economies of these countries from centrally planned to market economies In the case of Poland, its unquestioned source was the appearance of possibilities of reaping extraordinary profits as a result of deregulation on the entire economic system, administrative inefficiency, inexperienced political and economic elites, disequilibrium in many segments of the market. However, the causes of such 'explosion of entrepreneurship' should be also sought in the releasing of intellectual reserves of the society and in the disclosing of its financial reserves and savings

That period lasted about two years in Poland, that is till mid - 1991 and in was clearly stifled by the exhausting of the society's financial reserves and by intensifying economic problems of the country, a marked drop in the purchasing power of society, and saturation of the market with goods imported from abroad for their most part It caused, however, that already in December 1991 there were operating about 1,500,000 economic units (without agriculture) including, first of all, small and medium private firms (in this number were self-employed persons) This is a level resembling the number of enterprises in the countries with a developed market economy preserving, of course, appropriate proportions due to the level of the country's economic development, its population, etc

This huge army of entrepreneurs - owners and managers of small and medium firms poses an unprecedented challenge before the entire system of education in Poland, whose present state and further development are additionally threatened by the present deep economic crisis, social problems and political instability.

In order to elaborate an appropriate system of education and, to a large extent, to be able to exert an effective influence on the character and directions of assistance provided by various Western centres it would be necessary, first of all, to identify the needs of managers of small and medium firms in Poland and compile their demographic-professional characteristics.

Demographic and professional characteristics of an entrepreneur

In 1991 The Department of Entrepreneurship and Industrial Policy at The University of Lodz launched a series of studies, which aimed, among others, at supplying information about the educational background of the owners-managers of small and medium-sized enterprises in Poland

The data gathered in the course of the studies[2] indicate that today's entrepreneurs are for the most part persons with a higher education (over sixty-four per cent), with forty-two per cent of the respondents being graduates of technical universities. The second biggest group were entrepreneurs with the secondary school educational background (thirteen per cent). More detailed information about educational characteristics of the respondents can be found in table 27 1.

Table 27.1
Educational background of Poland's entrepreneurs in 1992

Educational background	Number of indications	%
Primary school	1	0,3
Basic vocational school	13	4,3
Secondary technical school	73	23,9
General secondary school	22	7,2
Higher technical school	128	42,0
Higher economic school	32	10,5
Higher legal education	19	6,2
Other higher education	17	5,6

Predominance of persons with higher education among entrepreneurs is also confirmed by the surveys of our department:

- in the cities of Lodz and Sieradz (1990), where entrepreneurs with a higher education constituted sixty per cent of the sample[3],
- in the Administrative Province of Lublin (January 1992), where persons with higher education represented eigthy-four per cent of entrepreneurs encompassed by the survey[4].

The limited scope of these surveys does allow to make any generalizations, all the more so as the studies performed by The Chair of Marketing at The University of Lodz show that persons with higher education made up seventy per cent of the owners of service firms set up in 1988, however among the owners of shops opened in 1987 the persons with higher education accounted for only thirty per cent, with the remaining owners being graduates of secondary schools[5].

On the basis of the available data, it is also difficult to draw any conclusions as regards correlations between the educational background of an entrepreneur, the choice of an economic branch, and the concrete object of activity of a firm established by them.

The analysis of entrepreneurs' previous place of work before commencing work in the present firm reveals that the most numerous group of them were persons employed on managerial posts in the socialized sector (41.5 %), followed by persons who had been owners of other private firms earlier (twenty-one per cent), and persons holding lower positions in the socialized economy units previously (19.6 %)[2]. The relevant data concerning previous employment of entrepreneurs can be found in table 27.2

Table 27.2
Previous places of work of entrepreneurs in Poland in 1992

Place of work	Number of indications	%
Owner (co-owner) of another private firm	64	21 0
Agent	12	3.9
Manager in the socialized sector	127	41.5
Manager in the non-socialized sector	23	7 8
Rank and file employee in the socialized sector	60	19.6
Rank and file employee in non - socialized sector	11	3 6
Job abroad	8	2.6

A high share (one-fifth of the sample) of entrepreneurs having some experience in running their own business allows to assume that we are witnessing a steadily expanding process of learning entrepreneurship in Poland. Operating one's own business involves seeking optimal solutions without any certainty that a planned goal will be accomplished. That is connected with adopting a strategy partly based on the trial and error method, which may result in a failure of an entire undertaking. However, persons starting up their business again already possess quite a great deal of experience, which increases their chances for success.

A big number of entrepreneurs employed previously on managerial posts in the socialized sector points at quite common readiness of this category of employees to enter the private sector, which may be both a result of their willingness and internal readiness to set up a private business and of certain negative stimuli inherent in the present environment of a future entrepreneur (they may include an anticipated dismissal or a necessity of abandoning the position held at present). Still it would be necessary to conduct more comprehensive studies in order to determine the motives guiding behaviours of this group of persons.

A predominant share of entrepreneurs employed in the socialized sector previously (over sixty-one per cent of the population under survey) has its explanation in the formal-legal barriers connected with private business start-ups, which existed in Poland till 1988

The results yielded by these studies are similar to those obtained in the cities of Lodz and Sieradz, where almost eighty per cent of the respondents had been employed in the socialized sector directly before launching their own businesses[3], while among persons opening their private shops such origins were pointed at by as many as ninety per cent of the respondents[4]

The research findings presented here do not confirm the phenomenon observed in the Western countries, where a big initiative in starting up private businesses is displayed by former employees of small firms (it could be pointed out here that till 1989 the private sector in Poland had been composed almost solely of such firms) That may be due to many reasons and primarily to the fact that:

- a dynamic expansion of the private sector in recent years has not led as yet to hiring such a big share of labour by private firms as it happens in the Western countries,
- lay-offs taking place at the present time encompass mainly employees of large state-owned enterprises.

As regards the age composition of Polish entrepreneurs the studies carried out by The Department of Entrepreneurship and Industrial Policy show that the owners of private businesses are, as a rule, persons aged thirty to fourty (they represented, for instance, 33.3 per cent of the respondents in the Administrative Province of Lublin[4]).
Simultaneously, the Lublin survey allows to draw a conclusion that the second most numerous age group of entrepreneurs are those between fourty-one and fifty years of age (thirty per cent of the sample)

By comparison, the studies conducted by The Chair of Marketing among owners of private shops in Lodz in 1987 revealed that fourty per cent were persons aged thirty to fourty and thirty per cent those aged fourtyone to fifty[5].

Both the studies of our Department in The Administrative Province of Lublin and those of The Chair of Marketing show that the readiness to set up their own firms has increased, in particular, recently among young people under thirty years of age, who constituted almost fifteen per cent of the owners of firms opened in the Lublin Province between 1989 and 1991, twenty-six per cent of the owners of private shops in Lodz, and twenty-three per cent of the owners of new service firms in Lodz established in 1988.

Motives behind setting up private firms

The insight into motives and aspirations of entrepreneurs seemingly of little importance for educational and training programmes allows, however, to prepare an adequate activity programme useful when translating potential entrepreneurship into concrete undertakings. The awareness of goals guiding people setting up their own firms is important in determining the significance of concrete problems in the entire didactic process, since it may be assumed that it is primarily the motive of setting up a firm and deciding to embark upon an independent economic activity, which will largely determine the direction and mode of searching for information indispensable for conducting such activity.

The entrepreneurs interviewed by The Department of Entrepreneurship and Industrial Policy at The University of Lodz[3] were most often pointing at such motives of starting up businesses as:

- need for self-fulfilment defined as a desire to perform work affording a chance for using one's knowledge and experience, lack of satisfaction with the previous job, lack of possibilities for accomplishing professional ambitions;
- need for creativeness formulated as: an inability to put into practice one's own technical solutions and innovations within the organizational structure of a socialized enterprise;
- need for independence understood as: a desire to abandon bureaucratic structures of a socialized enterprise, a desire to free oneself from futile office work, from a paralysing atmosphere in the previous place of work, internal revolt oriented against remaining in the previous set up,
- need for taking risk and testing oneself, convincing oneself that it is possible to satisfy the needs one experiences;
- material motivation described as a desire to attain desirable material standard allowing to free oneself from material troubles and spend free time as one wishes - necessity of improving material conditions of the family

The questionnaire findings do not allow to draw conclusions concerning the hierarchy of motives all the more so as a decision about setting up a firm is usually accompanied by several reasons operating parallelly

Taking into account, on the one hand, the present economic situation of Poland - particularly the noticeable pauperization of the society, and, on the other hand, a relatively high level of education of a statistical entrepreneur it seems that in the next few years there will be appearing significant differences in motivations of entrepreneurs between Poland and the countries with developed market economies. In as much as in the latter the dominant motives behind establishing one's firm are a desire to gain independence, derive a greater satisfaction from performed work, satisfy the need for creativeness, etc. the economic motive will most probably predominate in Poland. Taking into account the already launched and planned undertakings in the field of restructuring the economy, privatization and reprivatization it seems that a greater importance will be assumed by a motivation ensuing not so much from an individual's internal needs but rather from certain major changes in life and professional situations, with these changes assuming a character of positive or negative stimuli. Already our surveys in 1990[3] revealed that undertaking an independent economic activity in the 80's had been prompted in some cases by an inability to find a job in the socialized sector as a result of one's involvement in the trade union activity in that period However a pilot nature of those surveys caused that the existence of such phenomenon was only signalled Further surveys carried out in 1991[4,6,7] revealed also the presence of other stimuli of a negative character such as:

- anticipating major changes in their professional position by a part of the management in socialized units (recalling from a position held, transfer to a less responsible post, dismissal);
- serious conflicts of interests emerging among partners of earlier established partnerships with limited liability making it necessary for some of them to open a new firm.

The illustrative material collected through the case studies showed that positive stimuli begin to play a little more important role. These are such as:

- succession;
- positive family models and continuation of family traditions;
- persuasion by colleagues, who started up their businesses earlier;
- getting married and opening already jointly with a spouse a private firm expected to lay the foundations for independence and self-sufficiency of a new family,
- emergence of a fashionable trend of establishing one's own firm, being independent and self-sufficient within one's immediate milieu,
- regaining the property (buildings, sites, machines, trade marks) taken over by the State Treasury in the past

Scarcity of collected information does not allow to draw conclusions concerning the frequency with which particular motives occur and the importance of particular groups of needs for the development of entrepreneurship in our country. The findings of our own and other Polish studies indicate, however, that alongside the traditional motivation (discussed above) an increasingly greater role begins to be played (omitting here, of course, a far-reaching liberalization of the economic law) by changes occurring slowly in social awareness, owing to which independence and entrepreneurship assume positive undertones and become desirable qualities.

As it was shown earlier a vast majority of entrepreneurs have a typical technical educational background Meanwhile, the habit or tradition of employing services of specialist consultancy firms are completely missing from the Polish scene Hence it can be feared that the level of the present qualifications possessed by entrepreneurs may prove to be insufficient. At the present time it may not pose any bigger threat as yet, because small and very small firms predominate among all firms classified in the SME sector Still, it can be expected that many private firms will expand and increase the number of employees quite soon, which will inevitably involve changes in the mode of management. At such time a barrier of an entrepreneur's competences may emerge Simultaneously, the present economic situation of Poland, and especially instability of conditions in which firms operate, difficult access to external sources of financing their activity, deteriorating material situation of the society, and so on will all be releasing an orientation at survival among entrepreneurs. Its consequence will be a big demand for an indispensable minimum of knowledge provided this knowledge is helpful in solving a firm's problems rapidly and effectively.

This is confirmed by the findings of the studies conducted by us recently. Seeking an answer to a question about the main barriers to the growth of small and medium firms these studies aimed at collecting also information about the needs of entrepreneurs in the field of training as perceived by them The survey carried out by our Department in the Lodz Region during the first quarter 1992 on a sample of ninety-seven entrepreneurs, owners of small and medium-sized firms (employing from six to 100 persons) allows to identify, according to indications of the respondents, which professional groups should be trained, which forms of training arouse the greatest interest, and which subjects should be given preference. The respondents were allowed to indicate more than one answer in each problem area. The results of the survey are shown in table 27.3.

Table 27.3

Preferred type and form of training for SME employees in the light of a survey carried out in the Lodz region in 1992

	% of indications
- Professional group, which should be encompassed by training:	
a/ persons embarking upon independent economic activity	29
b/ manage	34
c/ shop floor workers in production and services	10
d/ administration employees (accounting, purchasing, legal services, etc.)	21
- Forms of training:	
a/ short courses focused on one area of business (subject)	35
b/ longer courses covering several subjects	6
c/ problem-solving seminars	25
d/ courses lasting one or more semesters	4
e/ schools of business (e.g MBA programme)	15
f/ retraining courses (acquiring new skills and qualifications)	16
g/ others	0
- Subjects of training:	
a/ developing personal characteristics of an entrepreneur	14
b/ socio-technical knowledge useful in operating businesses	16
c/ legal determinants of business start-ups and conducting economic activity (labour law, licensing, etc)	41
d/ accounting	28
e/ corporate finance, credit applications, etc	22
f/ application of civil and criminal law in running a firm (purchase, leasing, and other contracts)	30
g/ techniques and procedures of establishing co-operation with abroad	17
h/ marketing	41

This confirms our suppositions that entrepreneurs expect, first of all or perhaps solely, very practical information, which means they seek instruments that could find immediate application in their firms Thus, they are looking for information, which in conditions of the developed infrastructure of the SME sector is offered, to a big degree, by specialized systems of economic and legal consultancy.

It is quite understandable that educational and training centres are expected to offer programmes allowing small firms to respond successfully to challenges posed by the market and to their rapidly changing environment if we take into account:

- very frequent legislative changes in the sphere regulating the economic activity;
- relatively high costs of consultancy accompanied by poorly developed network and low quality of services rendered by consulting firms;
- very small scale of operations characteristic for a vast majority of Polish firms classified in the SME sector, which hardly justifies forming separate units dealing with administrative-legal services within their organizational structure;
- difficult and unstable economic situation of the country making small firms adopt a strategy oriented rather at survival than growth.

These are the current needs of entrepreneurs in the field of consultancy that most training programmes seek to satisfy offering short, relatively cheap courses for entrepreneurs focused in most cases on a single subject area, which anyway enjoy the greatest popularity.

However, the characteristics of entrepreneurs discussed earlier and our observations seem to indicate that real educational needs are much bigger and they go beyond the narrow circle of purely pragmatic issues. These needs are not articulated too strongly, as entrepreneurs are still partly unaware of them and, in part, they simply do not have the necessary time required to supplement their economic knowledge.

Entrepreneur education programes at the university of Lodz

Seeking to ensure a good educational background of entrepreneurs such educational needs have to be realized first of all through existing universities or newly established schools business.

As it has already been mentioned The Department of Entrepreneurship and Industrial Policy conducts two forms of education and training for the present and future entrepreneurs and managers. One of these forms are one-year post-diploma courses addressed to the present entrepreneurs and the other is a three-semester (one and a half year) undergraduate specialization programme for students of economics in their third and fourth study years.

The participants of the post-diploma courses provided by us for four years now are graduates of economic, law, and primarily technical higher schools being owners and managers of small and medium firms. Tuition fees are charged for this form of training (at the present time the fees paid by one participant amount roughly to 120-130 per cent of mean wage in the national economy). The entire two-semester programme consists of 207 hours grouped within five major subject blocks:

- Fundamentals of small business operation. 28 hours
  Role of SME in economy, ownership structure, tasks and finance of local self-governments, organizational-legal forms of SME.

- Management — 14 hours
  Small firm management, goals and strategy of operation, legal responsibilities of the management.
- Finance and credits — 39 hours
  Legal relations with contracting parties (contracts of lease), legal-economic relations with banks (banking law, credit policy), finance and accounting in small firms, topical tax issues.
- Market — 44 hours
  Legal problems of stocks and bonds market, marketing research, marketing strategy of small firms, goods turnover, trade with abroad.
- Capital — 58 hours
  Privatization forms, money-capital market, valuation of a firm's assets, capital decisions of firms, economic evaluation of a joint-venture, business plan
- Seminars and colloquiums — 24 hours

A significant and specific characteristic of the course is the fact that lectures on law and economics are combined in subject blocks. An important part of all didactic activities are seminars and colloquiums assuming mainly a form of meetings with practitioners running their own firms and providing a convenient platform for discussions on various practical issues of firms.

The experience gained hitherto in running this course allows to formulate two remarks:

- Effectiveness of training measured, among others, by the share of participants completing the whole cycle of learning in the entire number of participants is strongly correlated with the fact that participants cover the costs themselves Among participants whose fees are covered from the Labour Fund (persons sent by the employment offices within the programme of fight against unemployment and retraining of the unemployed) the share of those completing the course is quite insignificant
- If we wished to rely on participants' opinions when putting together the curriculum it would be necessary to build a programme composed of a maximum number of practical guidelines at the cost of general theoretical information, which is expected to fill in the gaps in the background knowledge observed among most participants. Such programme would be also very demanding for the teaching staff.

It has been also for four years now that our Department has been conducting lectures on entrepreneurship and small firm management for the students of The Faculty of Economics and Sociology at The University of Lodz. This is the so-called 'specialization' encompassing a teaching block, which is to prepare graduates not only to run their own firms but also to prepare cadres for the whole organizational infrastructure of SME, that is for the organs of state administration and local self-government dealing with promotion of SME, training of managers and lecturers for this sector, preparing highly qualified personnel for consultancy firms, and so on

The cycle of specialist lectures, within an M A seminar, consists of 207 hours (starting from 1993 it will encompass ca 400 hours) spread over three semesters They include lectures on: start-up processes, corporate accounting for small firms, small business finance, socio-psychological problems of managing small firms, etc It should be noted that we have been observing a growing interest of students in this problem area for some time.

Thus, in as much as in 1987 only eighteen students of the third year decided to choose this specialization their number rose to forty-five in this academic year This seems to be a testimony not only and not so much of a rising standard of our seminars and lectures but rather of a growing interest in problems of entrepreneurship and specific problems of small business management in the Polish society. It is especially the latter problem that attracts the interest of our students, which must be due to the fact that quite a big number of them come from families with longer or shorter traditions in running their own businesses.

Owing to the undergraduate and postgraduate programmes offered by us, as well as our studies conducted for several years now and aimed at evaluating the state of the SME sector we have established quite close relationships with a big group of entrepreneurs relatively well prepared to manage small and medium firms. This has been informal group (club) of entrepreneurship leaders, and its main goal is updating and expanding the knowledge already acquired at the University Our Department organizes cyclical (usually once a month) meetings with eminent scientists and practitioners of economic life for this group of entrepreneurs These meetings aim not only at the enrichment of their knowledge as they also afford an opportunity to establish closer co-operation and social contacts. Obviously, this function should not be performed by the University but by organizations of economic self-government of SME So far, however, the 'formal' organizations of this type operate on a very small scale in Poland. Consequently, it can be expected that 'informal' organizations of this type established at the universities, schools of business etc can speed up the process of forming groups of entrepreneurs, activating the entire SME environment and, among others, popularizing the idea of business education in it.

Summing up

An urgent and perhaps one of fundamental problems determining the success and speed of the transformation process from a centrally-planned to a market economy started in Poland is the problem of creating a modern system of education for entrepreneurs and managers of small and medium firms. The processes already initiated of restructuring, privatization, and reprivatization (which is to be accelerated soon) are to pave they way for attaining by the Polish private sector a scale similar to that in the Western economies. As mainly very small and small firms will be prevailing in the SME sector for a long time, the system of education and training formulated with the needs of SME in mind should go in the direction of training a maximum number of entrepreneurs-managers, and thus this category of people who combine a strategic role of an owner and a tactical role of a manager.

The first Polish schools of business began to appear in the late 80's, and the entire process including the assistance from abroad for this purpose was accelerated in the second half of 1989 following the 2nd Memorandum of Polish Government addressed to the Governments of twenty-four highly developed countries of the world

However, the system of education for the needs of SME is still at the initial stage of its development and it does not encompass big numbers of entrepreneurs as yet. Neither does it make a good use of the huge potential to be found in the Polish universities.

Notes

[1] The concept of the steps in the development of the SME sector in the period of transformation is broadly discussed in: Piasecki (ed.) 'Policy on small and medium-sized enterprises in Central and Eastern European Countries', Part II, Materials of the 19th ISBC in Warsaw, 1992

[2] Piasecki, B. (1991), Rogut, A. *General characteristics of an entrepreneur*, Lodz, (mimeograph)

[3] Lis, J., Piasecki, B and Rogut, A. (1991), *Miejsce i rola przemyslu drobnego w warunkach stabilizacji izmian systemowych gospodarki ze szczególnym uwzglodnieniem aspektów regionalnych* (Place and role of small commodity production in conditions of stabilization and system changes in economy with special reference to regional aspects), Lodz, December (mimeograph)

[4] Piasecki, B. (1992), 'Stan sektora malych i srednich przedsiembiorstw prywatnych w regionie lubelskim (Small and medium private firms in Lublin region)', *collective work edited by B. Piasecki*, Lodz, February

[5] Domanski, T. (1992), *Uwarunkowania tworzenia mamlych przedsiembiorstw* (Determinants of small business start-ups), University of Lodz, Lodz

[6] Stawasz, E. (1992), *List of small business needs and recomendations for socio-economic policy in Lodz region*, Lodz, February

[7] Lis, J., Opawski, K , Piasecki, B and Rogut, A. (1991), *Prawne i pozaprawne bariery powstawania i funkcjonowania mamlych firm* (Legal and extralegal barriers to setting up and fuctioning of small and medium firms in the light of studies), Lodz, December

28 Barriers to enterprise development

Marika Konecna

The role of small enterprises in the economy is unique They represent an element of competition and counter monopolistic tendencies, provide consumers with a broader choice and push prices down Their great flexibility drives them towards innovations and structural changes. Small- and medium-sized enterprises can effectively meet individualized demand and specific needs Due to their flexibility and adaptability to change they are well equipped to deal with market fluctuations The experience of foreign countries has shown that, in the periods of recession, they can partly outbalance the increase of unemployment.

In spite of their flexibility and simple structures the SMEs have a number of disadvantages and have to surmount certain difficulties, such as limited access to capital, higher unit costs due to the fact that the machines and equipment cannot be used to full capacity, they do not enjoy quantity rebates when purchasing materials, the markets on which they operate tend to be small, they cannot rely on their own research and development potential, they have limited means for advertising and promotion and most of them are not properly equipped to engage in foreign trade

For these reasons it is socially desirable to remove the existing barriers to small and medium enterprise development and provide assistance to start-ups and, in general, to enable these enterprises to play their important role in the economy.

Having these objectives in mind, this paper is focused on the analysis of barriers to small enterprise development The intention was to identify those barriers preventing the foundation of these businesses and to propose measures and changes to be made with the view of remedying the situation and the existing shortcomings

Most laws and regulations were discussed and adopted under time pressure on the part of the deputies, many times caused by the respective Government department submitting the bill. This situation makes it impossible to adopt effective measures, during the process of elaboration and discussion of laws in which non-governmental organisations should participate. Until principles are adopted which would provide for direct participation of those directly involved, it would be hardly possible to positively influence the elaboration and consideration of legislation otherwise than by indirect pressures, lobbying on the part of occupational organisations and similar means Perhaps the greatest shortcoming in the sphere of legislation is the non-adoption of the bill concerning economic chambers still in May 1992 in the Czech Republic.

Entrepreneurial associations offered a negative evaluation to the adoption of the small enterprise /Gewerbe-/ regulation before the adoption of the law concerning Chambers. In addition, its late adoption towards the end of the year has made it impossible to implement the law in an uniform, immediate and effective manner There exist also a number of observations concerning the law on small enterprises, both on the part of entrepreneurs and officials of the respective State administration. Entrepreneurial associations have proposed the law no. 455/91 to be amended.

Furthermore, the law of the National Council of the Czech Republic concerning the promotion of small- and medium-sized enterprises was still in May 1992 missing. This law is expected to create a suitable legislative and institutional background for the promotion of small enterprises. Also, there is no long-term framework for the SMEs development which would include the necessary stability of the respective tools. The volume of resources which have been made available for these purposes are totally inadequate and this constitutes a further problem. The means obtained by the National Property Fund from private entrepreneurs in the framework of the 'small privatisation' in auctions of small business units - plant and equipment, inventories and, exceptionally, land - have been used for the purposes of cancelling debts of State enterprises and recapitalisation of banks, rather than for the promotion of small enterprise development.

Further laws and regulations were adopted the implementation of which has had a negative impact on entrepreneurs and their activities. To mention an example, it is not possible to initiate legal proceedings in cases of damaging or stealing the property which is subject to restitution, or the new law on bookkeeping which imposes mandatory double entry bookkeeping even on physical persons registered in the company register - what in a number of cases means that the entrepreneur in question has to hire an accountant. The amended ordinance concerning administrative charges has raised the charge for registration of entrepreneurial activities from 120 CKR (for all registered activities) to 1,OOO CKR for each activity and 2,OOO CKR for each licensed activity (concession based activity).

Too often, the representatives of individual ministries and other bodies of the State Administration cannot be denied positive attitudes and efforts to seek solutions of partial problems concerning the promotion of small- and medium-sized enterprises To mention a positive example, good results have been achieved during the implementation of the Active Employment Policy Programme in the area of small enterprise development that was prepared by the Federal Ministry of Labour and Social Affairs All three Ministries of Economy have developed programmes for the promotion of entrepreneurial activities However, it has been pointed out that, failing the fundamental legislative basis and a comprehensive system, these activities represent only partial and often uncoordinated solutions.

Measures to be taken:

- to follow up the process of legislation and promote the adoption of laws designed to create a legal framework for small private businesses
- to offer comments to all new legislation taking account of its impact on the small enterprises in respect of costs involved or administrative requirements.
- to contribute to the creation of a favourable climate in the area of the State administration and to co-ordinate measures designed to promote small enterprise development.

Further barriers to small enterprise development can be found in the banking and credit areas. The availability of financial and investment resources is a fundamental condition for proper functioning of the market economy In no Western economy there is such a scarcity of private business capital as in the CSFR. During the last forty years it has not been possible to accumulate sufficient savings and family property. Consequently, the banking system should be in a position to supply the missing resources An analysis of the banking activities has revealed a number of shortcomings

The first part of them is connected with procedural and operational issues. The centrally planned economy abolished competition in the sphere of banking and a gap was created separating the Czechoslovak and the foreign banking systems. At the present time there are 48 banking institutions in the CSFR plus a number of subsidiaries of foreign banks. In spite of the relatively high number of both domestic and foreign banks, there is practically little competition on the banking market. There are problems in the payment system, in particular in respect of payments to and from abroad which can be attributed, in most cases, to the lack of technical facilities. The solution of these difficulties, which are subject to frequent criticism on the part of entrepreneurs, is already under way The installation and operation of a new clearing centre of the Czechoslovak State Bank and linking up of a substantial number of banks on the SWIP system is in a final stage

The second group of serious problems is connected with credits. Substantial problems are connected with the required guarantees for the awarded loans. It has been suggested that business can be started only by an real estate owner, as most banks require guarantees of this type. It is therefore highly desirable to establish a guarantee fund which would provide access to credit which would thus become available to those entrepreneurs who have nothing to offer as guarantee. In spite of the fact that banks charge mostly lower rates of interest, the current rate of around fourteen per cent seems to be excessive for most small- and medium-sized businesses and the impact of the debt service is substantial. This is further aggravated by the existing debt structure Banks prefer short and medium-term loans. In a great majority of cases they are unwilling to grant credits for a longer period of time than four years For the purchase of plant and equipment and other fixed assets such period is not sufficient and, in addition to that, fundamental rules for financing are not taken account of, as long-term investments should not be covered by medium-term loans This situation has already had negative impact in the framework of small privatisation It could have a marked adverse effect during the big privatisation by making it impossible for private entrepreneurs to participate and to submit 'competitive' privatisation projects. The value of equity transferred during this process is very high and privatisation cannot take effect without granting loans for periods of ten to fifteen years and awarding deferment of debt service payments for a number of years

In addition to the above mentioned problem - that of non-availability of long-term credits, short-term credits in the form of current account credits with an overdraft possibility, are also not available In this case, credit is taken when needed, up to the agreed amount.

Interest is paid on the debit balance. At the present time it is necessary to keep on renewing short-term credits, to continue elaborating cash-flow forecasts, to submit new guarantees, including entries in land registers, etc.

Measures to be taken:

- establishment of a guarantee fund (in addition to the existing Guarantee bank) which would provide partial guarantees for loans awarded to small- and medium-sized enterprises.
- to conceive a special type of long-term credits to respond to the need of submitting competitive privatisation projects by small- and medium-sized enterprises.
- when assuming guarantees is respect of credits, the Guarantee fund and the Guarantee bank should give preference to long-term credits granted to small- and medium-sized enterprises.
- to introduce short-term current account credits and overdrafts.
- to introduce factoring for receivables of small- and medium-sized enterprises, protecting them against insolvency, in particular in cases of secondary insolvency of their clients.

In respect of the fiscal area it is necessary to have regard to the fact that 1992 is the last year of the old tax system before transformation. The present support offered to small- and medium-sized enterprises in this area concerned especially the income tax (note. the present version of individual 'income' tax) i.e. deferment of tax payments, higher depreciation. Positive evaluation can be given to the general income tax reliefs in cases where certain conditions have been fulfilled. Therefore, the objective to be pursued is to maintain these concessions and to include in the proposed tax law such provisions and changes which would remedy the present shortcomings and inconsistencies.

Another shortcoming is to be emphasized: the excessive tax burden of small- and medium-sized enterprises in respect of the 50 per cent wage-volume tax and 55 per cent profit tax Double taxation of business company partners also has a negative impact. In most foreign countries are unlimited companies (partnerships) taxed in such a manner that income before tax, of the respective part of it, is included in the partners' tax assessment basis. This will be changed in new tax system. Business companies are sometimes taxed according to their size - small- and medium-sized companies enjoy lower rates (e.g small companies in Great Britain pay 25 per cent and other companies 36 per cent of income tax). In the CSFR small enterprises enjoy no special treatment. All companies will have income tax rate 45 per cent.

A possible positive contribution would be to enable businesses and companies to offset former losses in the tax returns concerning profit taxes. The present provisions of the income tax regulations do not allow these deductions

In many cases entrepreneurs are affected by local charges and similar dues They are different in nature (dislocation charge, charge for using public space, charge on spirits, charge on advertising space) and the total amount to be paid can be quite substantial

In respect of the value-added tax, which is very complicated, it would be convenient to set, in conformity with the guidelines of the European Communities, a sufficiently high ceiling on sales (6 Mil Kcs). Small enterprises with sales below this level would not be required to pay this tax.

The present system of information provided to tax payers is also a cause of concern The tax office does not offer any interpretation of the law. Certain interpretations made by the Ministry of Finance are made for 'internal ' purposes only Other information is provided in 'official ' language and cannot be understood by general public. In connection with the new tax system it would be desirable to start, sufficiently in advance, an information campaign and make sure that persons who would be called upon to collect taxes, would also be available to tax payers with advice how to meet their obligations (if only for one day a week after working hours).

Measures to be taken:

- To adopt provisions in the new tax law enabling to accumulate profit and strengthen the owners financial means in small- and medium-sized enterprises, in addition to that providing for tax reliefs in cases of using profit for investment.
- To prepare a broad information and popular education campaign in connection with the implementation of the new tax laws.
- To establish a special 'information service ' whereby selected officials would reply to telephone calls concerning tax laws One day a week tax offices would introduce a visitors' days to be reserved for personal contacts.

After adoption of the law concerning tax consultancy, persons engaging in this profession should be properly trained and informed against payment of the corresponding fee.

Entrepreneurship education more and more is considered to be important for the success of the businesses But the previous educational system and management training in the CSFR does not content this objectives for small- and medium-sized enterprises. Nowadays some universities and training institutions try to change this situation, but there are not many experience It is necessary set up changes of educational system in CSFR, first of all in the field of business education and management training for SMEs. The aims are identifying of qualification requirements and needs, of education objectives for the construction of appropriate curriculums and changes in educational system and management training University of Economics in Prague want develop modern educational methods for future managers of SMEs.

29 Characteristics of entrepreneurship in the post-socialist economy (Slovenia) and the demand for entrepreneurship education

Maks Tajnikar

Introduction

Entrepreneurship education is without doubt vitally important for the promotion of entrepreneurship in any country which would like to enhance the building of small and middle size companies. This is especially true of all the states which are being established these days as a result of the collapse of the former socialist countries. Economic restructuring and reconstruction of these countries is, what I shall show later on the case of Slovenia, to a large extent related to the rapid growth of small and middle size companies. In spite of the fact that the forms and the contents of entrepreneurship education have already been completely defined in the countries where entrepreneurship is already well established and can as such serve as a model to former socialist countries, the specific characteristics of the entrepreneurial environment in these countries dictate certain specific features and give characteristic accents to the training of entrepreneurs

In this paper, I shall use the example of Slovenia to show the specifics of the entrepreneurial environment in former socialist countries, the influence of the environment on the making of entrepreneurs and on the building of small and middle size companies, and I shall also point out the specific characteristics of the education of entrepreneurs, which are conditioned by the environment in which the education is implemented Since Slovenia has in a short period of time made considerable progress in this field, its experience may be of some interest to other countries with a much less developed small business sector.

Characteristics of entrepreneurship and the small business sector in the Republic of Slovenia

The paradox of the development of small businesses in Slovenia

In Slovenia, same as in many other East European countries, the share of small businesses in the structure of the economy lags far behind the share the small businesses have in the developed countries Small companies, those with up to fifty employees, employ 6.1 per cent of all the employed by the Slovenian economy. Since the legally independent sector of craftsmen and artisans which employs up to ten per cent of all the employed in the economy also comes under the roof of small businesses, we may well assume that about sixteen to seventee per cent of all the employed in the economy are employed in the small business sector. Although in some communities the share of small businesses may reach almost eighty per cent, which is the case in the developed economies, the share of small businesses is on average much smaller than the share they get in the developed economies

The result of this lack of small businesses is first, that there is very little competition in the sectors which are as a rule dominated by small businesses, and second, that new small businesses are easily established within this particular sector. The current practice proves this. During the two year period, since the liberalization of the legislation on the establishment of companies, the share of small businesses (its number) has increased to almost ninety-five per cent. The number of small businesses that have closed down is small, and it is estimated, that more than fifty per cent of the newly established companies will live longer than 5 years

The paradox of this boom is that the profitability of these small businesses is extremely low. It is true that 6.1 per cent of the employees employed in the small businesses (with fewer than fifty employees) create 13.3 per cent of the turnover and thirty-eight per cent of accumulation and this means that the efficiency of small businesses is extremely high, but the rates of return are on average very low (no exact figures are available) and probably do not amount to one quarter of the bank interest rate on long-term investments (approx. 15 per cent). This is an exceptional result especially because we know that there is little competition in this sector as a result of economic recession. In Slovenia, the growth rate of investments, however, has been negative for some years now.

The effects of the situation are evident and are reflected in the structure of the newly established small businesses Low profitability of small businesses and the increasing number of such businesses show that the majority of these businesses have been started for reasons of self-employment and in the fields whose main characteristic is low capital intensity In the first case the founders of the business do not determine their return with regard to the capital they have invested into the business but with regard to the pay they get as its employees. Their primary objective when starting up their companies are high salaries (the result is high efficiency of the business and empirical research can prove it). Low capital intensity is also a result of such an objective, i.e. self-employment, and also explains why most of the new businesses are started in the field of services and trade Among the one hundred biggest private companies in Slovenia, just a few are manufacturing units, the majority of them are wholesale businesses (import/export included). This can by no means be considered a negative trend, especially not since the share that the manufacturing industry has in the Slovenian economy is far too large.

Weaknesses of sole proprietorship

As there is very little competition, the two main characteristics of the newly founded businesses are self-employment and rather primitive management. The fundamental knowledge which an entrepreneur has in order to start a business is basically 'technological'. The majority of these businesses have been created as a result of the transfer of certain business functions (sales and purchase) from the socially owned companies to private hands. Businesses have been started without any business plans or clearly defined goals These businesses are run without any specific knowledge on marketing, personnel or finance. The inclination to low capital intensiveness does not encourage the building of such small businesses which would use high technology. The companies which have been established as such are manufacturing units or firms performing simple extra jobs (i.e. assembling in computer operations) on the imported, technologically more demanding, assembly parts There is practically no correlation between small businesses and innovation.

Most of these new entrepreneurs believe that their companies will continue to be 'mice'. The newly started small businesses do not possess enough strength to turn into 'gazelles'. Companies with potential for growth are established within the crafts sector. In the past craftsmen were those who were the only private owners of capital So activities performed within the crafts sector have by far outgrown the craftsmanship in the real sense of the world (manual work, low capital intensiveness, guild organization, etc.) Administrative restrictions have allowed for the growth of non-craft activities within this sector By spreading private sector all over the economic sector we see that the strongest companies are built out of this crafts sector. But the owners of these companies, who are not used to managing a big expanding company, bring as a rule these companies into difficulties. Lack of professional knowledge on marketing, above all export marketing, organization and finance, along with some subjective mistakes made by the owners have brought very many companies, especially those with potential to grow, to the edge of bankruptcy.

Entrepreneurship as a form of restructuring of socially owned companies

A special aspect of building up small businesses is connected to the restructuring of the socially owned sector of the economy. Two things are characteristic of the process. The first is that as a result of restructuring there is a large number of redundant workers. It is not difficult to find potential entrepreneurs among them. They have ideas which could not have been realized in socially owned companies Financial support, to which the redundant workers are entitled, has made it possible for them to start businesses. Since financial assistance is conditioned and dictates the way in which companies are constituted (i.e. training, preparation of business plans), the methods used in setting up these companies can serve as school examples.

Small businesses are also started as a result of decentralization of big socially owned companies The exclusively generic method of expansion of socially owned companies has caused that many companies have simply grown too big, and looking at it from the point of view of competition there is no logic in their structure. The market forces them into decentralization This is how small enterprises are started. This process is very important as companies are formed on the principles of entrepreneurship (in a well organized way, employing external advisers), and enjoy all the characteristics of modern entrepreneurship. Since these enterprises are started by larger groups of entrepreneurs, who use the capital of socially owned companies, their main objective is not self-employment, and are in most cases highly developed manufacturing units with a potential to grow. Privatization of the socially owned economy shall enhance the formation of such businesses.

Special forms of entrepreneurship

Small businesses are started as a result of some special entrepreneurial projects too. Such forms of entrepreneurship are to be found in rural areas, among women, within the framework of certain company incubator programmes, etc. Although these are the most precious forms of entrepreneurial activity, the number of businesses which are set up as a result of such an activity is negligible.

Training of entrepreneurs as a response to the conditions existing in Slovenia

Marketing entrepreneurship training

The prime time for small businesses started about five years ago within the framework of the socially owned sector. Entrepreneurship found support in the former government, and was, at least in Slovenia, closely related to the formation of the first consultancy firms established in the field of small businesses. These consultancy firms were the first to realize that there was a need for education of entrepreneurs. At first individual firms offered their own training programmes which soon turned out to be inefficient and of poor quality. In 1989 the idea of an entrepreneurship training centre was born. The centre was opened a year later (Gea College Ljubljana) as an independent entrepreneurial project. Although some people, above all those from abroad, were of the opinion that such a school could not be set up as a profit centre, it so happened that at the beginning the demand was such that gave the needed impetus to the school. Contrary to all expectations the school, at least at the beginning, proved to be a successful entrepreneurial project The programmes which sold best at that time were (marketing and finance in a small business, incubators, entrepreneurship, how to set up a small enterprise, how to make a small enterprise profitable) those which now after two years of running can simply not be sold any more. At the beginning the customers were individuals who had professional interest in entrepreneurship (advisers and established entrepreneurs) and not the newly made entrepreneurs. Socially owned companies with their training funds were also good customers. Since they made up a relatively small group, the demand dropped quickly. Today we know that the school with its programmes tailored to individual customers can not live.

But this does not mean that there is no need for such forms of entrepreneurship education. As I have already mentioned the newly formed entrepreneurs in the private sector lack the professional knowledge needed for running businesses. The same is true of those entrepreneurs who have become entrepreneurs as socially owned companies were decentralized (lack of professional entrepreneurial knowledge is least manifested by this group), the same problem is faced by craftsmen when they become entrepreneurs All these categories of entrepreneurs do not come to school as an organized group, because the tuition fee amounting to approximately two monthly salaries per a training programme is simply too high for them. If such a school is to prosper, two conditions have to be met. First, the government should subsidize the programmes by covering the fixed costs of the school, and the variable costs are covered by the fee. And second, certain institutions in the society should start promoting entrepreneurship, and the education of future entrepreneurs should become part of their activities. Government funds for the unemployed, funds for promotion of regional development, agriculture, science and technology as well as banks, bigger companies, insurance agencies, economic and branch associations, venture funds, etc could start to advance such activities Banks and venture funds are those which could require more knowledge and better managerial behaviour of entrepreneurs (i.e on international marketing, on financing of small companies, on how to prepare a business plan, cash-flow analysis, etc.) This is why the training programmes on marketing, personnel, finance, quality, computers in small businesses simply can not be sold without the assistance of the before mentioned institutions. Sometimes banks deny loans to entrepreneurs who have not been properly trained Banks themselves cover part of the training costs, and the rest is covered by the entrepreneur. Branch and professional associations are those which could introduce training in the fields which the school is in no position to develop. Some very successful training courses have been prepared in this way: a course on how to set up a small shop, a tourist agency, a garage, or a private doctor's surgery.

There is no point in turning the school into a state school Since its primary objective is to train people to become entrepreneurs, the school itself should keep its entrepreneurial character and its competitiveness It would be positive if the government could support a bit more such schools, then there would be more competition But our experience shows that small schools cannot hold out against competition and they are not able to maintain the high training standards.

Special needs for training and structural changes

Judging by what has been said so far and the problems presented, we can see that the need for various forms of entrepreneurship education depends largely on the position which entrepreneurship enjoys in the economy. Training programmes related to the restructuring of socially owned companies can serve as a typical example of such interdependence. Already with the first steps taken along the privatization road, at the time when privatization was not yet legally regulated, the demand for training programmes on entrepreneurship and its incubators suddenly increased. Socially owned companies had enough money to afford to pay for these training courses, and individuals saw in these programmes their way to privatizing parts of socially owned companies. Once the possibilities were limited by law, the demand for such training courses dropped drastically. It is expected that the Law on Privatization shall be a turning point. The government will favour such training programmes which will mean a better and a more professional process of privatization of socially owned companies

The banking system and the training programmes organized for the unemployed during which business plans are developed have been given special emphasis by the government which requires business plans for any financial resources that might be granted to help start up businesses This high quality programme has turned out to be very much in demand among the institutional and individual customers alike During the training process entrepreneurs study and work on their own projects and thus succeed in understanding them better. Unfortunately, only the programme, the duration of which is five weekends, is the one which is financially acceptable to entrepreneurs. In order to carry out the programme a large number of experienced teachers is needed but these are not easy to get. 'Training the trainers' is a precondition for successful education of entrepreneurs Only the government with the assistance of foreign experts and schools may help us overcome this drawback in a relatively short time.

By the disintegration of the craftsmen sector into companies, also expanding ones, and into a real crafts sector a number of problems appear, which are related to training The trade and crafts sector asks for the rehabilitation of vocational schools, which are not solely directed to the acquisition of trade and craftsmanship knowledge, but are in themselves part of preserving the cultural heritage of the country. The new entrepreneurs need in addition to the traditional knowledge also more and more managerial knowledge (on venture management)

This proves that promotion of entrepreneurship requires training of special groups for special purposes. At least at the beginning these groups can only be trained abroad. Later it may be possible that the trainers who have been trained abroad will start training others. A very successful educational pattern of training the trainers could be established if foreign consultancy groups included Slovenian trainers in the consultancy programmes, which they usually refuse to do. Such groups usually specialize in turn around management for small companies, regional restructuring, incubators, entrepreneurship in public services sector, and public administration, entrepreneurship, etc. With the development of post graduate courses, above all in co-operation with similar foreign programmes, some specialists could also be trained in Slovenia.

Trainers and entrepreneurs

One of the major problems related to the education of entrepreneurs are trainers. Although most of the trainers in Slovenia are graduates of the economics faculties, it has been proved that university professors are not the best trainers of entrepreneurs They do not have practical experience and put too much emphasis on theory An entrepreneur does not need to know all the alternative methods used in strategic planning. It is more important and practical for him to get trained in the one method which the trainer finds most appropriate for his particular business. Entrepreneurs who join training courses are not a homogenous group, their formal education varies. Our opinion is that it is not necessary for the university to get involved in the basic education of entrepreneurs because its additional programmes are to a large extent post graduate ones. People from practice cannot easily be made trainers since as a rule they are not familiar with the theoretic side of the subjects. Our experience tells us that the best trainers are those who have obtained their doctorate degrees, have at least for a few years worked in small businesses as consultants, and have broadened their knowledge through contacts abroad Foreigners can help us fill this gap But such help may turn out to be inefficient if foreign and local experts do not work together on a programme An entire programme could hardly be run in a foreign language But in this way we could at least get our first trainers of future trainers. Universities should also join such projects It is widely known that university study programmes barely knew the word entrepreneur until recently. It is only now that the first graduate programme on entrepreneurship is being designed.

Entrepreneurial literature

One of the major problems of entrepreneurial training is literature. Theoretical course books cannot be used for this purpose since most entrepreneurs are not inclined to serious study. Numerous foreign books cannot be used due to language barriers, foreign legislature and other country specific characteristics. So a simple translation does not suffice Foreign course books should be adopted to our local conditions. This is a demanding job and only the best teachers in entrepreneurial education can do it Although there are many papers in the field of entrepreneurship in our country, a real entrepreneurship manual has not yet been written.

Training for the entrepreneurship culture

In Slovenia we have established that the most important aspect of promotion of entrepreneurship is the creation of entrepreneurship culture This also takes special training The entrepreneurial forums were introduced to Slovenia about a year and a half ago in order to promote business plan preparation, and public presentations of business projects. Various activities have taken place to promote entrepreneurship Business plans have become a trade mark of entrepreneurship and also fall into this category. All these forms have been tried out in Slovenia. Two years ago not even the biggest banks knew what a business plan was. Today every businessman knows about it. The public is increasingly aware of the important role of the small business sector. The government has played a major role in this, because it has paid special attention to this sector in its programme.

Nevertheless the profit motive has not yet been fully accepted by the society as a normal element and the principal motive of any economic activity. Entrepreneurs are often accused of being speculators, company liquidation is still considered to be a socially very negative act. A change in the public opinion could be the result of a campaign which would inform people about entrepreneurship and enhance entrepreneurship education and thus finally convince those who still do not believe in it.

30 Profile of the Bulgarian entrepreneur

Plamen Patschev

Introduction

The establishment of private firms in Bulgaria was legally regulated for the first time since the Second World War in 1989. However, the real 'boom' started a year later - in 1990, when the country launched the radical social, political and economic changes The number of private firms registered has surpassed 220,000 as data for December 1991 show (The respective numbers for December 1989 and December 1990 are 13,066 and 54,160.)

In Bulgaria and in the other countries of the former Eastern bloc being in a transition period towards market economy, the private sector is expected to activate the entrepreneurial initiative and help the overcoming of the economic crisis typical for the transition period.

Having in mind the nowadays realities in Bulgaria, it would be expedient to analyze the characteristic features of the entrepreneur from three points of view - as a 'socialist' person in a transition period, as a universal figure in the establishment and the development of the private firm and as a combination of the first two with typical for the Balkans socio-psychological features. Dwelling upon this problem we will take as evidence and will comment on the results of the two most representative empirical studies on this matter in Bulgaria[1]. It must be pointed out in the beginning that relatively young people with good education get oriented towards the private sector Three-fourth of all entrepreneurs are less than forty-five years old (three-fifth are younger than forty), 72 per cent of them having secondary professional or higher education About one-third of them have passed different forms of additional training during the previous period, specializations abroad included. One-fifth of the new Bulgarian entrepreneurs are women.

The entrepreneur during the transition from socialism to market economy

The lack of possibilities for performing personal business activity and creative spirit during the previous period has placed its serious consequences on the Bulgarian. A number of peculiarities of the transition period must also be taken into consideration when analyzing the tasks of the entrepreneurship; if not directly dependent, they are strongly influenced by the system of values, thinking and behaviour of the individual in the conditions of the state economy.

That is why it is quite natural that 85 per cent of the entrepreneurs come from the state sector and only 12.4 per cent are students, pensioners, people with free professions or unemployed. The spheres of activities of the newly-established private firms correspond to the professional experience of their founders in the state sector. More than 70 per cent of the interviewees proclaim their present private activity to be identical or at least similar to the job they have had at the state-owned enterprise. The greater part of the interviewees possess managerial experience - more than 55 per cent have been managers of 10 to 300 subordinates at their previous employment in the state-owned enterprises. 65 per cent confess that before starting their private business they have changed their employment in one to three state-owned enterprises.

A specific feature of the new Bulgarian entrepreneur is their desire to combine for a certain period of time their work at the state-owned enterprise with their private activities. More than half of the interviewees answer that officially or secretly they have worked in both firms for a period of five to twelve months. However, more than half of them think that this fact is harmful for the activity of the private firm. What is more - 71.3 per cent share the opinion that under a 'liberal' legal regime allowing for a parallel employment in the two sectors they would have preferred to be in the private. These data show that this 'combination' of activities is a result of the fact that only 44 per cent of the interviewees can earn the living of their families from the income of the private firm.

However, the socialist way of thinking still predominates in the opinions of the Bulgarian entrepreneurs about the economic policy of the state. Thus, 80 per cent of them approve the control over the salaries and wages, 62 per cent do not object to government subsidies granted to the enterprises in difficult financial situation. 68 per cent want the state to intervene for the limitation of the differences in the incomes of the rich and the poor, etc. One third would approve the state to decide with branches of the economy are suitable for private firms' operation and which are not. This attitude towards the state is somehow strange since only 15.6 per cent of the entrepreneurs have been helped by the state for the establishment of their firm. It is evident that the stereotypes in the thinking of the past favouring the state leadership role in the economy have not been overcome.

This metamorphosis in the consciousness of the individual can be best illustrated from economic point of view by one of the answers according to which 68 per cent prefer 'average income at moderate level of risk'.

We can conclude that the entrepreneur of the transition is still strongly influenced by the system of values and the way of thinking typical for the former period of central planning and socialist public life. On the one hand, this fact probably maintains the socio-ethical equality during the change of the system (i. e. the entrepreneur tries to keep the balance between his direct business interests and the imaginary criteria for 'public welfare'). On the other hand, the previous practices of the so-called 'double standards' (bureaucracy, corruption in the state and party structures), the lessons taught by the shadow economy' and the ambition to liquidate the equality inherited from socialism can stimulate the appearance of some negative tendencies that could hamper the establishment of correct business relations having in mind some socio-psychological and national features of the Bulgarian.

Although of 'socialist type', but still entrepreneur

The theoretical problems of the entrepreneurship are not developed in Bulgaria but there is no clear cut opinion on this matter in the developed market economies as well. That is why we will treat the entrepreneur here not only as a founder of a private firm but also as a person with specific business and psycho-physical features - readiness to undertake risk, innovative thinking, capacity for hard work for the prosperity of his firm, etc. Below we will analyze the founders of private firms in Bulgaria on the basis of these criteria, thought to be typical for Western entrepreneurs as well.

The predominant motive of the new entrepreneur for entering the world of business is the desire to be independent (93 per cent of all answers). Second comes his wish to demonstrate his business and professional qualities in front of his relatives, the society and himself (87.2 per cent) The higher income ranks third (80 4 per cent), then contribution for the revival of the national economy (77.6 per cent) and winning popularity and respect (60.5 per cent) follow.

The share of those entrepreneurs who believe that the hard work is the prerequisite for every success is rather high (76 6 per cent), while only 6.1 per cent think that good luck and wide acquaintances are more important. The opinion that business needs courage (60.3 per cent) predominates compared to the opinion that 'sharp changes in life must be avoided' (24.6 per cent).

The Bulgarian entrepreneur is rather optimistic about his business (61 per cent); 21.1 per cent are more reserved as to the success of their business.

The attitude of the interviewees towards new ideas is very interesting. It is strange that the numbers of entrepreneurs relying more on innovation in business and those sticking to the traditional values are almost equal: 38.6 per cent and 39.4 per cent respectively. The second group believes that 'good ideas are those proven by the time' These two groups are balanced by 22 per cent of the interviewees who cannot define their opinion in favour of innovation or tradition.

The share of those relying on competition to stimulate the business initiative and private activity is extremely high - 92.7 per cent. The general optimism is dominant in the consciousness of the Bulgarian entrepreneur (60.3 per cent) as well as the positive expectations for the future of their firms (60.9 per cent). About 80 per cent of the interviewees declare good health and socio-physical balance.

Drawing the final conclusion based on the above results we can point out the availability of features typical for the Western entrepreneurs - independence and the professional manifestation, high working capacity and vigour, risk undertaking, courage for fight with the competition, etc Naturally, this similarity must pass the correction of the above mentioned 'socialist' remnants in the way of thinking and style of life taking into consideration some of the specific Balkan features of the Bulgarian entrepreneur

Entrepreneurship and balkan spirit

This conclusion is probably rather curious but it hides some definite risks. This is mainly due to the existence of two opposite opinions about the Bulgarians in the country as well as in the neighbouring countries and in other European countries. The first opinion shared in the national folklore and in the present public life states that 'the Bulgarian is a man of enterprise'. However, a lot of people find a certain conservatism and inertness in this small Slavonic nation on the Balkans that place a negative sign on its entrepreneurial spirit

The data of the two studies do not give explicit proofs in favour of or against these two hypotheses.

Both questionnaires contain 'provocative' questions aiming at finding the attitude of the new Bulgarian entrepreneurs towards phenomena outside the norms of the so-called business ethics The answers show that 15.5 per cent are inclined to buy goods which they know in advance to be stolen. About 32 per cent consider hiding of incomes from the tax authorities quite acceptable. All 100 per cent approve entirely or in certain cases driving after drinking of alcohol which is a rather discouraging result. Their statement that the maintenance of love affairs is not to be considered a misbehaviour (61 3 per cent) is rather confusing, having in mind the traditionally strict understanding for marriage fidelity on the Balkans

So, it is evident that the new Bulgarian entrepreneurs do not implement in the practice the business people they have proclaimed to follow The results of the interview show that about 90 per cent consider themselves loyal and fair in their business relations 92 per cent think that they have a good sense of humour, 77 per cent consider themselves particularly enterprising and 66 per cent share the opinion that their partners have high esteem for them However, if we compare this part of the answers, especially regarding 'honesty' (90 per cent) and the declared aptitude to concealing taxes or unfaithfulness in marriage (32 per cent and 61.3 per cent, respectively) we will feel the disparity.

The fact that 30 - 40 per cent of the interviewees cannot give proper assessment of their business and themselves also adds to this disparity. Thus, almost 17 per cent confess that they do not know their production process in details and 51.5 per cent consider the insufficient knowledge of foreign languages to be their primary shortcoming

Another contradiction is contained in the political commitment which 70 per cent of the entrepreneurs declare. But only 0.5 per cent of them are ready to give financial support to the parties they sympathize with On the other hand, the Bulgarian entrepreneurs are ready to grant financial support to students (34.1 per cent), orphans (32.2 per cent), poor people (21.8 per cent), research (10.4 per cent) and culture (1.1 per cent).

The definition of 'poverty' which the entrepreneurs give is also very curious. According to their opinion to be poor means 'to possess only the most needed things, no luxury' (35.8 per cent), 'to possess only means for the provision of food' (38.3 per cent) and 'to rely on outside help for the provision of the living' (26 per cent)

The feature of the socio-psychological portrait of the Bulgarian entrepreneur that bothers me most is his devotion to 'ideas proven by the time' (39.4 per cent) as compared to 38.6 per cent aptitude to support 'innovation' and 22 per cent hesitating between the two options.

So, the development of a reliable picture of the entrepreneurial spirit of the Bulgarians needs new methodology. It is the opinion of the author that national mentality is as important to the entrepreneurship as the availability (or lack) of industrial culture and traditions, political and economic stability, legal framework for the economic activities, control and standards, etc. By the time normal and comparable with Western standards conditions for the development of entrepreneurship are established in Bulgaria, there will always exist the temptation to explain different aspects of the entrepreneurial activity from the point of view of national peculiarities

However, this conclusion cannot replace the feeling that the aptitude of Bulgarian entrepreneurs to abuse law, their behaviour which is a mix of stereotypes of the epoch of 'primary accumulation of capital' and of ready-make humanity of the socialism are result of their Balkan mentality.

Conclusion

The dynamic changes taking place in Eastern Europe will affect the entrepreneurial activity in this region further and further It is expected that the category 'entrepreneur' will acquire the shape and the characteristics it has in Western countries.

Let us hope that the delay in the entrepreneurial activity and the rudimentary entrepreneurial spirit of the individual, left after the collapse of the system of central planning, will be overcome in due course through the instruments of internal stimuli of the countries in question and through a larger Western support and collaboration.

Notes

1 The first study was effected in June - July 1991 by a research team of academic researchers and includes more than 1,000 small private firms in all sectors, evenly distributed throughout the territory of the country /for details see: Bulgarian Quarterly, 3/1991, pp. 131-143

The results from the second study have not been officially published yet. It is carried out by a joint team of academic researchers and practitioners during the second half of the same year. It is based on a detailed questionnaire sent to more than 1,500 private firms. Only 400 answers are considered valid. The author has participated as a representative of the Bulgarian Industrial Association. He thanks the other members of the team: Dr. Roumen Avramov, Dr. Svilen Purvulov, Dr. Ivalio Parchev, Mrs Bistra Anachkova, Mrs. Svetlana Todorova, as well as Prof. Derek Jones from the USA for their collaboration.

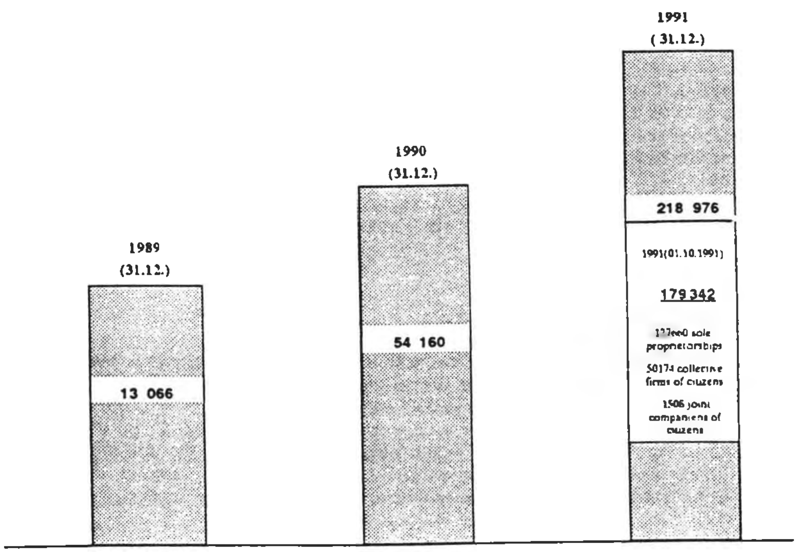


Figure 30 1 Growth of the number of Bulgarian private companies for the period 1989-91

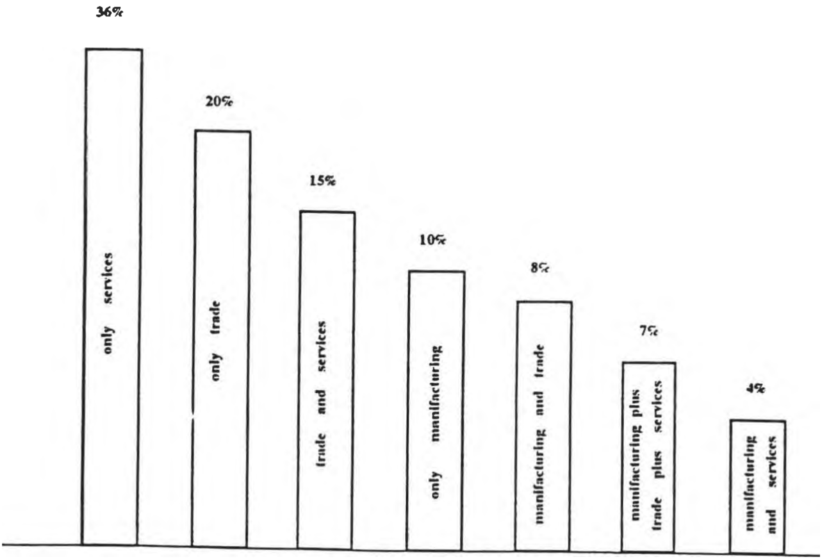


Figure 30.2 Subject of activities of the private companies

93% have up to 10 employees	37.2%	The owner is the only employee
	44.8%	up to 5 employees
	11.0%	6 - 10 employees
4.8% have up to 30 employees	3.1%	11 - 15 employees
	1.3%	16 - 25 employees
	0.4%	26 - 30 employees
2.2% have more than 31 employees	0.9%	31 - 50 employees
	0.5%	51 - 75 employees
	0.8%	more than 75 employees

Figure 30 3 Number of employed and size of the companies

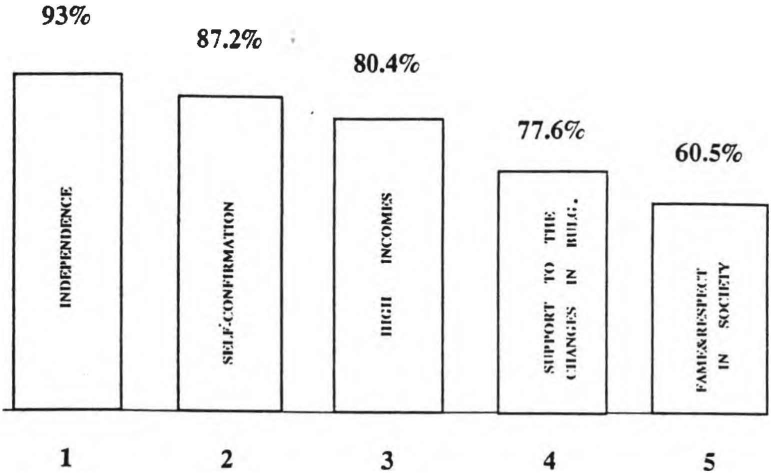


Figure 30.4 Motives of the entrepreneurs for starting their own business

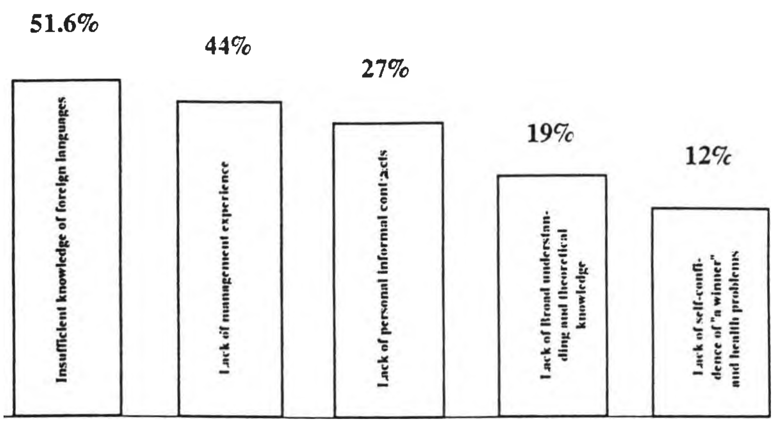


Figure 30.5 How the Bulgarian entrepreneur sees his shortcomings

31 Research, training and experiences in the Hungarian entrepreneurial sector

Peter Szirmai

The historical background

Despite the fact that entrepreneurial activity has been legalized in Hungary since 1 January 1982, from the early sixties and seventies we have had several cases of running these kinds of businesses. During that period we called it second form of economy or shadow (grey) economy A number of Hungarians had besides their legal job in the state monopolized economy, a second, unregistered source of income An example can be shown here regarding a fifteen year plan (1960-75) of housing, with an aim of building one million new flats, with two-thirds of state and one-third of private construction industry participation. This plan has been implemented and around 1,030,000 flats have been built The rating of construction industry has, however, been reversed to one-third to two-thirds in favour of the private industry. In other words this means that from Monday to Friday large construction companies built 340,000 - 350,000 flats and on the weekends, by means of obsolete technology, Hungarians built 600,000 - 690,000 thbusand flats

When the political leadership permitted private business in 1982, they believed nothing would really change except for legalizing the shadow economy.

The beginning of change

In 1982 from one month to another thousands of new private businesses have been founded. Obviously, it was still a very underdeveloped form of activity with an unestablished tradition. Nevertheless, during one year 12,000 new ventures have been registered, most with poor accountancy knowledge and no legal experience

This means a deficit economy has been operating in Eastern Europe in the eighties where almost every alternative business found its position easily and no substantial efforts had to be made in order to become successful. Besides this most of the business has been focused as trade and services, where minimal capital was required.

In 1982/83 the government did not permit entrepreneurial associations and it was only later that the Hungarian Chamber of Commerce was founded together with a small business department.

On training needs

The entrepreneurial boom has been placed in Hungary in 1982-85 when more than 30,000 private businesses were registered On the basis of the above mentioned facts the most urgent need has been registered in acquiring the knowledge of legal regulations. In this area the Small Business Department (SBD) has been organizing highly successful meetings with governmental representations for entrepreneurs on a monthly basis. The employees of the Ministries of Social Welfare, Finance and Justice also had the opportunity to study the opinions of private business people

These meetings have been of growing importance due to the fact that the government after 1985 became scared of the influence of private entrepreneurs Therefore, it tried its best to create obstacles to development of business through new taxes and punishment measures. Therefore, during 1985-88 the development stagnated, and by the end of 1988 the businesses registered reached only 32,000. Nevertheless, in 1989 the Entrepreneurial Law introduction has been a positive motivational factor for private business. The SBD has also struggled politically and opposed the government's negative measures. In 1988 the SBD succeeded in converting into the newly established independent organisation, the National Association of Entrepreneurs (VOSZ)

Starting again

From 1988 the VOSZ began to actively support business ventures in Hungary on a national basic. If had fought the counter-entrepreneurial efforts by all available means, including a 1-year TV media advertizement campaign titled 'Here is the entrepreneur - we need him'.

The VOSZ also participated as one of the founders in the Hungarian Entrepreneurship Development Fund and the SEED Foundation, too It has been the author and one of the sponsors of the TV series titled 'The School of Business', which will be shown in twenty parts in the near future on Hungarian TV Such organisations and ventures were designed to run all those functions VOSZ could not carry out directly, being an association with very specific purposes. The VOSZ also founded a Scientific Committee consisting of renowned advisors participating in the development of the VOSZ's economic policy. In 1990 the Budapest University of Economics and VOSZ have created the Small Business Research Group at the University.

Small Business Research Group Activity

The SBRG actively participates in the reform of the University's educational system In addition to conducting research, it has announced an entrepreneurial specialisation including the subjects of business development, business planning, marketing, joint-venture organisations and business ethics, etc.

The educational materials have been prepared on the basis of active research in such areas as Hungarian entrepreneurial credit system analysis. This involved interviewing sixteen banks conducting such services in Hungary.

Furthermore, the SBRG developed a 4-year program for secondary school education. It also participates in conducting entrepreneurial activities in Hungary. It also actively takes part in training entrepreneurs through external organisations such as the International Management Center and the Social and General Sciences University

The future

The transformation of political power and the new legal regulations have increased the number of private businesses to 60,000 companies in 1991 with approximately 350,000 individual entrepreneurs

Nevertheless, it is clear that there is no efficient way of getting out of the present crisis except for private business support and an accelerated privatisation process. (The VOSZ always wanted to achieve a substantial ratio of private property in the national economy).

One of the most important tasks is to introduce business education in Hungary with entrepreneurial elements as a compulsory module at the secondary school level This is also where SBRG plays an active role. Besides this, a need is increasing for acquiring the experiences and knowledge of international marketing, law and management methods and styles This will increase in the near future

There is an important role played by the support from the PHARE and TEMPUS program offices, and hopefully, this co-operation will serve the interests of the transition to market economy

32 The main directions of businessmen training and improvement of their professional skills

Romualdas Razauskas and Gediminas Samuolis

Introduction

Business Management is not only a science it is an art, too. The authors of the article aim at investigating of the first part of this statement, that is to try to evaluate the structure of business science. This question is of great practical value as it helps to settle the programmes for businessmen training and improvement of their skill as well as the work of the educational system in that field.

What are we going to teach at business schools? What sort of education should a business manager have? Well-known Polish expert in management E Staroschiak used to ironize: '...you can't do well without a multiplication table, but this doesn't mean you should teach managers arithmetics '

Going along with the statement above, it is very important to define what we are going to teach future managers and what kind of knowledge they should get It is an urging question for Eastern European Countries, Baltic States included, which are going to enter Central and Eastern European markets On the other hand it is very important, because today almost ninety-five per cent of our production managers are technical engineers.

Business today requires broadminded people with wide range of knowledge It comes from the analyses of qualification structure and work of western managers. The authors of the article would like to speak about five different levels of businessmen education The professional skills of a businessman can be evaluated according to these levels.

On the first level we usually judge about manager's competence in running the engineering and technological process of the object A manager cannot start or run a business if he does not know the peculiarities of a technological process This is a very important matter especially for production, process of production and marketing managers.

A businessman ought to know economics very well. Economic thinking and consciousness are very important criteria to every manager. These are the indispensable conditions for his work in this field. Economic thinking as well as economic consciousness and economic actions are not formed by ourselves. These things could be only developed by economic education, and this allows us to speak about the second educational level of a businessman.

Nearly everything men do in the modern world is helped or even controlled by computers. Various systems of automisation as well as means of control and information processing give a great help to a manager in his work. For example Japanese have already started to introduce a programme, which is called 'informational society'. This is inevitable for us, too And this is the third educational level for a businessman.

A manager does not have first-hand contacts with the process of production. In a well-balanced system a manager takes part in the process of production through his subordinates. This is why the management of production and business, as a matter of fact, is the management of people. A manager is supposed to know people, their interests and needs. They should study the psychology of collective work and social psychology.

Business management is not only a science, it is an art, too. A manager is supposed to have good manners and to be a person of culture. He should get a moral training, too.

And the fifth level concerns ecology. With the intensification and increase of industrialisation in modern world very many environmental - ecological problems have arisen. First at all those, who operate production, ought to feel the need for reducing negative human impacts such as conteination of atmosphere, ground waters, vail erosion, pesticide transfere to the waters, etc. Every manager should understand the importance of ecological problems. Businessmen training and improvement of these skills programme ought to teach future managers ecological culture, too, this should be one of the most important points of the whole business training programme.

These are the main things which predetermine any businessmen's high professional skills.

33 A summary of workshop on Eastern Europe

Roy G.C. Damary and Marika Konecna

Participants in the workshop contributed views from Hungary, Czechoslovakia and Bulgaria, together with Western experience on entrepreneurship covering Poland and Russia Eastern Europe is in such a particular situation that transfer of the Western experience in entrepreneurship or application of experience in the Third World of entrepreneurship requires the greatest care Moreover, there are differences from country to country, although they can be divided into two main groups (plus a third with Eastern Germany, which represents a unique case not treated in this workshop):

- the central European group of Hungary, Poland and Czechoslovakia In these countries there has been a longer experience of privatizing the economy. Hungary was the first to take the route towards privatization having begun in the 1970's; Poland began its transformation in the 1980's and only Czechoslovakia is relatively slow with the change to a free market economy beginning only after the Revolution in November 1989. Nevertheless, all three countries have memories of the pre-communist era and have had a long tradition of an industrial and entrepreneurial base before the second World War. To some extent, Hungary and Poland have been privileged in terms of attention and investment from the West This group of three have fairly well established laws on ownership and business and there is considerable tolerance among the population for entrepreneurs and entrepreneurial success In all three, however, private firms are still very tiny, although there are many thousands of them

- the Eastern European group consisting of Russia and the other former Soviet Republics, together with Bulgaria and Romania In these countries there is a widespread anti-entrepreneurial attitude expressed in jealousy, mistrust, vandalism of the signs of wealth and a perceived equivalence between entrepreneurship and black marketeering All three countries have an inadequate legal framework for private enterprise. In the former Soviet Union it has been so long since private enterprise was allowed that there is no 'folk memory' left Bulgaria does not have an historical industrial base As for Romania, it was so totally destroyed by the Ceausescu regime, that the economy has to be built on ruins.

Another contrast between group 1 and group 2 is the level of salaries and costs There is already an order of magnitude between Western salaries and those of the Central European group, but there is a further order of magnitude between that group and Eastern Europe Experiences in all these countries have reflected cross-cultural conflicts between Westerners and the beneficiaries of training in entrepreneurship. Westerners tend to carry an attitude of 'we know best' and the cost and salary differentials easily give rise to perceived exploitation Generally the East Europeans are suspicious of motives of West Europeans offering entrepreneurship training

The demand in Eastern/Central Europe for entrepreneurship training is huge So far it has been offered by Westerners on the basis of philanthropy linked to the business hope that 'taking a position today will put one in a strong position when the economies turn round'. Westerners in the workshop hoped that an economic motive in their seeking to assist Eastern/Central Europe could be perceived as honourable. In current circumstances, anyone wishing to offer courses in Eastern/Central Europe has to be quite entrepreneurial to find an economic basis for them in the first place!

Despite the reservations expressed above, most Eastern/Central European countries look to the West, particularly the United States but also Western Europe, for their models in establishing a free enterprise economy and entrepreneurship. In fact they look so much to the West, they tend to ignore each other They also feel that any training in entrepreneurship must have Western instructors or at least a strong Western component both because local instructors are not available in sufficient numbers and because they lack credibility in the eyes of the students. An additional complication in Eastern/Central Europe is that people who have become successful entrepreneurs are unwilling to share their experience publicly.

Although all participants perceive entrepreneurship as an important component of economic reform in Eastern/Central Europe, it must be remembered that the governments are so preoccupied with the theme of privatisation, i. e. disposing of the state-owned enterprises, that they give relatively little attention to creating laws and an environment to encourage the creation of new ventures.

The workshop recommendations included:

- that Eastern European countries share their experience in entrepreneurship education, particularly on the basis of relations between their universities. They could even share policy development entrepreneurship between universities so as better to advise their governments
- local partners for all entrepreneurship training are needed for the translation and adaptation of Western material
- a Western partner involved in training entrepreneurs should be willing to let go over time and allow courses to be run by local instructors The idea was mooted of an

'alter-ego', a local instructor who could follow the course of a Western instructor and eventually take it over
- that preference be given to private or non-governmental institutions as partners for training entrepreneurs, including universities. Government blessing is very helpful, but being too closely dependent on a given government runs the risk of losing all influence if a government changes
- that counselling to entrepreneurs needs to be a component added to formal training
- that cultural differences have to be accepted in the short run and worked within as culture change will take at least a generation. Nevertheless, without an attempt now to change the culture will not change even within a generation.

Part D

Africa

34 Entrepreneurship education in a new South Africa

Akbar A. I. Bootha

It is no secret that South African politics is going through a drastic change - an exciting change for many, uncertainty for some, high expectations for others. We are going through a revolution which we are conscious and aware of. The fact that we are conscious and aware of the profound changes taking place in South Africa, provides us with a unique opportunity to manage these changes

The discussion amongst all people in our country these days is the changing South Africa. The question which preoccupies everybody is: 'What is going to happen after the change?'

These changes will certainly have an impact on business. International focus is on us. Sanctions are falling away, world markets are opening up for our products. Our entrepreneurs will now have to compete with international businessmen, both internally and externally.

Against this background the following question arises. Are South Africans sufficiently equipped with the necessary skills and expertise to take on this world competition?

My answer to this question is yes, some South Africans are, but the majority are not. Our black population has not been equipped with the necessary skills to enter any competition. Management education has been the right and privilege of those belonging to the white race

Although the system of apartheid is falling away, the policy will leave legacies of economic and educational inequalities among the different races of the country. Apartheid gave rise to gross inequalities of skills between the white and black members of the society. Entrepreneurship education has been almost non existent in the black community, which represents the majority of the South African population.

I believe that a democratic culture in a new South Africa with equal business opportunities for all cannot be a reality until steps are taken to narrow the gap created by the discriminatory system of the past

My discussion is organized as follows:

I will first deal with the background to apartheid education and its effect on black entrepreneurship in South Africa.

Thereafter I will briefly touch on entrepreneurship education in South Africa and point out its limitations in narrowing the gap created by apartheid

Finally, I will propose certain possible solutions to problems created by the past structures.

The policy of the present government regarding black education was illustrated by Dr. H.F. Verwoerd in Parliament in 1953. 'Education must train and teach people in accordance with their opportunities in life, in accordance to the sphere in which they live... native education should be controlled in such a way that it should be in accord with the policy of the state'. (Dr. Verwoerd was the Minister of Native Affairs when he made that statement and later became the Prime Minister of South Africa).

The statement of Verwoerd came about as a result of the Eiselen Commissions report In January 1949 the Nationalist government, believing that schooling was an essential means in bringing about apartheid, set up a commission on Native Education under the chairmanship of Dr. W.W.M. Eiselen. The main terms of reference were:

> 'the formulation of the principles and aims of education for Natives as an independent race, in which their past and present, their inherent racial qualities, their distinctive characteristics and aptitudes, and their needs under ever changing social conditions are taken into consideration.'

The Bantu Education Act was introduced, subsequent to the report, giving wide powers to the Minister. Syllabuses were adapted to the so called black way of life and black languages introduced into the black schools

The control of black schools was also slowly taken away from the missionary bodies and placed under the Department of Native Affairs

It is important to note that segregationist education did not begin with Verwoerd It had been established long before and existed even in the period of mission school predominance Compared with whites the expenditure on black education was always low. In 1930 the per capita expenditure on white schooling was £ 22 and for black schools £ 2 In 1945 it was £ 38 for whites and £ 3.10 shillings for blacks

With the abolition of apartheid after President De Klerk's famous speech in February 1990, Bantu education is still alive and kicking

In terms of the existing South African constitution, education is defined as an own affairs White education falls under the Minister of Education and Culture, black education under the Minister of Education and Training, coloured education under the House of Representatives and Indian education under the House of Delegates.

State expenditure on black education since 1970 has been steadily increasing Whereas expenditure on African education constituted 16 per cent of the total education budget in 1969/70, it constituted 48 per cent of the total education budget in 1992. White expenditure decreased from 70 per cent in 1969/70 to 33 per cent in the 1991/92 budget This is a substantial change but the population figures must not be ignored when making this comparison The total African population according to 1991 estimates was 29 million, in comparison with only 5 million whites

However, it is encouraging to note that the Minister of Education and Culture announced in April 1991 that there would in the future be a single education system for the whole country, which would have to meet general acceptance

It is heartening to observe that South Africa is moving towards change and apartheid is becoming part of history. But, there is no doubt that a wide gap has been left between the white and black members of the society.

In 1990 only 37 per cent of Black matriculants passed the examination and 8 per cent of those got matriculation exemption, entitling them to university entrance The figure among whites was 96 per cent pass and 41 per cent exemptions.

Business and management education from the basic school level has been almost non-existent in the black community.

The 1989 figures show 44 per cent of black standard 10 pupils took history as a subject, 37 per cent took geography, but only 8 per cent enrolled for accountancy, 16 per cent for business economics and 10 per cent for economics A typical matriculation certificate of a student out of the Bantu Education System would look as follows: English (standard grade), Afrikaans (standard grade), Xhosa/Zulu/Tswana (higher grade), History (higher grade), Geography (higher grade) and Biology (standard grade). This explains why there were (according to 1987 statistics) only 227 commerce graduates at universities amongst blacks compared with 4,188 in the education faculties and 2,273 in the arts faculties.

Looking at these statistics it is not surprising that black owned enterprises are estimated at less than 4 per cent of the total number of businesses in South Africa.

However, it should be remembered that it is not only the education system which has caused this but the whole system of apartheid Time does not permit me to discuss the Group Areas Act, and various other legislation measures which also played a significant role in bringing about the present state of affairs. I have emphasized only education as I am talking to educators

Now I would like to briefly touch on post matric management or entrepreneurship education.

The normal Bachelor of Commerce degrees offered at universities contribute little towards making entrepreneurs. A student graduating with the B.Com degree is hardly equipped to go out into the world and open his own business The courses are very academic and not integrated Although the programme is offered over a minimum period of three years, graduates need to get additional qualifications and experience to make a success in the business environment.

Many of the larger universities have business schools offering post graduate courses such as the MBA The MBA was originally brought in from the United States and the American curricula or formula are sometimes rigidly adhered to, which does not help us meet South African challenges Furthermore business schools have been concentrating on management of large organisations In this sense they have been producing good workers but not entrepreneurs.

In an interview with Business Day on 26 November 1991, Syd Catton, chairman of the Public Relations committee of the South African Board of Personnel practice said: 'South Africa has not succeeded in correlating supply and demand in any of its university courses. When attempts are made to do so, they are usually too historic to have any relevance and such research as is available, for example the Human Sciences Research Council, is not disseminated ' Mr Catton goes on to say, 'business schools generally fail to see themselves as in service to the community'.

> 'Instead of developing an awareness of how the integrated components of the business community functions, they tend to be simultaneously out of touch with overseas de-

velopments and slow to react to local trends. At the same time the business community does not have a unified voice.'

Even those business schools which commit themselves to meeting the needs of the community have a hard time identifying what these are when trying to reconcile the agendas of the various bodies such as Sacob, Sakekamer, Fabcos etc.

Then we have the private business colleges. Business colleges or commercial colleges as they are known by many, have somehow been taken for granted; but they have been playing a very significant role in Management Development for quite some time now.

These colleges have been offering several practical and cost effective options to people who are either not ready or able to take a full scale university degrees.

The institutional exams offered by many business colleges are equivalent to matric plus three years, although these courses are compressed into one and two years. Fortunately, the market place has recognized the value of these courses and students coming out of these programmes are often snapped up by commerce and industry.

In fact business schools attached to universities have in recognition of the importance of these short courses introduced programmes in direct competition.

Technical colleges too are beginning to play a bigger role in commercial education. Between 1986 and 1990 black student enrolment at technical colleges increased by 135 per cent whereas enrolment of white students decreased by 10 per cent. About 32 per cent of this enrolment is in commerce, which is encouraging.

Universities have in recent years begun establishing centres and institutions within business schools to improve management and entrepreneurship education. A good example is the Unit for Entrepreneurship and Small Business Management of the University of Stellenbosch Business School.

There is also the Centre for Developing Business at the Wits Business School, the Small Business Advisory Bureau of the University of Potchestroom, just to name a few. These centres and units are in my opinion, playing a significant role in entrepreneurship education and training. They offer short and medium term courses, which are of a practical nature.

The Centre for Business and Management at the University of Bophuthatswana, of which I am Director, has been established with almost the same principles and objectives.

The Bophuthatswana National Development Corporation, having realized that one of the greatest needs in the sub-continent is for trained and skilled managers and entrepreneurs, approached the University of Bophuthatswana to help address this particular problem.

A joint steering committee was set up in 1988 for the establishment of the Centre under the chairmanship of Mr D O Lenamile, a member of the University Council.

The centre was officially launched on 9 August 1990 following a donation by the BNDC.

The Unibo Business Centre, as it is commonly known now, focuses on structured certificate programmes, non-certificate programmes, seminars and workshops and private sector requested programmes.

The centre has only four full time employees. There are no full time lecturers in its employ. Persons with appropriate qualifications and experience in the relevant courses are identified and appointed on a temporary part-time basis to present courses. Although this system does place an additional strain on the existing full-time staff, it is found to be cost effective and ensures that students are at all times provided with appropriate expertise.

We try to work closely with academics from our own university, other universities, as well as business executives and private consultants. There is one programme, the Management Development Programme, which we are running jointly with the Unit for Entrepreneurship and Small Business Management, University of Stellenbosch Business School.

There is another programme, which runs jointly with the Rand Afrikaans University.

The Unibo Business Centre, like its other counterparts, exists in a semi autonomous relationship with the university. It is required to generate its own income or depend on private sector sponsorship for survival.

Notwithstanding their importance in narrowing the gap created by apartheid, these Centres and units have a serious problem because they are treated like step children. Government subsidies available to universities are not at their disposal Some of them, I am told even have to pay rent to the university for space occupied This makes the cost of certificate and non certificate programmes very expensive; sometimes more expensive than an MBA degree programme which is subsidized.

Having listened to these facts you will agree that something more must be done to create entrepreneurs in the black community and bridge the inequalities of skills created by apartheid education and apartheid system as a whole In addition to this gap I have been referring to we have a serious economic problem in our country.

The value of our currency has been steadily declining, $ 1.30 for R1 in 1980 to the present 35 U S cents for one Rand We have a high inflation rate averaging about 15 per cent and high unemployment. According to Chris Stals, the Reserve Bank Governor, only fifty-five percent of the total economically active population of thirteen million people is employed in the formal sector. It is estimated that more than 2 million people are unemployed and about four million earn some kind of living in the informal sector The low gold price is causing mines to retrench employees It has been reported by the Chamber of Mines that fifty thousand mine jobs have been lost in the last 18 months.

Our neighbours, Mozambique, Angola, Zambia and Zimbabwe are impoverished and economically bankrupt. Our politicians, as well as those in our neighbouring states have, instead of concentrating on efficient government and economic stability, been concentrating on developing an ideology which has hopelessly failed

Part of the solution to this problem, in my opinion, can be found in entrepreneurship development amongst blacks: Small Business Development We cannot depend only on large scale investment and the establishment of big industries to solve the economic problems and create full employment People must be educated towards self employment and move away from thinking like workers The slave mentality must disappear

Something must be done to develop entrepreneurs world wide but something **more** must be done in South Africa We must teach all people basic business and management skills. We must create an entrepreneurship culture in the community.

How do we achieve this?

I believe that the entrepreneurial educational institutions can play a major role in this:

Firstly they must unite to address the problem An association of South African small business training and educational institutions must be formed, perhaps under the auspices of an international body, to look at ways and means of creating an entrepreneurial culture in South Africa

As a united force with international backing we can exert pressure on the government to recognize the need for small business development and influence them to financially support these training institutions in a manner similar to the support which is being given to tertiary education Basic management and business education should also be encouraged at school level particularly at secondary schools. This is a certain way of creating an entrepreneurial culture

Furthermore entrepreneurship educators must look at introducing courses in motivation and self confidence in addition to the normal business courses People who have been oppressed have certain psychological disadvantages and they must be helped to overcome these These courses would apply not only to the black population which has been disadvantaged but all people How many people have you not come across with brilliant business ideas but have failed to implement them for not only the lack of know how but the lack of confidence?

Courses must be short so far as the number of contact hours are concerned People, especially adults, cannot afford to spend years studying full time at university. More use must be made of consultants and successful entrepreneurs in training, to make courses more practical and perhaps even cheaper. The business community can play a big role in this by making their personnel available. There should be a proper mix between academics and private consultants to make courses effective.

Furthermore, we all know that governments are slow to react to needs and therefore the business community must take over in providing financial assistance for these courses. The business community must be made aware of the need for entrepreneurship education. This can only be done by the educational institutions if they speak with one voice - therefore the importance of an association

The international educational and training institutions also can play a major role in assisting to correct the balance. They have vast experience, well qualified personnel and financial strength. They could, firstly, make available to us their training programmes which have been developed over the years. They can come on lecture tours, (financed of course by their respective institutions) to help create the entrepreneurship culture. More important, they can play a big role in training the trainers. You have excellent research and training facilities. You have the expertise.

Share this with our training institutions Make your facilities available to us. Through your contacts with major foundations, South Africa's educators can be exposed to your systems without any cost to them or yourself. It would be more beneficial if you provided training for one educator or trainer from South Africa then giving a scholarship for 10 prospective entrepreneurs.

The South African society has developed great respect for foreign programmes. Let us endeavour to offer some programmes jointly in South Africa and have a closer link with one another

In conclusion, I would like to say that the greater the involvement of the international community in South African entrepreneurship education, the greater our chance of success. I therefore close by extending an invitation to you to hold a future conference of this nature at my university, the university of Bophuthatswana. By you coming there and seeing for yourselves you will appreciate the problem much better than hearing about it 10,000 kilometres away.

References

Christie, P. and Collin, C. (1984), *Bantu Education: Apartheid Ideology and Labour Reproduction in apartheid and education*, edited by P Kallaway, Raven Press, Johannesburg.

Cooper, C. and others (1992), *Race Relations Survey*, South African Institute of Race Relations.

Human, L. (1991), *Education and developing managers for a changing South Africa*, Juta and Co.

Business Day, 26 November 1991, 27 April 1992.

The Star, 17 June 1992.

35 A training concept for entrepreneurs

Johan Nortje

Preamble

This contribution will deal mainly with business skills training for entrepreneurs and mentor ship for newly established business persons, but will link this training to a total upliftment programme, which in essence will involve five other separate training phases as well

It will set out to establish a format for a training programme to develop the often ignored, but inherent ability of many of South Africa's population whom for want of a better education and training, have been relegated to what is commonly known as the 'lost generation', yet have remarkable inherent entrepreneurial ability

This 'Lost Generation', as this mass of illiterate, semi-literate, unskilled and therefore basically unemployable group has been called, must be uplifted from their predicament before this country can advance further along the road of industrial development and the achievement of full first world status, while at the same time those with that special ability will be taught the additional skills needed for business and also helped to establish businesses.

Introduction

The 'Lost Generation', is a term we now know means those who have had little or no education, minimum or no skills training and thus are not productive members of South Africa's economy, for they cannot be employed in any situation except as basic labourers in labour intensive projects

South Africa, with all its wealth in minerals and other assets has a vast problem with these uneducated and untrained masses, who through their unfortunate inability to undertake anything except the most basic labouring tasks, cannot conceive or contribute positively to the needs of a modern day industrial world, except in the most menial way, being illiterate and unskilled

South Africa has utilised these unskilled people most successfully in the past, when massive projects required their basic labouring skills, but unfortunately little consideration was given to their fuller development.

Today there is no legislation to prevent their rise, but nor are there any extended major capital project requiring masses of unskilled labour The few projects available now require both literacy and practical skills for virtually the lowest category of worker, for projects today and in the future, will rely upon far higher technical skills than their predecessors.

Thus this vast untapped source of potentially skilled labour needs only two requirements to enable them to become a vital and contributory force to South Africa's future industrial growth Requirements which are taken for granted by most people. That is simply the ability to read and write and to have a market related skill at their fingertips

However, notwithstanding this need, a vast proportion of this 'Lost Generation' have kept themselves and their families alive through inherent entrepreneurial skills from gardening, washing cars and selling goods in the street.

They had the ability to see an opening or a gap in the market place and seized this opportunity thus capitalising on their ability A high majority of the 'informal sector', as this entrepreneurial group has now become known, is made up from previously unskilled and unemployed persons, who seized upon the only opportunity they had left, and become businessmen Many are totally self taught, but they are earning a living, and becoming successful, some even prospering well.

What is needed in South Africa is a plan to capitalise on this ability and to ensure that many more people enter the entrepreneurial market, rather establishing formal enterprises than just being an informal business operation To grow within this market most entrepreneurs will need both functional literacy and a market related skill, for what South Africa desperately needs is skilled entrepreneurs Entrepreneurs who can manufacture or construct and employ skilled persons themselves For to expand the nation's ability the aim must be towards first world status for all its citizens

The plan in broad outline

The objective

The main objective of this document is to prove conclusively that in spite of misgivings which academics, industrialists and businessmen may have, it is possible to capitalise upon the inherent entrepreneurial skills which this 'Lost Generation' possess It will also show there is a way to lift the entire 'Lost Generation' out of their oblivion and turn them into highly productive skilled workers, within a relatively short time span and at an acceptable cost In most cases this must first be achieved, because there are many thousands of the 'Lost Generation' who need upliftment and from where many new entrepreneurs could emerge, compared to the all too few existing entrepreneurs who could also benefit from improvement in business skills

The method

In essence this will be achieved by providing a total upliftment programme, but with multi-entrance points which will allow any level of person to enter the programme at a point commensurate to their ability, be they a total illiterate, a semi-literate, a semi-skilled worker desiring to become a skilled worker, or even skilled workers and existing successful entrepreneurs whishing to obtain a full range of business skills.

The evaluation of trainees to identify the potential entrepreneur will be accomplished by daily monitoring of all trainees. All trainees will undergo assessment tests prior to their skills training in order to determine direction. Thereafter follow up tests will be undertaken which will deal specifically with business ability and entrepreneurial potential.

The total upliftment programme will follow five separate phases designed for entry at phase 1, but as stated allowing for any phase entry as required excepting directly into the 'M' phase.

The five phases

The five phases are shown as follows:

- Phase 1: Functional literacy in the mother tongue
- Phase 2: Functional literacy in an official language
- Phase 3: Extended training in a market related skill
- 'B' Phase: Business skills training for selected persons with identified entrepreneurial potential
- Phase 4: Placement in industry and follow up for all skilled trainees and those 'entrepreneurs' who did not achieve the top positions under the 'B' phase
- 'M' Phase: Mentor ship and guidance for entrepreneurs commencing their own business. This is the only phase which cannot be entered direct.
- Phase 5: Further on-going development which will allow for continuous upgrading of all skills limited only by a trainees own ability

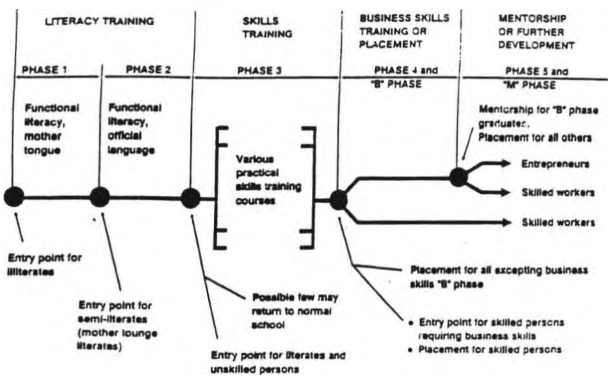


Figure 35.1 A diagrammatic presentation of a training concept for entrepreneurs

Business skills training - the 'B' phase

Introduction

It is essential to understand that entrepreneurial ability is normally an inherent skill, born into a person and cannot be readily taught. However what can be taught is the ability to capitalise on this inherent skill, so that the finer points of all aspects of business are passed on to those with ability.

As there are no previous guidelines which can be used to estimate exactly what percentage of trainees will be identified as suitable candidates for this additional training Training centres must initially assume the figure will be between three per cent to ten per cent of the total available trainees Time alone will give a more accurate estimate of the numbers that should prodeed on this phase

It must also be realised that of any selected group, identified for this special training, again only an estimated three per cent to ten per cent will be a truly top entrepreneurial ability. These top few will be identified by various established methods.

Selection of trainees

Trainees will normally be selected from the total upliftment programme and so must come from graduates of phase 3, which is the extended skills training phase. For this is the phase that provides a trainee with a needed market related skill, and if they have the entrepreneurial ability, they can now also attempt to 'go it alone' without any further tie up to the programme.

However, not many will try this, especially if they can receive the additional training which will firmly ground them in business skills.

In addition for the top few achievers on this 'B' Phase, they have the exciting prospect of actually being financially assisted in order to establish themselves as independent small businesses Therefore each of the proceeding education and training phases will be closely monitored throughout all stages to identify those who exhibit entrepreneurial potential, have leadership ability and are also totally reliable.

The monitoring of trainees will be undertaken as part of the normal evaluation of each trainee, throughout their daily training, as well as their competency based evaluation testing.

Modified sections of established business games, as well as portions of free enterprise courses will be utilized as testing samples The trainees will be carefully watched to determine which of them have the potential to access any situation, both form the standard 'artisan' related approach, specifically for their skill and also from a business angle This will involve simple tasks such as stock availability, material wastage, which reflects upon profitability and an acceptable level of production, again bearing directly upon profitability

This will be the normal procedure, for as stated, the skills training is in fact part and parcel of the entire upliftment programme, and thus even those who exhibit no inherent potential will have been exposed to simple business methods

The skills

The skills which will be taught to these selected trainees will consist of the full spectrum of skills needed to successfully operate any business Obviously the emphasis will follow the traditional format of material, management, manpower, machinery, money and market But this is just the start, for each facet of the foregoing will be broken down into the finer points. This will be combined with established free enterprise system ideals such as quantity verses quality, internal cash flow, consumer chain and competition to name a few.

Trainees will also be taught purchasing procedures, correct inventory levels, stock control, profitability, organizing manpower, management and marketing of their product, amongst other business related skills.

Exposure to talks from successful existing entrepreneurs, who have commenced their own operations, will form part of the course. Here trainees will receive first hand knowledge and advice on various specific aspects from those that have experienced the struggle, but have emerged successful.

Mentor ship and guidance for entrepreneurs - the 'M' phase

Introduction

History tells us that most new businesses fail within the first two to three years, and this is what must be avoided at all costs.

The failure of many businesses results from many factors, each contributing to become an overwhelming burden to its owner, who eventually closes down

To negate and reverse this trend it will be vital to provide each of the newly established entrepreneurs with mentors, possibly from their financial backers, who can guide them over this initial period. For the best of the entrepreneurs will still make basic mistakes, such as tending to buy short runs when a longer run could increase profitability Obviously this type of situation must be coupled to available capital, correct inventory levels and projected short and long term turnover, to name but a few pitfalls In short the new entrepreneur needs time to gain practical experience in the market place, under the watchful eye of his mentors.

Eligibility

This phase is not in the true sense a theoretical training phase, but a total practical work experience phase For in fact it is the initial establishment of the top few percent of the entrepreneurs course in their own business, as well as providing the necessary guidance for them until they are on a sound footing, while they are actually running their own enterprise.

It is also the only phase which cannot be entered directly from the outside. For although it is the mentor ship portion of the programme, designed to establish potential entrepreneurs in their own businesses, this facility must be reserved exclusively for those who have followed the total programme or at least a significant portion of it.

For the training will have been sponsored by many different organisations, commercial and industrial concerns, state organisations, community and social groups, as well as concerned individuals. These organisations will have funded the training, as well as helped to monitor it, through liaison committees and thus they will naturally be reluctand to assist any non-trainees to open up their own small business, be it an informal, or a more formally structured one

Business establishment

This will be undertaken in the following manner:

- Training centres and small business development centres will, through their placement personnel, who throughout the upliftment programme will have been in constant liaison with major commercial and industrial concerns, personally introduce the top potential entrepreneurs to these organisations.
- These organisations, because of their close co-operation and previous assistance to the programme, will now be requested to help finance these entrepreneurs, by means of a loan of sufficient magnitude, to allow the full establishment of the proposed business
- A fund must be set up, right from the start, by all organisations contributing to the sponsorship of this total upliftment programme This will be a 'Risk Capital Fund' established for the purpose of funding the top potential entrepreneurs.

The mentors

It is proposed to draw mentors from participating organisations in the same manner which the Junior Achievement course, run by various universities nation wide, provides highly trained specialists as mentors and guidance councillors, for school students, during the short period they run their own small business. Therefore this mentor ship will include financial advisors, production and sales specialists as well as personnel, materials management and quality control experts to name but a few. Each newly established enterprise only requiring the correct number of mentors in accordance with its size and product.

The mentors will not be permanently based in the various businesses, but will rather act as consultants, perhaps only visiting each of their particular charges weekly, of later bi-monthly or monthly They will however be only a phone call away from all the entrepreneurs under their guidance, thus always being able to provide instant advice or recommendations.

Conclusion

The tiny country of Singapore is only twenty-seven years old as a nation, for it separated from Malaysia on 9 August, 1965. Yet today it is rated the fourth best place in the world to do business in, after Switzerland, Japan and Germany. It tied with the United Kingdom for sixth position in the world economic rankings, has an overall economic growth rate of seven per cent and in 1988 its economy grew by eleven per cent This country's lists of achievements are endless. How has this small island, with basically no natural resources, which was forced into becoming an independent nation, been able to achieve such remarkable progress in just twenty-six years?

One of the main answers lies in their total belief in developing their most abundant and only real natural resource, their people Here education and training are not seen as a cost or a nuisance value, but as an investment in human capital for which an excellent return is guaranteed and continually achieved. This simple, but significant philosophy has resulted in the high growth rate, exceptional productivity levels, high standard of living, zero inflation, high literacy and skills level, as well as many other significant achievements.

Training for artisans always suffers, when times are hard, but even more so does training for those who need it even more and for whom there has never been any comprehensive training or upliftment programme, the 'Lost Generation'. Likewise the training of potential entrepreneurs, never before attempted in the format outlined in this document must be undertaken, for this will also create the necessary base of an eventual middle class business community, capable of creating large scale employment and job opportunities mongst their own people.

If this portion of the training is tackled with initiative by people and organisations with vision, the total training programme, especially including the entrepreneurial phases, could enable South Africa, within a few years, to experience a similar phenomenon as great as the industrial revolution experienced in England in the 1800's.

36 More questions than answers

Jan B. Pretorius

Introduction

In South Africa, the interest in developing, promoting and taking part in Entrepreneurship runs high - maybe higher than the expertise had needed to realise expectations. It is vitally important for a developing country like South Africa to truly maximize its potential entrepreneurial material The Potchefstroom University for Christian Higher Education has for many years been the home of the Small Business Advisory Bureau (est 1961). (This institute has done marvellous work during the past years and has placed the emphasis on the training of small business managers and has only recently concentrated more on the entrepreneur as a distinct species).

The biggest challenge is not only to train or to teach entrepreneurs, but to identify the entrepreneurship at a nearly stage or, preferably, at a young age. The Department of Business Economics at the P.U. FOR C H E started a course in entrepreneurship in 1990 with the main purpose being the teaching of the art of entrepreneuring

Defining entrepreneurship

It borders on embarrassment to have a subject included in a curriculum without clarity on its definition. I have seldom come across any word or concept that is so enticingly clusive in its meaning, there are richness and mystery and exaggeration, all locked up in its meaning The impression gained, however, is that the term entrepreneurship is well and alive and is growing Everyone, from the astute academics to taxi drivers, will tell you what an entrepreneur is, but there are unfortunately, more variations than similarities in its meaning and interpretation This is most likely the root of a further problem; because of the differences in viewpoints, more and more characteristics are being added to accommodate more and more features so that eventually almost any type of person, and not only the entrepreneur, may be described

Fewer characteristics should really be opted for instead of more, the numerous characteristics are actually clouding the issue and not clarifying it. The following description rather than definition is considered and is being used here as the beacon of this discussion:

This does not imply that the numerous other characteristics are not important; the description merely highlights and concentrates on fewer specific aspects and isolates creativity, innovation, perseverance and the profit motive as possible distinguishing aspects The idea is to differentiate the entrepreneur from other human beings, e.g. managers; or, on the other hand, to identify managers with entrepreneurial traits Other characteristics such as managerial skills, internal locus of control, orientation towards risk and honesty may all contribute towards and increase the probability of becoming a successful entrepreneur, but do not necessarily describe an entrepreneur (or assist in the identification of the latter at a young age).

A further source of confusion is the question regarding small business owners/managers and Entrepreneurship. Clark and Louw (1991) has this to say which clarifies the issue to a large degree: Entrepreneurship is the initiation of change, a creative act, while management involves controlling and planning within an existing structure This does not imply that entrepreneurs do not manage or that managers never initiate change - it simply implies that entrepreneurship and management are two different types of activities. Starting and running a small business, for instance, involves both entrepreneurship and management When you develop a new product, a self-shining shoe for example, you are initiating an innovative change and acting as an entrepreneur However, when you start producing the self-shining shoe, you begin to act more like a manager - co-ordinating and controlling the business operation. You may of course, return to your entrepreneurial role later on: alter the design of the shoe, establish a new market, improve the production process or introduce an entirely new product (Clark and Louw, 1991, p 1).

The terms 'entrepreneur' and 'small businessman' are often used synonymously in modern literature, sometimes even referred to as the 'small entrepreneur' {I C.S B -Bulletin (S.A.) p 4, May 1992}. However, not all small businessmen are entrepreneurs; nor, for that matter, are all entrepreneurs small businessmen. But usually the small business enterprise is the ideal habitat and setting for a typical entrepreneur, which may be the reason for the two concepts having been given synonymous meanings

Too often the entrepreneur is seen as some 'super being ' who possesses magical powers and performs or will perform miracles in the business world Farrell (1986, p. 49) puts it as follows:

'In reality, modern entrepreneurs are a fairly average lot As a group, they are not smarter than the rest of us, they are not less honest than the most of us, they are not neurotics and they haven't invented 21st century products beyond the grasp of mortal man Their pursuits range from starting a garbage collection service to baking bread. Entrepreneurs, like all other human beings, are motivated by the perception of likely consequences of their action Entrepreneurs, like the bygone craftsmen who made and sold their own goods, exist on the most basic level of enterprise, where customers are obviously the only means of survival.'

The aim and purpose of this paper

The purpose of this paper is to share the approach of one particular Department of Economics on the southern tip of the African Continent with all those people and institutions who are chasing and trying to trap the elusive human being, called the entrepreneur. In doing so, it is hoped that further clarification may be given with regard to the approaches to and methods used in identifying, stimulating, and assisting entrepreneurs in a country which is awakening to the challenges of the twenty first century, that is, a new South Africa.

The problem and the ideal

The ideal is to identify entrepreneurs at a fairly young age or to identify entrepreneurs within a different culture and with a dissimilar frame of reference

The problem is to find suitable criteria that will isolate entrepreneurs at a better than fifty per cent probability.

Present methodology and approach to entrepreneurship training

Entrepreneurship as a subject

Almost eigthy per cent of the research work is presently interwoven into the presentation of a subject called entrepreneurship; The candidates taking this course are themselves the subjects of the study on entrepreneurship The approach covers the following aspects:

- Teaching (part A)
- Training (part B)
- Developing and coaching (part C)
- Creativity and innovation (part C)

Teaching

The teaching (part A) is mainly aimed at the nature and general characteristics of entrepreneurship and the text-book contains twenty chapters covering the following topics:

- Definition(s) of entrepreneurship
- Types of entrepreneurs
- Psychological characteristics of entrepreneurs
- Influence ofexternal factors on entrepreneurs
- Training of entrepreneurs
- Development of entrepreneurs
- Intrapreneurs
- The informal sector
- The importance of small business in South Africa
- Problems facing small business
- Privatization and deregulation
- Creativity
- The entrepreneur and the law

- The entrepreneur and contracts
- The entrepreneur and administration
- Resources, creativity, opportunities
- Feasibility of business
- The business plan
- Financial consideration.
  (Kroon and Mollman, 1992)

Training

The training (part B) translates theory into practice and concentrates on practical business ventures that must be implemented; practical, not in the sense of being useful, but rather the physical act of doing it. Students are randomly divided into groups of four members and they then have to launch a business of any nature and submit their results at the end of the year. There are few rules/ conditions, but the students are dissuaded from launching projects which are too ambitious or too capital intensive. Twenty worthwhile projects are in the developmental stage at the moment, ranging from a patent-worthy 'milk spike jug' to a down-to-earth cookie-shop.

Creativity and innovation

Students are made aware of creativity and innovation (part C). This is somewhat difficult in a classroom situation but the students are shown videos on new products on the market and selected patented products and items from the East (e.g Taiwan) are also discussed and analysed Apart from the aspects mentioned above, the additional motive lies in the art of 'evaluating' products and/or ideas. Groups discuss and select products and have to report on why the other products have not been selected and give reasons for their particular choice This also enhances the important aspect of 'decision making', this is also practised by offering franchise options (selected from the Entrepreneur Magazine [U S A.)) as alternative business ventures Limited, but stimulating information, is usually given in these ads and the students are at liberty to make some assumptions and again defend their group's choice. Certain ventures are taken further, e.g. 'prepare a business plan and establish working capital or owners capital needed '

The students are particularly made aware of the mind as the most important instrument in creative and innovative thinking A sixty-minute video comprising cartoon drawings, a film on Disney World and forty five ads selected from award-winning advertising films of the 1987,1988, 1989 and 1990 Cannes film festival, are screened.

The cartoon films (Tom and Jerry/ Mickey Mouse) illustrate the 'anything goes' type of thinking The clips on Disney World show what the results of creative thinking can be. Walt Disney had a vision and created out of semi-marsh lands a vast metropolis of futuristic happenings and an idyllic life of fun and enjoyment. Before showing this film the students are asked to write down their thoughts and plans on a question put to them in the following manner:

- 'Design a play park '
- After about a one minute interval additional requests/information are added.
- 'You have $10,000 to design this play park '(1 minute).
- 'You have $1 Million dollars to design your play park' and then finally:
- 'You have $100 Million dollars to design the particular play park '

They then report back on what their thought processes were and are especially made aware of the factors inhibiting their thought processes Their plans or the answers they submit are not really the issue, much rather the awareness of the barriers their own minds have created and thereafter the sò-called input-barriers.

With regard to the film and advertising work, the emphasis here lies on simulating creative thinking/work by focusing on a small section in the outside world The viewer are first required to think and are then given an example of how others have used their creative thought processes Students are devided into groups of two to four and at the instructor's request view themselves as advertising agencies They then receive a particular assignment/commission for work and sit down and briefly discuss it and attempt to come up with ideas/concepts for the work The typical assignment may, for example be:

'The African wildlife trust wants you to make a film to curb/prevent the ongoing killing of the elephant.' 'Air Canada want a film that will emphasize their air-craft's spaciousness and luxuries; with executive businessmen as their particular market segment.' 'Sandvik (Pty) Ltd wants you to promote its product, comparing it with conventional sandpaper '

Lateral thinking

It is surprising how once the initial barriers inhibiting free thinking come down, what original and brilliant ideas come forward After contributions from the floor the actual advert/film is shown and briefly evaluated before going on to the next item. It is interesting to note that everytime the form of thinking starts off 'vertically ' but eventually changes to what Eduard de Bono (1988) calls lateral thinking

Testing, evaluating and monitoring

A full-time contingent (fourty-eigth) and an after-hours group (fourty-four) are enrolled for the present course in entrepreneurship. The latter group consists almost, without exception, of full-time employed students Everyone agreed to be part of a test program as well as evaluation-tests and to supply feedback and relevant information on their career development and, lastly, to be aware that 'official' academic tests would also form part of the total program (M B A -students are also included on an ad hoc basis).

The following tests have so far been conducted (1992):

- An attitude test with regard to entrepreneurship
- An evaluation test on the psychological characteristics of entrepreneurs.
- An evaluation test on relevant theory covering 'Intrapreneurs'
- A test/exercise on creative and/ or lateral thinking
- A test on the relevant theory covered during class
- Marks are awarded for group practical work

The following tests will still be conducted during the latter half of 1992:

- A further testing on creative and/or lateral thinking
- A test on feelings regarding independence
- A test on feelings regarding risk
- A test on feelings regarding control
- A final test on the relevant theory covered during class
- A repeat of the attitude test with regard to entrepreneurship taken at the beginning of the year to evaluate and measure improvement or disillusionment

The most important aspect (monitoring of career development/longitudinal research) will take time All students participating will be monitored in years to come and should entrepreneurs evolve, their evaluation performances would be compared to real life performance and correlation will be sought with the various tests conducted during 1992.

Conclusion

Unemployment is a serious problem in many parts of the world and is becoming an urgent issue in South Africa (Pretorius, 1985, p. 78). The small business sector, and more specifically, the entrepreneur corps will have to play a major role in this regard as job creators. If the typical entrepreneur can be identified and be encouraged in whatever way, the dividends in the form of employment generated should be high

The University of Potchefstroom is attempting to train entrepreneurs and this paper has attempted to illustrate their approach to this challenge The training at this institution goes hand in hand with research in this field with the ultimate aim of finding the vital juices which distinguish entrepreneurs from the rest of us. If it is at all possible, an attempt will be made to eventually formulate a battery of tests which may supply and identify candidates/applicants with a so-called E.Q (entrepreneurship quotient) In the meantime, the present short-term strategy is to work with those who are willing and disclose a positive attitude and strive towards improving their entrepreneurial qualities.

Reference

Clark, I., Louw, E. (1991), *Small Business opportunities*, Struik Publishers, Cape Town

De Bono, E (1983), *De Bonos' thinking course*, British Broadcasting Corporation, Pitman Press, Bath, London

Farrel, L (1986), 'Building entrepreneurship, a global perspectiv', *Magazine of human resource*, pp 49-50, July

Kroon, J., Moolman, P.L (1992), *Entrepreneurship*, Haum-De Jager Publishers, Potchefstroom

Pretorius, J.B. (1985), 'Kleinsakeondernemings as werkverkaffer en skepper van werkgeleenthede in Suid-Africka', *DBA dissertation*, PU for CHE, Potchefstroom

Vos Savant, M (1990), *Brain power: The twelve week mental training program*, Judy Piatkus, London

37 The stimulation of entrepreneurship amongst the youth with special emphasis on the activities of the Unit for Entrepreneurship

T. J. de Coning and G. J. P. Maas

Introduction

The present absorption rate of the formal sector in South Africa is about seven per cent. It declined from seventy-four per cent during 1965-70 to this present level (Sanlam Economic Review, 1991). If something drastic is not done, it is estimated that about forty per cent of the total labour force will be unemployed by the year 2000 (Sanlam Economic Review, 1991). It is estimated that there are already six million unemployed people in South Africa (Small Business Forum, 1992).

If one takes into consideration that political and economic national stability is extremely dependent on workforce stability, then the above statistics are very alarming There may be various alternatives to stimulate employment e.g government incentives, training of business people, etc. The alternative that seems to be most cost effective is the stimulation of self-employment It costs about R100,000 to create a single job in the formal sector, and about R1,000 to create a new job in the informal sector (Small Business Forum, 1992).

In order to stimulate self-employment an appropriate climate must be created. People must be encouraged to no longer regard it as a sin to take risk and start their own business. The South African economy needs more entrepreneurs than risk evaders

In order to create an entrepreneurial climate one needs to start from the lowest possible level Such a level can be from primary school level. It would be a waste of time and resources to stimulate only adult entrepreneurs More pro-active actions can be expected by stimulating entrepreneurs from primary school level

This task of creating an entrepreneurial climate at school level cannot be left only to the schools; there are various organisations with more relevant experience that should be involved in such a process The Unit for Entrepreneurship and Small Business Management of the University of Stellenbosch is such an organisation.

However, creating a climate conducive to entrepreneurship cannot take place unless a sound theoretical basis has first been established. The aim of this article is to establish such a basis. First, the concepts of training will be discussed, with special emphasis on the development of entrepreneurship. The focus then shifts to the learning objectives and strategies pursued by the Unit for Entrepreneurship and Small Business Management. Finally, the current efforts of the Unit in stimulating entrepreneurship amongst the youth will be discussed.

Entrepreneurial and management development

When analysing an operational description of an entrepreneur, one of the salient aspects is that this description contains a large management component: A person who has the ability to identify opportunities in the external environment, who can make innovative use of such opportunities; and, who has the necessary management abilities to activate, integrate and control the required resources Although it certainly cannot be postulated that all managers should also be entrepreneurs, the opposite is probably true, i.e. that all entrepreneurs ought to be managers too. The theoretical models which are used as a basis for management development should consequently also be taken into consideration in entrepreneurial development.

As a point of departure, it should first be ascertained what the objectives of management development actions are In this regard Davies (1971, p.74) distinguishes cognitive, affective and psychomotor objectives. Cognitive objectives are related to information and knowledge, while affective objectives emphasize attitudes, values, feelings and emotions Psychomotor objectives, on the other hand, entail muscle and motor skills, the manipulation of materials and objects, or an activity which requires brain-muscle co-ordination.

Both Davies (1971) and Laird (1985) support a classification of learning objectives in management development programmes, especially in terms of the cognitive and affective domains They both make particular use of Bloom's taxonomy of learning objectives in this regard (table 37.1).

Table 37 1
Bloom's cognitive and affective domains

Cognitive domain	Affective domain
Evaluation	Organisation and characterisation
Synthesis	Conceptualising
Analysis	
Application	Evaluation
Perception	Response
Knowledge	Reception

Source: Davies (1971), p 75

In the context of Bloom's taxonomy (table 37.1), knowledge is seen as the lowest objective in the cognitive domain and evaluation as the highest. Likewise, as regards the affective domain, the reception of stimuli is considered as the lowest order of objective and organisation and characterisation as the highest level.

Especially when noting Laird's (1985, pp. 105-108) more comprehensive description of Bloom's taxonomy, it appears that this taxonomy provides a sensible basis for entrepreneurial development. In this more inclusive description, definitions of the various levels of behaviour in both the cognitive and affective domains are provided (table 37.2).

Table 37.2
Definition of behaviour in terms of Bloom's taxonomy

Cognitive domain		Affective domain	
Behaviour	Definition	Behaviour	Definition
Knowledge	Recalling data	Reception	Paying attention, awareness
Perception	Transformation, interpolation	Response	Readiness to react; Agreement in response
Application	Spontaneous use of abstraction; Use of a concept in a new context	Evaluation	Being aware of value; Commitment; Conceptualising of a value
Analysis	Subdivision of systems of communication in components	Organisation	Organisation of values in a system; Determining the interrelationships between values;
Synthesis	Creating a structure of patterns out of elements from various sources		Determining dominant values
Evaluation	Forming opinions about the value of ideas, work, solutions, materials	Characterisation	Persistent functioning of value system; An individual's unique characteristics

Source: Laird, 1985: pp 107 - 108

As regards the domains and behaviour according to Bloom's taxonomy (table 37.2), it is possible to analyse the required behavioural dimension in terms of entrepreneurial development according to this taxonomy. This will subsequently be focused on, after which the emphasis will shift to suitable strategies to realize this behaviour.

For the sake of simple reference, indicators with regard to entrepreneur-directed behaviour as empirically determined, are tabulated here in table 37.3.

In terms of Bloom's taxonomy, knowledge forms part of the cognitive domain, and aspects of attitude form part of the affective domain In the light of this initial division, using Bloom's taxonomy as a point of departure, it is subsequently possible to provide a clear indication of the order of learning objectives as well as the behaviour which is aimed at after regarding the relevant aspects.

Table 37.3
Business characteristics as indicators of business behaviour

Knowledge and skills		Aspects of attitude	
Knowledge:	Financial management	Intent on:	Performance
	Marketing		Growth
	Broad general knowledge of management		Innovation
		Core focus:	External business environment
Skills: (in the context of managerial skills)	General management		
	Financial management	Comprehensive approach	
	Manpower management		
	Marketing	Internal locus of control	
	Broad general skills in management		

As regards cognitive aspects, in the context of the entrepreneur, all the various objectives, ranging from knowledge to evaluation, are involved Knowledge of marketing, finance and general management will not in themselves result in the required behaviour, rather a thorough understanding of each separate management field, as well as of business management as a whole, is required This understanding needs to be applied by means of integrated marketing, general planning, suitable financial planning and control, as well as the use of relevant manpower management techniques - all as integral components of applied integrated total business management At a higher level, still in the cognitive domain, continual analysis is required of the effect of, or results obtained by the application of such an integrated total in a business management system Eventually, at a still higher level, but still in the cognitive domain, conclusions and synthesis of the results of analysis emerging from the various diverse components of such total business management application are involved, and after that, evaluation, and if necessary, adjustment on the level of application of management in order to obtain optimal business results. In short, regarding the cognitive domain, both lower and higher orders of objectives are required in respect of the entrepreneur, as this is the only way in which a suitable integrated system approach to management can be established.

As regards the affective domain, a persistent entrepreneur-directed value system ought to be instilled in the entrepreneur. In terms of Bloom's taxonomy (table 37.2), there should be an emphasis on a more internal locus of management, the intention towards achievement and the establishment of growth From this basic value system a comprehensive general approach ought to emerge with the external environment as point of departure for two reasons. First, in order to identify opportunities which can be exploited to the advantage of the business, and second, the entrepreneur must be able to keep pace with the position of key environmental factors, so that, where necessary, adjustments can be made timeously in the business itself in terms of the possible effect of such environmental factors To conclude, regarding entrepreneurial development in respect of the affective domain, objectives and behaviour of a higher as well as a lower order must be pursued

In this section the emphasis was on arranging the objectives and behaviour which should be aimed at in entrepreneurial development according to the cognitive and affective domains. At the same time the order of objectives and the behaviour which should be pursued in terms of each domain, have been considered Subsequently the suitable strategies which should be followed to apply entrepreneur-directed behaviour regarding the domains are stressed.

Learning objectives and strategies pursued by the unit for entrepreneur-ship and small business management

Using the above theoretical review as a point of departure, the focus will now be on the development of suitable learning objectives and strategies for the various target groups of entrepreneurs. Learning objectives must especially be seen against the background of a hierarchy of objectives to be pursued (table 37.4).

Table 37.4
Hierarchy of objectives pursued by the Unit for Entrepreneurship and Small Business Management

Lower level	1.	To stimulate/sensitise members of the broad population to exercise entrepreneurship as an appropriate means of achieving personal objectives
	2.	To guide persons who have already made the decision or are considering to exercising entrepreneurship, in developing comprehensive business plans according to which the envisaged business concern can be brought into being and operated
Higher level	3.	To equip persons who are already running a business to become true entrepreneurs. Entrepreneurs who will be intent on identifying opportunities, innovative in availing themselves of opportunities and who will have the necessary management skills to integrate and manage the required resources optimally.

The main aim of learning objective number one is to acquire a favourable attitude towards the exercising of independent entrepreneurship by individuals Objective number two, on the other hand, has both an affective and cognitive dimension, as here the aim is specifically to instil a persistently entrepreneurial value system in the prospective entrepreneur and at the same time equipping the individual with the required knowledge and skills to prepare a suitable business plan for the proposed business venture. Objective number three probably poses the biggest challenges and potential problems. This could especially be ascribed to the fact that the target group is already practising business people, probably with established value systems which are not necessarily of an entrepreneurial nature. The challenge which is faced here, is to change already established attitudes and behavioural patterns of individual business people. The essential focus should be on both affective and cognitive domains.

Recommendations regarding the attainment of learning objective number one: to sensitize the individual to the practice of entrepreneurship

The concept of exercising independent entrepreneurship is involved here. The aim is to incorporate the exercising of independent entrepreneurship as an alternative in the individual's frame of reference when he or she makes decisions about how to attain personal objectives related to work status. In terms of Bloom's taxonomy (table 37.2), what is involved is both making them aware of entrepreneurship and the evaluation of the entrepreneurial alternative - in other words, cultivating a favourable attitude towards entrepreneurship.

According to the approach of Davies (1971, p. 75) group discussions, tutorials, role playing, case studies, brainstorming, independent study, leaderless group discussions and sensitivity training are especially suitable learning strategies for attaining the learning objectives in the affective domain. As the type of activity involved here is suitable for a typical workshop situation, which could with certain adjustments in the level be presented to pupils, students, housewives and persons who are already involved in the economy, it is recommended that:

- this activity should be accommodated by means of short workshops, and
- use should especially be made of group discussions and case studies as appropriate learning strategies

As regards group discussions, it is especially foreseen that with the use of teachers at schools as facilitators, the following topics ought to be dealt with:

- the necessity that more persons should enter the economy as independent entrepreneurs;
- an operational exposition of the terms entrepreneur and entrepreneurship,
- an answer to the question whether entrepreneurs are born or developed,
- to obtain agreement on the benefits involved in practising entrepreneurship, and
- setting guidelines for own development towards independent entrepreneurship

As regards case studies as a learning strategy, past experience has shown that persons who attend such a workshop, usually prefer making use of live rather than recorded case studies. What is especially involved here, is submitting living proof of the practice of successful entrepreneurship to the group. In terms of this approach:

- suitable prominent entrepreneurs ought to be identified to come and address the group in an informal fashion on the stated topics;

- a trainer from a school ought to take the lead in highlighting that which the practising entrepreneur divulges to the group within a suitable framework for the group, in order to reveal latent entrepreneurial potential; and
- the teacher should eventually put forth an appropriate algorithm in terms of which it can be ensured that the entrepreneurial alternative will form an integral part of the individual's decision-making framework when he or she makes decisions about a future career.

The above are not the only learning strategies which can be adopted to attain this learning objective. However, in the opinion of the researcher the above strategies provide the most acceptable alternatives by which the specified learning objective can be achieved.

Recommendations for attaining learning objective number two: to guide persons who have already made the decision or are considering exercising entrepreneurship in developing comprehensive business plans

Whereas learning objective number one was, relatively speaking, a simple task, as it dealt mainly with sensitising persons with regard to entrepreneurship, learning objective number two is highly complex. Its complexity can be ascribed to two main factors.

It cannot merely be accepted that persons who have already decided or are considering to start their own business, are motivated by entrepreneurial reasons to proceed with such a step. The primary task is therefore to ensure that prospective business people will, as far as practically possible, where aspects of attitude are involved, actually display entrepreneurial attitudes

As regards the confirmation of entrepreneurial motivation in prospective small business people, the problem mainly centres around the fact that these persons must be convinced that it is advisable to plan a new business venture with an entrepreneur-directed attitude. In the final analysis the question is therefore characterisation in the affective domain (table 37.1), in terms of which prospective entrepreneurs must make a persistently entrepreneur-directed value system their own. The attainment of such a higher-order affective objective requires profound introspection by the individual in order to identify the specific aspects of attitude where there are shortcomings

In order to obtain this affective learning objective, the strategies proposed in regard to attaining learning objective number one can be used, viz. group discussions and live case studies. By means of the topics which were dealt with in connection with learning objective number one, there should, in the first place, be success in making prospective business owners aware of the entrepreneurial alternative. Further, it can also be expected that prospective entrepreneurs should be convinced that it is better to start new ventures with entrepreneur-directed reasons as an incentive. Additional learning strategies should, however, be used in order to attain the higher-order affective learning objective of characterisation in terms of an entrepreneur-directed value system (table 37.5).

Table 37.5
Prospective small business owners - suggested learning strategies to attain learning objectives in the affective domain

Objective	Learning Strategy
Cultivating awareness of the entrepreneurial alternative	Group discussion
Evaluating the advisability of the entrepreneurial alternative	Live case studies
Organisation/Characterisation in terms of a persistent, functional entrepreneur-directed value system	Deliberation

In order to instil organisation/characterisation in terms of a persistent functional entrepreneur-directed value system in the individual, it is recommended that attainment of this specific objective should be pursued by deliberation between trainer and student Deliberation in this context can in terms of Davies's (1971, p 167) description of tutorials, be described broadly as a supervision tutorial, where there is close interaction between trainer and individual student on an interpersonal level. Where pupils at this stage ought to have reached both the awareness and evaluation levels (table 37.5) it would probably be realistic to expect them to prepare their views on the advisability of an entrepreneur-directed attitude. The trainer, on the other hand, ought to aim his preparation mainly on an evaluation of possible test results which have been achieved with regard to performance-motivation, growth-orientation, locus of control and Gestalt (aspects of attitude which are considered expedient in terms of the entrepreneur). During deliberation the emphasis should mainly be on reaching consensus about the desirability of an entrepreneurial-directed attitude in terms of the aforementioned aspects and the trainer ought to guide the student by means of indirect questions in such a way that he himself realizes his own shortcomings in regard to the desirable aspects of attitude The results of the testing which the student underwent, should give the trainer suitable indicators of the direction that the discussion ought to take During the last phase of the counselling, it can be foreseen that the trainer ought to give relatively firm guidance in order to suggest to the student ways and means for bridging shortcomings which have been identified

It would be simplistic to expect that after these learning strategies have been applied to business owners, their attitudes would in future be entrepreneurial-directed without any further problems. However, at this stage it is realistic to expect prospective business owners to be able to characterize themselves in terms of a persistent entrepreneurial-directed value system, and to carefully note their own shortcomings and be able to take the necessary actions in order to overcome these shortcomings themselves

As regards the affective domain, the learning strategies explained here, are considered as applicable for all prospective business owners, regardless of their formal knowledge and skills. A differentiation of learning strategies can, however, be foreseen when the cognitive domain is entered

As regards the cognitive domain, it should be borne in mind that the eventual objective is to establish a suitable business plan according to which the prospective business can be founded and operated. The attainment of this objective cannot be directly pursued if the student has not already acquired the necessary knowledge and skills. This includes:

- knowledge acquired in connection with marketing, finance and integrated business management; and
- skills regarding marketing, finance, manpower management and integrated business management

As regards the cognitive level (knowledge of marketing, finance and integrated business management), it is recommended that at the onset, the formal levels of knowledge and skills of the student should be established. These formal levels of knowledge have a particular bearing on the necessary levels of knowledge mentioned above. This can take place in various ways, as for example by means of pre-evaluation, during which the focus is on these specific areas If it can be ascertained that the student does not have sufficient knowledge and/or skills in the necessary management fields, it is suggested that a combination of learning strategies be used to remedy the situation

Consequently it is suggested that an algorithmic approach should be used to enable the trainer to determine the suitable learning strategy or strategies applicable to a specific group (table 37.6).

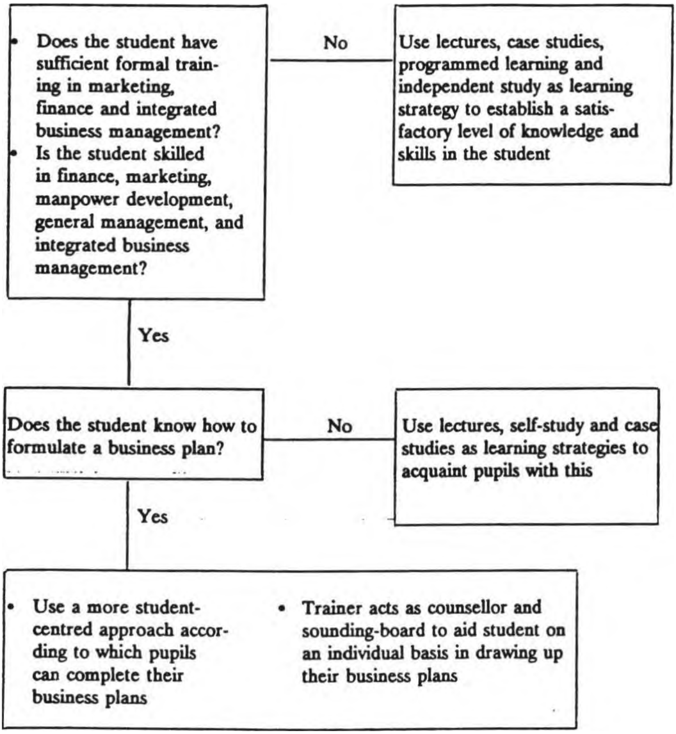
In the first place, independent study can be used, where prospective entrepreneurs attempt each of the management fields in modular fashion by means of programmed learning The purpose of this is to acquaint pupils with the relevant terminology and the basic principles. This is followed, in terms of Bennet's (1984), management development model (table 37.5), by a situation of classroom learning, using learning strategies such as lecturing and case studies to concentrate on developing the pupil's understanding of management and decision-making processes regarding each of the aforementioned management fields separately, and then in an integrated system context

As regards the topics to be dealt with in the various management fields, the following are envisaged:

- the components of an integrated marketing approach in which the potential consumer is central;
- breaking-even analysis, various forms of financial budgeting and control, as well as financial analysis, with the emphasis on management of trading capital,
- organisation of functions of the business, motivational techniques, basic principles of remuneration, and
- components of an integrated systems approach to business management, with the emphasis on determining a mission, analysis of the environment, analysis of strengths and weaknesses, establishment of comprehensive objectives, formulating a business strategy, functional strategies and functional action plans, as well as the establishment of suitable control measures

Table 37.6

Suggested algorithmic approach for the choice of applicable learning strategies for prospective small business owners with regard to the cognitive domain



It is envisaged that the student will ideally have sufficient knowledge and skills in each of the aforementioned management aspects before the next phase, the compilation of a business plan, is attempted.

The next phase, is the formulation of a suitable business plan. This is mainly considered a practical phase where a student-centred approach is usually used It is , however, foreseen that in the initial stage of this phase, the student will by means of independent study be equipped with knowledge of the various steps and components of formulating a business plan. This should be followed by a classroom situation where the acquired knowledge is corroborated by means of condensed lectures, and where a thorough understanding especially of the analytic and decision-making processes involved in the formulation of such a business plan is instilled in pupils. The suitable learning strategy for this purpose is the use of case studies on the formulation of business plans for the proposed ventures

As regards the way in which these case studies are to be used, it is recommended that students study the case studies individually and then discuss them in group context, after which feedback is given by the groups. During this feedback, the emphasis is especially on the following:

- the extent to which all the components of business plan formulation were incorporated; and
- general impressions of the comprehensiveness of the business plan and possible shortcomings, as well as impressions of the validity of assumptions which were made.

As regards the actual formulation of business plans by students, it is foreseen that a student-centred approach should be employed with structured interaction between groups of students and the trainers During this phase it is foreseen that the trainer should mainly be available as advisor and sounding-board for students on an individual basis. Various reasons can be cited for the latter approach. First, the confidentiality which is involved in individual business plans must be taken into account, which would make discussion of these in group context undesirable. Second, there is the usual divergent nature of business opportunities which are investigated by individual groups of students, which could not be meaningfully discussed in extended group context.

As regards prospective entrepreneurs, three phases can therefore be distinguished First, there is a phase during which the concentration is mainly on learning objectives in the affective domain in order to establish entrepreneur-directed attitudes in prospective entrepreneurs. The secondly phase concentrates mainly on establishing a basic knowledge and understanding of the relevant management fields with prospective entrepreneurs. The third phase is mainly student-centred, with the focus on the formulation of individual business plans

The unit's activities in stimulating entrepreneurship amongst the youth

Although the Unit's primary focus is on adults it has a very important role in stimulating entrepreneurship amongst the youth as well The first reason for this is that the Unit has a wealth of experience regarding entrepreneurship and should share this experience with all relevant parties. Furthermore, due to the absence of entrepreneurship as subject in the school curriculum, the role the Unit can play is even more important The second reason is that the Unit can act as medium through which demands of the business and education sector can be communicated to each other Co-ordination of activities between these two sectors needs to be closer in order to stimulate entrepreneurship.

Against the above background, the Unit undertakes various activities which will be discussed in the following paragraphs.

Young entrepreneurs competition

The aim of this competition is to promote entrepreneurial thinking and to stimulate implementation of business ideas amongst the youth This programme was launched in 1988 in the schools of the Northern suburbs of Cape Town. The competition has since expanded to its current size which includes the readership area of 'Die Burger', a regional newspaper. In 1992 300 pupils enrolled for this competition

This competition is evaluated in three different categories, namely standards 5 and 6, standards 7 and 8 and standards 9 and 10 Pupils must first submit an essay of about 2 to 3 pages explaining their business idea All essays are evaluated and four per category are selected These 12 finalists are then required to formulate detailed business plans for their respective business ideas. Every finalist is provided with a comprehensive manual which helps them in formulating a business plan. The various business plans are then presented to a panel of judges who select the winners.

When evaluating this competition against the learning objectives of the Unit (table 37.4) it complies with the guidelines of objective number 1 and 2. We assume that pupils possess the necessary knowledge and attitude (table 37.3) in order to participate in this competition. Although information is provided prior to the start of this competition it appears to be insufficient Pupils without any formal knowledge of finance, marketing, human relations, general management and the formulation of business plans do, however, take part in this competition. Only background information regarding the competition and entrepreneurship in general is provided Participation is on a voluntary basis The question can thus be asked why pupils enter this competition? Is it due to the fact that they really want to become true entrepreneurs or is it due to the attractive prizes awarded to the finalists and schools? In this regard one can only assume that the prizes do play a major part when deciding to enter this competition.

Stimulating entrepreneurship once a year amongst a relative small number of pupils simply cannot create the desired results, i.e. to create an entrepreneurial climate in which entrepreneurs can prosper and thus have a positive effect on the total economy. The following alternatives may help to alleviate the problem.

- More detailed workshops regarding entrepreneurship must be presented The Unit, however, has not sufficient resources (manpower and financial) to undertake such a venture. Only a small portion of the total market can be reached in such a manner.
- The business sector can become more involved. They can formulate criteria for pupils to which they must conform to in order to become true entrepreneurs. These criteria must be communicated to the education authorities The business sector can also provide general information to pupils on what they can expect when entering the business world and what to do in order to cope in the business environment. The business sector can also be encouraged to temporarily employ more pupils during school holidays.
- Teachers can be trained in the subject of entrepreneurship which will help them to stimulate pupils to become entrepreneurs. Mechanisms must also be found to keep teachers abreast of the latest development regarding entrepreneurship and the business world in general.
- Parents can be educated in entrepreneurship in order to support their children in becoming entrepreneurs. The environment in which the previous generation grew up is totally different from today's turbulent environment
- The media should be encouraged to participate in stimulating entrepreneurship amongst the youth by providing information, transferring knowledge and illustrating actual examples of successful child entrepreneurs

Many more alternatives can and must be identified The alternatives must, however, not be regarded as mutually exclusive but rather as mutually supportive. It is not a case of which is the best alternative to select, but rather which one can contribute towards stimulating entrepreneurship amongst the youth

Training of teachers

The Unit has no role in training teachers per se, but can act as facilitator to alleviate the gap as outlined in paragraph 4.1. The basic problem is that teachers are currently not trained to teach entrepreneurship and that some schools plan to implement entrepreneurship as a school subject in 1993

The Unit is presently planning a project in conjunction with a teachers' training college whereby firstly knowledge regarding entrepreneurship will be taught to aspirant teachers. The subjects to be discussed include the following: a general background regarding entrepreneurship, environmental analysis, intrapreneurship, financial and market feasibility, creativity, innovation and the formulation of a business plan. The programme will consist of theoretical input, case studies and group discussion. Secondly, the material and information will be adapted to suit the needs of the school system The method of training adults and children differs and therefore the material must be adapted to suit the needs of the children Aspirant teachers should then possess the necessary skills, knowledge and material to implement entrepreneurship on school level.

The problem, however, remains that existing teachers are still not trained to implement entrepreneurship. Due to the fact that teachers have a higher education, they should be able to assimilate the necessary information relatively quickly. But it must be remembered that there can be a gap between gaining the knowledge and gaining enough practical experience to present entrepreneurship as subject Entrepreneurship with its various disciplines and practical applications can be a complex subject. It is essential that entrepreneurship must keep up with environmental trends in order to stimulate pro-actives. The education authorities have therefore a definite role to play in ensuring that every teacher involved will posses the necessary skills, knowledge and material to teach entrepreneurship

Presenting seminars on entrepreneurship

It is envisaged that seminars can be used as a tool to ensure some symbiotic relationships between teachers and the business environment. The aim of such seminars can be twofold First, to furnish business people and teachers with knowledge on how to be more entrepreneurial, and second, to act as forums where business people and teachers can share ideas on what each party expects from the other. Third, seminars can play an important role in stimulating the parents of pupils and thus can ultimately play a positive role in the total process.

The problem with presenting such seminars is first that they are relatively costly to present countrywide Second, it will require considerable effort to ensure that all teachers attend such seminars Third, the potential danger exists that the emphasis can be on the promotion of business effectiveness rather than on implementing entrepreneurship at school level.

Women entrepreneurship program

Programmes are presented to housewives who are interested in creating their own business Mothers are normally more involved in their children's schoolwork and therefore can positively influence their children's attitude towards entrepreneurship

Conclusion

The activities of the Unit are but a small effort in the total process of stimulating entrepreneurship amongst the youth Various other parties are also involved in this process. This, however, occurs on a very fragmented basis. There need to be a better co-ordinated and integrated effort from every party. Energy must be combined and focused in order to achieve the necessary results.

One way of doing this is to create a forum on the stimulation of entrepreneurship amongst the youth which will take place frequently, present plans and control the total process to achieve the required results (figure 37.1).

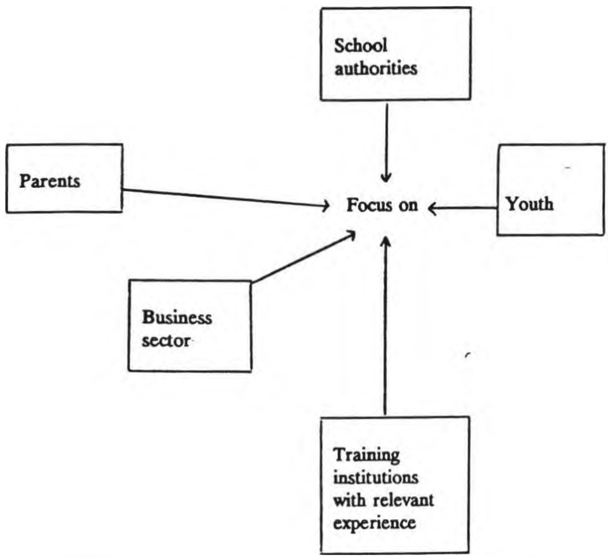


Figure 37.1 Parties involved in stimulating entrepreneurship amongst the youth

The relations between the various parties need to be interactive. There needs to be sharing of information, knowledge, etc. If co-ordination can be achieved between these parties, synergy can be achieved on the stimulation of entrepreneurship Forums can be created for the different regions and a more workable co-ordinating unit can be created on provincial and national levels The different regions of the education authorities can be used as basis for creating different forums.

Although many training institutions are involved or active in South Africa, it is necessary to involve only those with theoretical and practical experience in the discipline of entrepreneurship It must not become a process where the wheel is rediscovered Time and the crisis in the economy does not allow for experimentation Actions are urgently needed.

The question is therefore not whether to train or stimulate entrepreneurship amongst the youth but rather what must be done to stimulate entrepreneurial actions and orientations amongst the youth A sound theoretical basis already exists This is a tremendous help, but time now calls for actions to be taken

References

Bennet, R. (1984), 'Management education for real', in Kakabadse, A. & Mukhi, S (eds), *The future of management education*, p. 233, Gower, Hampshire

Davies, I.K. (1971), *The management of learning*, McGraw-Hill, London

De Coning, T.J. (1988), "n Ondersoek na die moontlikheid en aanwendbaarheid van 'n ondernemingskenmerkgebaseerde kategorisering van kleinsakelui in Wes-Kaapland', *Unpublished Ph.D. thesis*, University of Stellenbosch, Bellville

Laird, D. (1985), *Approaches to training and development*, Addision-Wesley, Massachusetts

Roskin, R. (1984), 'Choosing experiential based learning designs for management development', *Journal of Management Development*, 3 (2), pp. 17 - 33

Sanlam Economic Review (1991), May

Small Business Forum (1992), March, 11

Sims, R.R. & Sauer, W.I. (1985), 'Guiding principles for the development of competency-based business curricula', *Journal of Management Development*, 4 (5), pp 51 - 65

38 The training of Southern African entrepreneurs in financial management

Johan Marx[1]

Background

Unemployment in Southern Africa has reached critical levels It is estimated that there are currently only seven new job opportunities being created for every 100 new entrants into the job market. Owing to the high cost of job creation, the formal sector of the economy is unable to contribute to alleviating the problem of unemployment One way of overcoming the problem of unemployment is by encouraging entrepreneurship Entrepreneurship, particularly in the small business and retailing sectors with their low entry requirements, could play a significant role in the creation of jobs South Africa will have to change from a country of workers to a country of entrepreneurs. The promotion of entrepreneurship can only succeed if:

- there are sufficient marketing opportunities available to ensure the viability of the new business ventures,
- there is affordable financing available,
- the entrepreneur is equipped with sound management knowledge and skills.

Purpose of the paper

The paper will deal with empirical research concerning:

- the training needs of Southern African entrepreneurs in financial management
- the way in which these needs are being satisfied at present by institutes associated with universities and development corporations and
- how these training needs could alternatively be satisfied

An analysis of the training needs of Southern African entrepreneurs in financial management

The Department of Business Economics at the University of South Africa undertook empirical research with the objective of investigating the feasibility of introducing a small business management course by means of distance education.

The research consisted of two phases, namely, to determine the nature of:

- the need for training and education of Southern African entrepreneurs.
- entrepreneurship training and education offered by various institutes in Southern Africa Ancillary services which were provided, such as financing, were also investigated The managers of thirty-one institutes were visited personally[2] and interviewed using a standardised questionnaire

This section will deal with the need for training and education of Southern African entrepreneurs. To determine the training needs of entrepreneurs a survey (by means of a mail questionnaire) was undertaken of 14,532 small business firms[3].

The questionnaire used in the survey listed forty-three potential training needs[4]. The ranking of the ten training needs which were considered as most important is summarized in table 38 1 (in descending order of importance).

Table 38 1
The ranking of the ten most important training needs of Southern African entrepreneurs

Ranking	Training need	Number of respondents
1	Computer literacy	537
2.	Financial control	451
3.	The formulation of a marketing strategy	439
4.	The motivation of employees	371
5.	Budgeting	366
6.	Profit planning	363
7.	Income Tax	331
8.	Sales techniques	291
9.	The analysis of financial statements	279
10.	Management information systems	277

The study also included an assessment of how the institutes experienced the training needs of Southern African entrepreneurs In this regard, the institutes ranked the functional areas of management for training purposes as follows:

- financial management
- general management
- marketing management
- purchasing management
- operational/production management and
- administrative management

The training needs which featured among the top ten and which are directly related to financial management can be categorised as financial planning (which includes budgeting, profit planning), financial control (which includes the analysis of financial statements) and income tax.

The Southern African entrepreneur devotes the majority of his limited time that he makes available for the financial management of his firm to the planning and control of cash flow, accounts receivable and stock management. Not all entrepreneurs are equally well trained in these areas Each of these aspects will now be dealt with

Training the entrepreneur in the management of cash flow requires an explanation of the cash flow cycle and the influence of the time value of money on the cash flow cycle. Cash management strategies are based on the premise that the cash flow cycle should be as short as possible, requiring that accounts receivable (if any) should be collected as quickly as possible, stock levels be managed as efficiently as possible and accounts payable be paid as close as possible to the due date without damaging the credit-worthiness of the firm. Ultimately, these variables have to be catered for in the cash budget.

Training the entrepreneur in the use of the cash budget depends on the level of competence of the entrepreneur and his/her ability in the use of a personal computer. The less sophisticated entrepreneur will have to be assisted initially by a consultant, involving practical sessions using pen and paper methods. The more competent entrepreneur could be trained in cash budgeting by means of a personal computer and using spreadsheet programmes such as Lotus 1-2-3 or Quattro Pro

Training the entrepreneur in the management of accounts receivable will also have to be done in a practical manner. In this respect he should be taught how to set credit limits, credit standards, how to evaluate prospective debtors and how to monitor debtor payments. This training may begin by using the current accounts receivable of the firm as a point of departure and explaining how the above-mentioned concepts may be applied to the benefit of the firm.

The management of stock requires that the entrepreneur should be made aware of the cost of carrying stock, ordering costs and the waiting period before newly purchased stocks can be delivered. Internal control measures aimed at preventing the loss of stock owing to employee dishonesty also need to be addressed The insurance of stock should simultaneously receive attention.

How the training needs are satisfied at present[5]

Several institutes associated with either universities or development corporations in Southern Africa assist the entrepreneur in improving his management knowledge and skills[6].

Most of the institutes interviewed (sixty-four per cent of them) have been operating for longer than ten years Thirteen percent had been operating between two to six years, and twenty-three per cent for less than two years.

The aim of these institutes is to equip the entrepreneur with management knowledge and skills, rather than the awarding of formal academic qualifications The priorities of these institutes in rendering a service to the entrepreneur are indicated in figure 38.1.

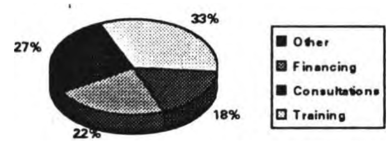


Figure 38.1 The priorities of institutes involved with entrepreneurship training

The training of entrepreneurs in aspects of management receives the most attention, followed by consulting and financing The institutes indicated that financial management was the most important topic covered in their training courses. Other support offered by the institutes are lobbying, the planning of shop fronts and layouts, as well as publications such as magazines, information brochures and pamphlets.

The institutes follow a formal approach to the training which they provide mainly through the use of work sessions, formal lectures and seminars The types and distribution of the training methods are shown in figure 38.2.

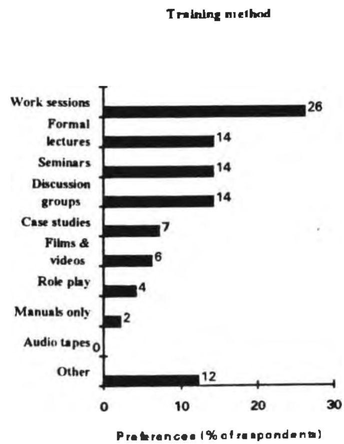


Figure 38.2 Training methods used by Southern African institutes involved in entrepreneurship

The respondents stressed the importance of a practical approach to the training of entrepreneurs In this respect, the use only of manuals to train entrepreneurs seemed undesirable

The institutes which were consulted in the survey indicated that the entrepreneurs they dealt with had a need to acquire specific management knowledge and skills, rather than a formal academic qualification such as a BCom or MBA degree In this regard, sixty-four per cent of the respondents indicated that non-degree courses concerning specific topics of management or functional aspects of management would be the most successful in training Southern African entrepreneurs. Only ten per cent of the respondents were of the opinion that degree courses could be successful in training entrepreneurs.

The length of entrepreneurship courses was also studied. The most popular were seminars lasting from one to three days, followed by short courses of one to four weeks Other courses were either quarterly or annual programmes These preferences by the respondents are indicated in figure 38.3.

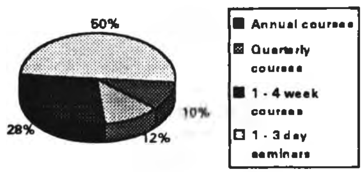


Figure 38.3 The preferences of Southern African institutes involved in entrepreneurship concerning the length of courses

The methods of instruction used by the institutes are ranked as follows:

- lectures involving personal interaction between lecturer and the entrepreneur,
- a combination of self study and lectures,
- do-it-yourself modules, and
- degree programmes or parts thereof.

The preferences for the above-mentioned methods of instruction are illustrated in figure 38 4.

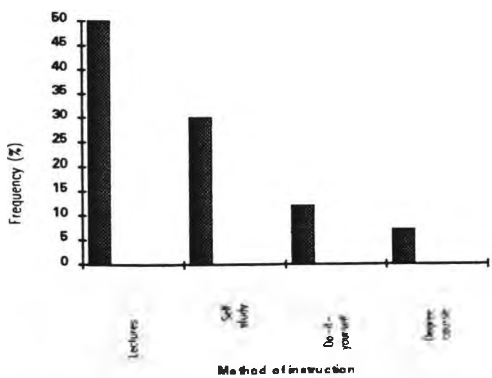


Figure 38.4 The preferences of Southern African institutes involved in entrepreneurship training concerning the methods of instruction

How the training needs in financial management may alternatively be satisfied in Southern Africa

Several factors require that alternative ways of satisfying the demand for entrepreneurship training (including financial management) should be identified These include:

- time constraints of entrepreneurs and the limitation of not being able to leave the business for a certain period to attend training courses or seminars,
- the cost of training,
- academic institutions which are not geared to meet these needs,
- a lack of suitable consultants and lecturers/instructors,
- the lack of proper school education (mainly in the case of black Southern Africans).

In view of the above-mentioned factors, the training needs of Southern African entrepreneurs in financial management may also be satisfied by utilising the following options:

- training by means of distance education,
- training by means of the mass media, such as radio, television and news papers,
- training and consultation by charted accountants,
- training and consultation provided by banks, and
- training provided by franchisers

Distance education

The general concept of distance education involves studying by correspondence. The student receives his tutorial matter after registration and studies at home in his/her own time and at his/her own pace A number of assignments (usually three or four) have to be submitted before certain due dates during the course of the year and these are used to determine whether the student should be granted admission to the examination. Lecturers write their comments on each assignment submitted A tutorial letter is also posted to all students containing further comment on the assignment and a suggested solutien to the assignment (if applicable). If student numbers permit, group discussion classes are held The group discussion classes usually last three hours and are presented over two consecutive days Where student numbers are too large, group discussion classes may be replaced by radio broadcasts during suitable hours of the day. A degree or diploma is awarded after passing the requisite examination.

Distance education could be used to train Southern African entrepreneurs, not only in financial management, but in all aspects of entrepreneurship and management

The concept of distance education may, however, have to be adjusted for the training of the entrepreneur As indicated earlier, the training will have to be of a practical nature To this end, the assignments could take the form of practical tasks which the entrepreneur must perform in his business or envisaged business[7]. Such practical tasks may, for example, include the drafting of pro-forma balance sheets and income statements, as well as cash budgets. These documents could be used to determine the extent, nature and timing of financing needs of the business. Such an assignment could then be evaluated based on predetermined criteria.

Distance education for the training of the entrepreneur need not necessarily involve examinations and the awarding of degrees The successful completion of the course may be certified by a certificate of participation rather than by a degree

Mass media

The mass media consisting of radio, television and the printed media may also be used to advantage in the promotion of entrepreneurship and the training of the entrepreneur.

For the use of mass media to succeed in the promotion of entrepreneurship and the training of entrepreneurs, however, will require sponsorships and an organisation to co-ordinate a well planned programme. The most important benefits to be achieved by use of the mass media are the large number of entrepreneurs and aspiring entrepreneurs who could be reached and the subsequent low cost per person that could be achieved. The use of the mass media also overcomes the problem of the time constraints experienced by entrepreneurs.

Charted accountants

Charted accountants in Southern Africa are increasingly employing business consultants to aid their clients in solving managerial problems in their firms. These services, however, are costly and are aimed primarily at the formal sector of the Southern African economies.

The informal sector will be receiving attention shortly. The accounting firm Coopers Theron Du Toit and the National Industrial Chamber[8] have embarked on a programme called "Business skills for South Africa" (BSSA) with the purpose of transferring fundamental business skills to emerging businesses in Southern Africa The programme consists of twenty seminars covering accounting and finance, marketing and marketing research, personnel and general management. The accounting and finance module covers the following topics:

- basic accounting,
- understanding financial statements,
- the use of accounting techniques to increase profitability,
- debt recovery,
- cash management,
- the use of computers, and
- taxation.

A feature of the BSSA programme not found in other training programmes is that delegates are offered mentorship from qualified business persons to ensure that the business skills which they have learned are implemented correctly in practice.

Banks

The gaining of management knowledge and skills by a bank's clients are beneficial to both parties since it tends to alleviate the risk of business failure. Currently four South African banks offer assistance in the form of booklets and videos to the entrepreneur. They are:

- Standard Bank of South Africa Ltd
- First National Bank Ltd
- Volkskas Ltd
- Trust Bank Ltd

The Standard Bank of South Africa Ltd assists the entrepreneur by providing business education courses and practical financial workshops through their Business Education

Unit The bank also has a regional network of small business development managers (SBDMs) These managers:

- develop and secure banking relations with small businesses[9] having growth potential
- advise on the type and amount of finance required by a business
- assist the client with the preparation of applications for credit facilities and
- provide financial advice to clients

Assistance of this kind contributes to the development of the Southern African entrepreneur, and many aspiring entrepreneurs should in future stand to benefit from this assistance.

Franchising

An entrepreneur's lack of knowledge concerning accounting, financial management, marketing, personnel and other critical business functions could be overcome by franchising. The franchiser normally provides training in these aspects of management as part of the benefits offered to franchisees.

Most South African franchisers are members of the South African Franchising Association. At present there are sixty members in the Association and their operations are classified in table 38.2.

Table 38.2
A classification of the members of the South African Franchising Association

Field of operation	Number of members	% of total
Cleaning services	4	6.6
Estate agencies	5	8.3
Fast food & restaurants	18	30.0
Stationers	5	8.3
Personnel consulting	1	1.6
Education	3	5.0
Personal services	2	3.3
Vehicle maintenance	10	16.6
Clothing	3	5.0
Financing	1	1.6
Furnishers	1	1.6
Construction	4	6.6
Leisure	3	5.0
Total	60	100.0

Source. South African Franchise Association Handbook, 1991/92

In view of the figures provided in table 38.2, it is suspected that franchisees in the field of fast foods and restaurants have benefited most as far as their level of management knowledge and skills (including financial management knowledge) are concerned.

Any new franchises entering the Southern African market in the future will make a valuable contribution not only to job creation but also to the training of those entrepreneurs wishing to enter the business world with little or no management skills

Summary

The paper dealt with empirical research concerning:

- the training needs of Southern African entrepreneurs in financial management,
- the way in which these needs are satisfied at present by institutes associated with universities and development corporations, and
- how these training needs could alternatively be satisfied.

It appears from the surveys conducted among both institutes involved in entrepreneurship education and individual entrepreneurs that there is a need for training in financial management, particularly in the areas of financial planning and control.

The training of entrepreneurs by institutes associated with universities and development corporations in Southern Africa was described. All the institutes indicated that they include a module on financial management in their courses The institutes follow a formal, yet practical approach to the training of entrepreneurs and use mainly work sessions, formal lectures and seminars during courses.

Alternative ways of training entrepreneurs were suggested. These include training by means of distance education and the mass media, as well as training provided by chartered accountants, banks and franchisers

Notes

[1] Department of Business Economics, University of South Africa, South Africa
[2] The personal interviews were undertaken by a project team which had been set up for this purpose. The project team consisted of six members.
[3] The acceptable questionnaires amounted to 1,499 or nearly 20 per cent of the sample.
[4] The complete list of potential training needs are provided in annexure B
[5] All information provided in this section emanates from research undertaken by the Department of Business Economics at the University of South Africa (UNISA). The findings of the research have not been published in a final report yet.
[6] The names of these institutes are provided in annexure A.
[7] The confidentiality of such practical tasks will have to be ensured.
[8] The National Industrial Chamber represents black Southern African industrialists.
[9] The bank defines a small business as an individual, partnership, close corporation, company or a co-operative, with total assets worth not more than R 1,5000,000, having a turnover of up to R 5 million per annum, employing up to 100 people, with borrowing requirements up to R 400,000 and which is engaged in, or has intentions of engaging in a commercial or manufacturing enterprise or the provision of a service.
[10] The Centre does not offer a course in entrepreneurship or small business management yet, but offers a retail management course using distance education (i.e correspondence course)

References

Marais, P. (1992), 'Only seven jobs for 100 new job-seekers', *Pretoria News. 12, May*
Kotze, C., J. (1992) 'Training in a small 3rd world business environment.' *ICSB SA Bulletin*, vol 1, p. 6, May
Baxter, B (1992), 'Verbal information provided to author', *Potchefstroom*

Cant, M., C. and Machado, R (1991), 'The changing environment and the dilemma of the Black entrepreneur', *Unisa Alumnus*, vol. 13, no 9, December

Fagan, S. (1992), Letter to author, 22 May, Durban, (Original copy in the possession of author)

Kietzman, M , L. (1992), 'Letter to author, 15 May', Johannesburg, (Original copy in author's possession)

Appendix A

Institutes associated with universities and development corporations involved in the training of Southern African entrepreneurs

Institutes which provide consultation services and/or training to the Southern African entrepreneur include the following:

Institutes associated with universities

1. The Small Business Advisory Bureau (SBAB) at the Potchefstroom University for C.H.E
2. The Unit for Entrepreneurship and Small Business Management at the University of Stellenbosch
3. The Institute for Small Business at the University of the Western Cape
4. The Business Advisory Bureau at the University of the North
5. The Small Business Unit at the University of Transkei
6. The Institute of Management at the University of Fort Hare
7. The Unit for Small Business Development at the University of the Orange Free State
8. The Small Business Unit at the University of Port Elizabeth
9. The Centre for Businessmen at the University of Zululand
10. The Centre for Developing Business at the University of the Witwatersrand
11. The Centre for Business Economics at the University of South Africa (UNISA)[10].

Development corporations and agencies

1. The Small Business Development Corporation (SBDC) The SBDC provides guarantees aimed at acquiring finance for entrepreneurs, and by training entrepreneurs by means of short courses and consultations
2. The KwaZulu Development Corporation
3. The Venda Development Corporation
4. The Ciskei Development Corporation
5. The Transkei Development Corporation
6. The Bophuthatswana National Development Corporation
7. The Qwa-Qwa Development Corporation
8. The KwaNdebele National Development Corporation
9. The Lebowa Development Corporation

Appendix B

The list of potential training needs among Southern African small business firms which listed in the questionnaire

1. The planning of purchases
2. The use of the computer (computer literacy)
3. Advertising
4. Budgeting
5. Marketing feasibility
6. Marketing strategy
7. Management information systems
8 Accounting
9. Financial control
10. Financial feasibility
11. Quality control
12. Group behaviour
13. Commercial law
14. Income tax
15. Introduction to economics
16. Investment decisions
17. Office planning
18. Capacity planning
19 Legislation pertaining to small business
20. Cost accounting
21. Credit planning
22. Leadership
23. Licensing
24. Market research
25. Motivation
26 Negotiations with suppliers
27. Analysis of financial statements
28. Training and development
29. Tracing suppliers
30. Personnel planning
31. Personnel selection
32. Personnel recruitment
33. Product and pricing policy
34. Production layout and planning
35. Productivity measurement
36. Time management
37. Trade unions
38. Sales technique
39 Transport economics
40. Stock control
41. The functioning of regional service councils
42. Shop layout
43. Profit planning

39 Towards understanding the entrepreneurial personality - A South African study

A. B. Boshoff and J. J. van Vuuren

Introduction

Work in the field of entrepreneurship is, according to Bygrave (1989) done in terms of a relatively young paradigm Carsrud, Olm and Eddy (1986) state that a shortage of theory seems to exist in the entrepreneurship field This is confirmed by Smith, Gannon & Sapienza (1989). These views seem to summarize the prevailing situation - a great deal of thorough research using sophisticated methodologies and techniques is needed to create a sound body of knowledge The importance of a systematically created body of knowledge can scarcely be overstated (Low & MacMillan, 1988) as it is to serve as a frame of reference for work in this field, for instance, the huge and growing effort in universities which is aimed at the development of entrepreneurs (Vesper, 1985)

It seems as if research in the entrepreneurship field, can, firstly concentrate on the entrepreneur, his characteristics and behaviour, and secondly, on the entrepreneurial process A third focus can be on the factors enhancing or impeding the development of entrepreneurs and entrepreneurial activity. Several recent studies have been undertaken regarding the characteristics of entrepreneurs (Brockhaus, 1980, Begley & Boyd, 1987, Carland, Hoy, Boulton & Carland, 1984, Fernald & Solomon, 1987 and Hisrich, 1988). The results of earlier studies in this direction were summarized by Brockhaus & Horwitz (1985), and by Gartner (1988) Brockhaus & Horwitz (1985, p 42) concluded: 'The literature appears to support the argument that there is no generic definition of the entrepreneur, or if there is we do not have the psychological instruments to discover it at this time' Furthermore, Gartner (1988), came to the conclusion that while a large number of traits have been attributed to the entrepreneur, a clear picture of the entrepreneur in comparison with other occupational groups in the population is still to emerge. In a later review Boshoff, Bennett and Owuso (1992, p. 51) concluded: 'Our knowledge of the traits of an entrepreneur is consequently inadequate'.

Biographical and business variables of which the relationship with entrepreneurship have recently been investigated include age, marital status, employment history, sex, education, type of new venture, capital sources, membership of immigrant and of minority groups. The results seem to be mixed and contradictory, and meta-analyses of the results in the different areas are called for (Boshoff, et al , 1992).

Significant, rigorously executed studies on specifically the interests of entrepreneurs in comparison with other groups were not found. Under these circumstances it was decided to try to find answers to two research questions:

1. Do successful and less successful entrepreneurs differ from each other in terms of biographical variables, personality traits and interests?
2. Do entrepreneurs differ from individuals in other occupational groupings, i.e. state employment and banking, in terms of biographical variables, personality traits and interests?

Method

Subjects

Three groups of subjects were included in the study. The members of the first group (N = 77) were all employed by Central Government. Random sampling from officials attending a formal organization training course was used to select the members of this research group. All the members of this group resided in a region known as the Pretoria-Witwatersrand-Vereeniging (PWV) area - the commercial and industrial hub of South Africa.

Twenty six females and 51 males were chosen from 13 different State Departments. The mean (M) age of the female members of the sample was 37.46 years with a standard deviation (SD) of 9.04 and a range of 19 to 59 years. The M age of males included in this group was 38 92 years with a SD of 8 15 and a range between 25 and 60 years The age range of the total sample was between 19 and 60 years with a M age of 38.43 and a SD of 8.43.

The second group included in the study comprised a number of bank officials (N = 70). This group was randomly drawn from employees in one banking institution. Employees from two regions of operation of this banking institution formed the sampling frame The Pretoria region contained 13 and the Johannesburg region 11 branch offices. Thirty two individuals from the Pretoria region and 38 from the Johannesburg region were included in the sample. The sample consisted of 37 females (M age = 31.54, SD = 7.79, range 20 to 46 years) and 33 males (M age = 31.45, SD = 7.56, range 19 to 45 years). The M age of the total sample was 31.5 years with a SD of 7.63 and a range of 19 to 46 years.

A third group consisted of entrepreneurs The sampling frame consisted of the owners of 10,500 privately owned businesses operating in the PWV area. These businesses were all classified as 'sound' by an organization specializing in determining the creditworthiness of small businesses. The annual turnover of these businesses did not exceed R5 million (ca. US $1 75 million), which is an accepted norm for classifying a business as 'small' in South African terms

A random sample of N = 482 was drawn from these businesses. One hundred and forty entrepreneurs (i.e. 29 per cent) agreed to participate in the study. The M age of subjects in this group was 42.79 years with a SD of 9.83 and a range of 20 to 78 years. This group was further divided into two subgroups i.e successful (N = 110) and less successful (N = 30) entrepreneurs.

To be regarded as successful an individual had to own a business employing five or more people, the business had to have been in existence for three years or more, and had to have made a net profit over the three year period. During the last financial year these businesses should have recorded a return on capital invested of three or more percentage points higher than the risk-free return rate(interest paid on government bonds). The M age of this subgroup was 42.69 years (SD = 9.89, range 22 to 78 years). The group consisted of 105 males with a M age of 42.77,(SD = 10.07) and an age range of 22 to 78 years. Five females in the age range 35 to 47 years were included in this group.

The less successful entrepreneurs (N = 30) encompassed owners of businesses which did not meet at least one of the criteria for a successful business. This subgroup had a M age of 43.17 years, (SD = 9.75, range 20-61 years). Twenty-nine males were included in this subgroup (M age = 43.31, SD = 9.89, range 20 to 61 years). The only female included in this subgroup was 39 years old

Measuring instruments

Three measuring instruments were employed in obtaining the desired information. These were the 16 personality factor inventory (16 PF), the 19 Field Interest Inventory (19 FII) and a biographical questionnaire. Personality traits were measured by means of the 16 personality factor inventory (16 PF), Form B, which is based on the personality theory of Cattel (Cattel, Eber, & Tatsuoko, 1970). The designation of factors and characteristics measured by this instrument are shown in table 39.1

Table 39.1
Identification of personality traits measured by 16 PF

FACTOR SCALES

A	SIZOTHYMIA Reserved, Detached, Critical, Cool	CYCLOTHYMIA Outgoing, Warmhearted, Easy-going, Participating
B	LOWER SCHOLASTIC MENTAL CAPACITY Less intelligent, Concrete-thinking	HIGHER SCHOLASTIC MENTAL CAPACITY More intelligent, Abstract-thinking, Bright
C	LOWER EGO STRENGTH Affected by feelings, Emotionally less stable, Easily upset	HIGHER EGO STRENGTH Emotionally stable, Faces reality, Calm
E	SUBMISSIVENESS Humble, Mild, Obedient, Conforming	DOMINANCE Assertive, Independent, Aggressive, Stubborn
F	DESURGENCY Sober, Prudent, Serious, Taciturn	SURGENCY Happy-go-lucky, Heedless, Gay, Enthusiastic
G	WEAKER SUPEREGO STRENGTH Expedient, A law to himself, By-passes obligations	STRONGER SUPEREGO STRENGTH Conscientious, Persevering, Staid, Rule-bound

H	**THRECTIA** Shy, Restrained, Diffident, Timid	**PARMIA** Venturesome, Socially bold, Uninhibited, Spontaneous
I	**HARRIA** Tough-minded, Self-reliant, Realistic, No-nonsense	**PREMSIA** Tender-minded, Dependent, Over-protected, Sensitive
L	**ALAXIA** Trusting, Adaptable, Free of jealousy, Easy to get on with	**PROTENSION** Suspicious, Self-opinionated, Hard to fool
M	**PRAXERNIA** Practical, Careful, Concentional, Regulated by external realities, Proper	**AUTIA** Imaginative, Wrapped up in inner urgencies, Careless of practical matters, Bohemian
N	**ARTLESSNESS** Forthright, Natural, Artless, Sentimental	**SHREWDNESS** Shrewd, Calculating, Wordly, Penetrating
O	**UNTROUBLED ADEQUACY** Placid, Self-assured, Confident, Serene	**GUILT PRONENESS** Apprehensive, Worrying, Depressive, Troubled
Q1	**CONSERVATISM** Convervative, Respecting established ideas, Tolerant of traditional difficulties	**RADICALISM** Experimenting, Critical, Liberal, Analytical, Free-thinking
Q2	**GROUP ADHERENCE** Group-dependent, A "joiner" and sound follower	**SELF-SUFFICIENCY** Self-sufficient, Prefers own decisions, Resourceful
Q3	**LOW INTEGRATION** Casual, Careless of protocol, Untidy, Follows own urges	**HIGHER SELF-CONCEPT CONTROL** Controlled, Socially-precise, Self-disciplined, Compulsive
Q4	**LOW ERGIC TENSION** Relaxed, Tranquil, Torpid, Unfrustrated	**HIGN ERGIC TENSION** Tense, Driven, Overwrought, Fretful

Source: HRSC Training Manual, 1992

Psychometric and other characteristics of this instrument can be found in the Human Sciences Research Council's Training Manual (1992)

The 19 Field Interest Inventory (FII) measures interests in 19 fields, as indicated in table 39.2.

Table 39.2
Fields of interest measured by the 19 FII

Number	Interest field
1	Fine arts
2	Clerical
3	Social work
4	Nature
5	Performing Arts
6	Science
7	Historical
8	Public speaking
9	Numerical
10	Sociability
11	Creative thought
12	Travel
13	Practical (female)
14	Law
15	Sport
16	Language
17	Service
18	Practical (male)
19	Business
20	Work - Hobby
21	Active - Passive

More information on the kind of data obtained by applying the 19 Field Interest Questionnaire can be found in Fouche and Alberts (1992)

Biographical and business variables on which information was obtained are presented in table 39.3.

Table 39.3
Biographical and business variables on which data was gathered

Personal information	Business information
Sex	Industry
Marital status	Market served
Population group	Previous occupations
Religious affiliation	Source of capital
Education: School	Turnover (per year)
Education: Tertiary	Profit: Turnover-ratio
Father's occupation	Investment: Own and other capital
Position in birth order	Investment: Own capital
Socio-economic level of family	Age of business
Age	Number of employees
Language group	Return on investment

The decision on which biographical variables to include in the data-gathering process, was partly based on an earlier study of South African entrepreneurs (Boshoff, Bennett, Owuso 1992) The biographical variables were phrased into a questionnaire and pre-tested by administering it to 60 final year students in a personnel management course The feedback received from this group was utilized to modify and revise the biographical questionnaire with regard to readability, as well as clarity of instructions and questions.

Data gathering

The three measuring instruments were applied to the group of state employees during one session of a training course in which these subjects participated.

The bank officials were divided into two groups One group completed the questionnaires in one centre and the other group in another centre. Standard test procedures were adhered to in all cases

Due to the wide geographical dispersion of the entrepreneurs, the preciousness of time as a resource, and the need to obtain co-operation from as large and representative a sample as possible, data was individually gathered from entrepreneurs. In order to reach the large number of entrepreneurs within a short time period, a total of twenty-three field workers were trained in the application of the data gathering instruments Training was done in groups of three to four members, with sessions lasting approximately six hours.

After drawing a random sample of N = 482 entrepreneurs from the population of N = 10,500, every entrepreneur included in the sample received a letter in which information on the research was provided and co-operation requested A tear-off sheet was provided on which willingness to co-operate in the research and a list of dates suitable to the entrepreneur for a visit by a field worker could be indicated. This rendered a positive response [indication of willingness to participate in the research and of dates for a visit by a field worker] from 82 entrepreneurs (17 per cent), a negative response [i.e. an indication of unwillingness to participate] from 9 entrepreneurs (1.8 per cent) and no response from 391 entrepreneurs (81 per cent)

Telephone contact was made with those individuals who had responded positively and an appointment for a visit by a field worker was set up. A follow-up letter was sent to non-respondents. This brought a response of willingness to participate from another 102 entrepreneurs, bringing the total number of individuals who were willing to participate to 184 (38.2 per cent) Usable information was obtained from one hundred and forty individuals (29 per cent of the original sample) Taking into account the difficulties associated with this kind of field research, the actual response rate was regarded as acceptable

Data was gathered by means of personal visits to the entrepreneurs' workplaces. In the majority of cases more than one visit, with a maximum of three, was necessary to gather information from the subjects. The arranged meetings between the field workers and respondents mostly took place after working hours

Results

All statistical analyses were carried out by means of Statistical Analysis System (SAS, 1985).

The first research question necessitated enquiry into the significance of the differences between the responses of the respondents classified as successful and less successful entrepreneurs The responses of the two groups were distributed on discrete scales on the majority of the biographical and business variables, and were compared by means of Chi-squared. The results of these analyses are shown in table 39.4.

Table 39.4
Results of chi-squared analysis of response distributions of two groups of entrepreneurs on biographical and business variables

Variable	Chi-squared	p.
Place of birth	4.05	.40
Sex	.08	.77
Marital status	1.90	.39
Population group	4.72	.10
Religious affiliation	2.94	.57
Level of school education	2.50	.29
Level of tertiary education	8.90	.18
Occupation of father	2.99	.39
Position in birth order	2.98	.56
Socio-economic level of family	2.51	.64
Kind of business	5.95	.11
Industry	10.67	.15
Market served	3.47	.32
Previous occupations	7.19	.07
Source of capital	17.35	.002
Turnover per year	40.95	.13
Percentage annual profit on turnover	43.61	.008

From table 39.4 it seems as if the two groups of entrepreneurs differed significantly on only two of the 17 variables on which the two groups were compared. The more successful entrepreneurs tended to own businesses which were more profitable than those of the less successful entrepreneurs. They also tended to use relatively more own capital than less successful entrepreneurs did.

Differences between the two groups on variables which were measured by means of continuous (interval scales) were investigated by means of One-Way Analyses of Variance. The results are shown in table 39.5.

Table 39.5
Results of One-way Analyses of Variance on responses of successful and less successful entrepreneurs (df = 1,138)

Biographical Variables	F-value	p.
Investment: own and other capital	10.75	.0013
Age of respondent	0.05	.8151
Age of business	4.39	.0380
Investment: own capital	1.79	.1831
Number of employees	5.29	.0230
Return on investment	73.08	.0001

(own capital and debt), the age of the firm, the number of employees, and the return on investment, are characteristics on which the two groups differed significantly.

These results seem to be in the expected direction, the larger the amount of capital invested, the older the business, the larger the number of employees and the higher the return on investment the more likely it was for the business to be successful.

The scores of the two groups on the personality traits measured by the 16 PF were also compared by means of One-way Analyses of Variance. The results are summarized in table 39.6.

Table 39.6
Results of One-way Analyses of Variance on scores of two groups of entrepreneurs on personality traits (df = 1,138)

Variable	F	p
Sizothymia - Cyclothemia	1.42	.24
Scholastic Mental Capacity	.17	.68
Ego strength	.44	.51
Submissiveness - Dominance	.11	.74
Desurgency - Surgency	.41	.52
Superego strength	4.61	.03
Threctia - Parmia	.20	.66
Harria - Premsia	.17	.68
Alaxia - Protension	.10	.75
Praxernia - Autia	1.90	.17
Artlessness - Shrewdness	.81	.37
Untroubled adequacy - Guilt proneness	.98	.33
Conservatism - Radicalism	.50	.48
Group adherence - Self-sufficiency	.01	.90
Low integration - Higher self-concept control	.18	.67
Ergic tension	.03	.87

From table 39 6 it can be seen that the scores of the two groups differed significantly on only one personality trait i.e superego strength The direction of the difference seems to be: less successful entrepreneurs ($\underline{M}$ = 13.80, $\underline{SD}$ = 3.25) > more successful entrepreneurs ($\underline{M}$ = 12.56, $\underline{SD}$ = 2.66)

Comparisons of the scores of the two groups of entrepreneurs on the fields of interest measured by the 19 Field Interest Inventory were done by means of One-way Analyses of Variance The results of these analyses are shown in table 39.7.

Table 39.7

Results of One-way Analyses of Variance on scores of two groups of entrepreneurs on fields of interest measured by 19 FII (df = 1,138)

FIELD OF INTEREST	F	p
Fine Arts	2.37	.13
Clerical	0.00	.98
Social work	.94	.33
Nature	.07	.79
Performing Arts	.10	.75
Science	3.75	.055
Historical	2.45	.12
Public speaking	0.00	.96
Numerical	.31	.58
Sociability	.21	.65
Creative thought	.03	.86
Travel	3.82	.053
Practical-Female	2.68	.10
Law	.05	.82
Sport	.83	.36
Language	2.80	.10
Service	.01	.92
Practical-Male	.30	.58
Business	.80	.37
Work-Hobby	.20	.65
Active-Passive	.03	.87

From table 39.7 it can be seen that the scores of the two groups of entrepreneurs did not differ significantly on any of the fields of interest as measured by the 19 FII. Two near significant differences at the 5 per cent level, i.e on the scales for 'science' and 'travel' occurred

From the results presented so far it can be concluded that the two groups differed significantly on only one of the personality traits measured and on none of the fields of interest as measured by the 19 FII. The two groups also did not differ significantly with regard to the biographical variables on which data was gathered As could be expected, the two groups did differ in terms of 'business' variables The reason for this is obvious: the two groups were defined on the basis of the achievements of their businesses.

The results of the above analyses seemed to indicate that the successful and less successful entrepreneurs (as defined in this study), could be treated as one group (set). This also seems to provide an answer to the first research question; the two groups were not different on the vast majority of the variables on which the two groups were compared. In subsequent analyses successful and unsuccessful entrepreneurs were treated as one group

Further analyses were carried out to arrive at answers to the second research question.

To determine whether entrepreneurs differed from state employees and bank officials in terms of responses on the three sets of variables, One-way Analyses of Variance, followed by Tukey's ranges tests (in the case of continuous scales), and Chi-squared (in the case of discrete scales used for all biographical variables except age), were carried out. An F-value of 24.7 (2,286) indicating a significant difference among the three groups at the p = .0001 level was found for the biographical variable age Tukey's ranges test indicated that bank officials were significantly younger than the state employees as well as the entrepreneurial groups.

Other results obtained are shown in table 39.8.

Table 39.8
Results of chi-squared and One-way Analyses of Variance on scores of state employees, banking officials and entrepreneurs on biographical variables, personality traits and interests

Biographical variables	Chi-squared	(df)	p.	
Place of birth	62.3	(4)	.000	
Sex	65.7	(2)	.000	
Marital status	14.1	(4)	.007	
Population group	6.3	(6)	.393	
Religious Affiliation	67.6	(6)	.000	
School education	6.8	(4)	.147	
Tertiary education	34.0	(6)	.000	
Occupation of father	127.5	(8)	.000	
Position in birth order	7.7	(8)	.461	
Socio-economic level	12.3	(10)	.264	
Language group	111.7	(4)	.000	
Personality traits	**F**	**(2,286)**	**p.**	**Groups different (Tukey)**
Sizothymia-Cyclothymia	4.4		.01	Bankers>Entrepreneurs; Bankers> State
Scholastic Mental Ability	2.1		.13	
Ego strength	4.0		.02	Entrepreneurs>State
Submissiveness - Dominance	5.0		.01	Entrepreneurs>State; Entrepreneurs> Bankers
Desurgency - Surgency	1.4		.26	
Superego strength	2.4		.26	
Threctia - Parmia	1.9		.16	
Harria - Premsia	15.3		.0001	State>Entrepreneurs; Bankers> Entrepreneurs
Alaxia - Protension	11.1		.000	Entrepreneurs>State; Entrepreneurs>Bankers
Praxernia - Autia	3.7		.03	Entrepreneurs>Bankers
Artlessness - Shrewdness	.4		.67	
Untroubled adequacy - Guilt proneness	5.9		.00	State>Entrepreneurs
Conservatism - Radicalism	.2		.78	
Group adherence - Self-sufficiency	3.5		.03	Entrepreneurs>Bankers
Low integration - Higher self-concept control	.6		.53	
Ergic tension	1.6		.20	

Interests				
Fine Arts	.4		.70	
Performing Arts	1.8		.16	
Language	1.6		0.21	
Historical	.8		.46	
Service	20.7		.0001	State>Entrepreneurs; Bankers> Entrepreneurs
Interest fields	F.	(2.286)	p.	Groups different (Tukey)
Welfare work	10.9		.0001	State>Entrepreneurs; Bankers>Entrepreneurs
Sociability	6.2		.002	Bankers>State
Public Speaking	.9		.39	
Law	.4		.66	
Creative thinking	3.0		.05	Entrepreneurs>Bankers
Science	.1		.91	
Practical - Male	1.8		.16	
Practical - Female	19.2		.0001	Bankers>Entrepreneurs; State>Entrepreneurs
Numerical	7.8		.0005	Bankers>State; Entrepreneurs>State
Business	21.9		.0001	Entrepreneurs>Bankers; Entrepreneurs>State
Clerical	12.4		.0001	Bankers>State; Bankers> Entrepreneurs
Travel	.9		.41	
Nature	5.2		.006	State>Bankers
Sport	2.9		.06	
Work - Hobby	2.4		.10	
Active - Passive	1.4		.26	

A final line of analysis was aimed at determining how accurately the variables on which the three groups differed significantly could predict membership of the three groups. This was done by means of stepwise discriminant analysis (Proc Stepdisc in SAS) followed by discriminant analysis by means of Proc Discrim in SAS.

As a first step, the biographical variables on which the three groups differed significantly (age, place of birth, sex, marital status, religious affiliation, tertiary education, occupation of father and language group), were used to build a model of factors which could differentiate between the three groups. This was accomplished by means of stepwise discriminant analysis. The Proc Stepdisc procedure entered seven variables after eight steps The variables used in the model were, in order of their contribution to the prediction: religious affiliation, sex, tertiary education, age, occupation of father, language, place of birth Use of these variables yielded a Wilk's Lambda of .38 and an average squared canonical correlation of .37.

The variables identified by this process were then used to classify the respondents into the three groups by means of discriminant analyses. The resulting classification is shown in table 39 9.

Table 39.9
Number of observations and percentages classified into different groups using biographical variables

From Group		State employees	Banking officials	Entrepreneurs	Total in group
State employees	N	58	13	6	77
	%	75.3	16.9	7.8	
Banking officials	N	10	55	5	70
	%	14.3	78.6	7.1	
Entrepreneurs	N	28	13	99	140
	%	20.0	9.3	70.7	

From table 39.9 can be seen that while 75.3, 78.6 and 70.7 percent respectively of the state employees, banking officials and entrepreneurs were classified 'correctly' only 7.8 and 7.1 per cent of the state employees and banking officials respectively, were classified as entrepreneurs. In absolute terms larger percentages of state employees and banking officials were classified correctly than was the case with entrepreneurs.

The same procedures (using the traits sizothymia - cyclothymia, ego - strength, submissiveness - dominance, harria - premsia, alaxia - protension, praxernia - autia, adequacy - guilt proneness and ergic tension in the stepwise discriminant analysis) resulted in the variables harria - premsia, alaxia - protension, ego - strength, sizothymia - cyclothymia (in order of contribution to variance) being retained in the model to classify respondents into the different groups. This resulted in a Wilks' Lambda of .79 and an average squared canonical correlation of .11. The results of the discriminant analysis using these variables are shown in table 39.10.

Table 39.10
Number of observations and percentages of respondents classified into different groups by means of personality traits

From group		State employees	Banking Officials	Entrepreneurs	Total in group
State employees	N	35	22	20	77
	%	45.4	28.6	26.0	
Banking officials	N	25	27	18	70
	%	35.7	38.6	25.7	
Entrepreneurs	N	21	31	88	140
	%	15	22.1	62.9	

From these results, it seems as if personality traits had less power to classify respondents into their correct groups than was the case with biographical variables - as indicated by the values of Wilk's Lambda, the canonical correlation coefficients, and the percentage accuracy of classification obtained. A larger absolute percentage of entrepreneurs than of the other two groups were, however, classified correctly.

Similar analyses were done using scores on the fields of interest as discriminators. The interest fields used in the stepwise discriminant analysis, were once again those on which significant differences were found between at least two of the respondent groups (i.e service, social work, sociability, creative thought, practical-female, numerical, business, clerical and nature). The stepdisc procedure included business, service, nature, clerical and social work in the model, which yielded values of .67 for Wilk's Lambda and .18 for the average squared canonical correlation. A classification of respondents, based on this model is exhibited in table 39 11.

Table 39.11
Number of observations and percentages classified into different groups by means of scores on fields of interest

From Group		State employees	Banking officials	Entrepreneurs	Total in group
State employees	N	40	21	16	77
	%	52.0	27.2	20.8	
Banking officials	N	18	35	17	70
	%	25.7	50.0	24.3	
Entrepreneurs	N	17	22	101	140
	%	12.2	15.7	72.1	

From these results, it can be seen that the accuracy of classification of respondents into the three groups by means of scores on the fields of interests scales was not high - a relatively high value of Wilk's Lambda and a low canonical correlation coefficient as well as percentages of respondents classified correctly, were obtained Entrepreneurs were again classified relatively more accurately than was the case with the other two groups.

A final analysis was done in order to determine the discrimination ability of the three sets of variables biographical, personality traits and interests - when used in combination

The twenty-five variables on which significant differences had been found, were used in a stepwise discriminant procedure, which resulted in six biographical variables (religious affiliation, sex, tertiary education, age, father's occupational level and language group), three personality trait variables (alaxia - protension, ego strength, harria - premsia) and four fields of interest (business, service, numerical and creative thought) being included in the final discriminant model The value of Wilk's Lambda was .30 and the squared canonical correlation 45. Using these variables in a discriminant analysis the following pattern of classification was obtained

Table 39.12
Number of observations and percentages of classification into groups

From Group		State employees	Banking officials	Entrepreneurs
State Employees	N	62	10	5
	%	80.5	13.0	6.5
Banking officials	N	10	54	6
	%	14.3	77.1	8.6
Entrepreneurs	N	12	8	120
	%	8.6	5.7	85.7

It seems as if a relatively good prediction was obtained by means of the variables used as discriminators in this analysis. The discriminators that were chosen seem to yield a quite successful classification, especially for the entrepreneurs. The values obtained for Wilk's Lambda and for the canonical correlation are also quite satisfactory.

Discussion

The results obtained by means of the analyses described in the previous section seem to provide relatively clear answers to the research questions. With regard to the first research question, it seems as if the two entrepreneurial groups differed significantly from each other in terms of the success levels of their businesses. These significant differences exist in terms of variables which are commonly seen as indicators of relative success or failure of businesses i.e. profit as a percentage of turnover, source of capital, return on investment, number of employees, amount of capital invested and the length of time the business has been in existence. From these results, it seems as if the more successful entrepreneurs tended to contribute a larger part of the capital invested in their businesses than the less successful entrepreneurs did. A finding that is possibly of more importance, is that the more successful and the less successful entrepreneurs differ significantly on only one out of sixteen personality variables i.e. superego strength and on none of the fields of interest. It seems therefore as if successful and less successful entrepreneurs are quite similar in terms of the kind of people they are. It can also be concluded, that, in terms of other biographical variables like age, marital status, religious affiliation, education and family background, entrepreneurs are entrepreneurs - they come in all biographical shapes and sizes.

The analyses carried out to determine whether the three groups (entrepreneurs, state employees, and bankers) differed significantly from each other in terms of biographical variables, personality traits, and fields of interest, yielded quite clear results. The differences between the biographical background of entrepreneurs and that of the respondents in the other two groups can be summarized as: Entrepreneurs tended to be English-speaking, older, more likely to have been born outside South Africa, male rather than female, white, married, not formally affiliated to a religious denomination, either less likely to have had tertiary education or more likely to have had tertiary education, and had fathers who were themselves in business or did managerial work.

The results with regard to differences in personality traits and interests are summarized in tables 39.13 and 39.14.

Table 39.13
Comparison of personality traits of entrepreneurs and banking officials

Entrepreneurs were: Higher	Lower	Entrepreneurs tend to be:
	Sizothymia-Cyclothemia	Reserved, detached, critical, cool
Submissiveness-Dominance		Assertive, independent, aggressive, stubborn
	Harria-Premsia	Tough-minded, self-reliant, realistic, no-nonsense
Alaxia-Protension		Suspicious, self-opinionated, hard to fool
	Praxernia-Autia	Imaginative, wrapped up in inner urgencies, careless of practical matters, Bohemian
Group adherence-Self-sufficiency		Self-sufficient, prefers own decisions, resourceful

A similar table can be constructed to summarize the significant differences in terms of personality traits between entrepreneurs and state employees. This is shown in table 39.14.

Table 39.14
Comparison of personality traits of entrepreneurs and state employees

Entrepreneurs higher on	Entrepreneurs lower on	Entrepreneurs tend to be more:
Lower Ego Strength - Higher Ego Strength		Emotionally stable, faces reality, calm
Submissiveness-Dominance		Assertive, independent, aggressive, stubborn
	Harria-Premsia	Tough minded, self-reliant, realistic, no-nonsense
Alaxia-Protension		Suspicious, self-opinionated, hard to fool
	Untroubled adequacy-Guilt proneness	Placid, self-assured, confident, serene

The significant differences found on the scales measuring interests can be summarized as: Entrepreneurs tend to be more interested than both state employees and bankers in the field of business, more interested than bankers in creative thinking, and more interested than state employees in the numerical field. Entrepreneurs are on the other hand significantly less interested than both state employees and bankers in service, welfare work and practical-female matters. They are also significantly less interested than bankers in clerical work These patterns seem to be intuitively correct as in line with some generally accepted characteristics of the three kinds of occupations.

This study seems to have succeeded in providing, at least as far as the present respondents are concerned, some new insight into the entrepreneur as different from members of two other occupational groups.

The study has clear shortcomings. Causality could not be established due to the ex post facto nature of the present study. The variables on which significant differences between entrepreneurs and other groups were found can therefore not be used as predictors of, for instance, career choice. It is quite possible that having been a banker, or a state employee, or an entrepreneur could have influenced (changed) the respondents and could therefore have caused the differences which were found.

It seems as if longitudinal or experimental studies are needed to further tease out the role of biographical, personality traits and interests in determining career choices, especially as far as the choice between entrepreneurship and other occupations and careers are concerned.

References

Begley, T.M., & Boyd, D.P (1987), 'Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses', *Journal of Business Venturing*, 2(1), pp 79-93

Boshoff, A.B., Bennett, H.F & Owusu, A.A. (1992), 'Entrepreneurship research: Where are we and where should we be going?', *Development Southern Africa*, 9(1), pp 47-64

Brockhaus, R.H. (1980), 'Risk taking propensity of entrepreneurs', *Academy of Management Journal*, 23(3), pp. 509-520

Brockhaus, R.H & Horwitz, P S (1985), 'The psychology of the entrepreneur' in Sexton, D L. & Smilor, R W. (Eds), *The art and science of entrepreneurship*, Ballinger, Cambridge, MA

Bygrave, W.D. (1989), 'The entrepreneurship paradigm (I): A philosophical look at its research methodologies', *Entrepreneurship theory and practice*, 14(1), pp. 7-26

Carland, J.W., Hoy, F., Boulton, W.R & Carland, J C. (1984), 'Differentiating entrepreneurs from small business owners: A conceptualization', *Academy of Management Review*, 9(2), pp 354-359

Carsrud, A.L., Olm, K.W. & Eddy, G.G. (1986), 'Entrepreneurship: Research in quest of a paradigm' in Sexton, D L. & Smilar, R W (Eds), *The art and science of entrepreneurship*, pp. 336-366, Ballinger, Cambridge, MA.

Cattel, R.B., Eber, H W & Tatsuoko, M M. (1970), *Handbook for the sixteen personality factor questionnaire(16 PF)*, Institute for Personality and Ability Testing, Inc., Illinois, U S A

Fernald, L.W & Solomon, G T. (1987), 'Value profiles of male and female entrepreneurs', *The Journal of Creative Behavior*, 21(3), pp. 234-247

Fouche, F.A & Alberts, N F. (1992), *Manual for the 19 Field Interest Inventory (19 FII)*, Human Sciences Research Council, Pretoria

Gartner, W.B. (1988), ' "Who is an entrepreneur?" is the wrong question', *American Journal of Small Business*, 12, pp. 11-32

Hisrich, R.D. (1988), 'Entrepreneurship: Past, present and future', *Journal of Small Business Management*, 20(3), pp. 62-68

Human Sciences Research Council (1992), *Human Sciences Research Council Training Manual. Guidelines for administration, scoring and interpretation of the 16 PF*, H.S.R.C., Pretoria

Low, M.B. & MacMillan, I.C. (1988), 'Entrepreneurship: Past research and future challenges', *Journal of Management*, 14(2), pp. 139-162

Smith, K.G., Gannon, M.J. & Sapienza, H.J. (1989), 'Selecting methodologies for entrepreneurial research: Trade-offs and guidelines', *Entrepreneurship theory and practice*, 14(1), pp. 39-49

Statistical Analysis System (1985), *SAS user's guide: Basics*, (5th ed.), Cary, North Carolina

Statistical Analysis System. (1985), *SAS user's guide: Statistics*, (5th ed.), Cary, North Carolina

Vesper, K.H. (1985), 'New developments in entrepreneurial education' in Hornaday, J.A., Shils, E.B., Timmons, J.A. & Vesper, K.H. (Eds.), *Frontiers of entrepreneurship research*, pp. 489-497, Babson College, Wellesley, M.A.

40 Business values in the republic of South Africa and the United States: A tale of two countries

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Abstract

This paper reports on a study of the values of two samples of South African managers over a ten year period It then compares those values to a group of US entrepreneurs, using the same instrument, the Allport-Vernon-Lindzey Study of Values, for both groups. The comparison with the early sample of South African managers noted similarities between the value systems of the two groups The comparison with the most recent group of managers indicates a shift in the values of the South African managers There appeared to be little difference between the values of the later group of managers on the basis of age This was similar to the findings in the US sample as well as the earlier South African sample There were differences in the strength of the values, but less of a difference in the pattern of values exhibited based on industry backgrounds The reasons for these shifts are discussed, including the potential impact on the education process in South Africa

Introduction

As the map of Europe continues to be redrawn and emerging nations leave behind their previous planned economies, increasing attention is being paid to the process of teaching people how to be managers An important question is whether teaching techniques, or even US management doctrines and techniques, can be exported to meet this need One problem may be whether values systems in other countries are sufficiently similar to those embodied in US managerial practices In an increasingly trade oriented world, it is also important even for stay-at-home managers and business educators to understand where similarities - and differences -may occur.

Studies of managers' personal values have a history stretching back into the mid 1960's. Two traditional focuses have been the extent to which managers' values appear to be different from other groups within the organization (see, for example, Guth & Tagiuri, 1965), and whether values have changed over time (cf. Lusk, 1974). A third, more recent, focus has been on value patterns in different nations, including Japan (Howard et al, 1983), India and Australia (England, 1978, England and Lee, 1974), Greece and Germany (Naumes and Naumes, 1991). The present study concentrates on managers from the Republic of South Africa, both as how their values compare with traditional US patterns and as to how these have changed over time.

Methodology

Sample: The baseline for this research was provided by a study of managers in the Republic of South Africa (RSA) by Boshoff et al (1983) Because of the complexity of the South African economy and the pluralistic nature of the workforce, managers in the RSA face a challenging environment. Accordingly, the authors hypothesized that managerial values would be primarily pragmatically-oriented Using the Allport-Vernon-Lindzey Study of Values, this would translate to higher scores in the Economic, Theoretical, and Political value dimensions In their 1983 study of 381 managers from all sectors of the economy, results were consistent with this hypothesis. In addition, there were only minor differences among managers from different sectors Age also did not appear to be related to scores on the Allport-Vernon-Lindzey value dimensions.

The current study utilized data provided by 126 managers enrolled in middle management courses through the business school of a South African University All have opted for an entrepreneurship-oriented track rather than a corporate management program, although all are currently employed by larger organizations, in the mining, agriculture/forestry, manufacturing, services/utilities/government, and retail/financial sectors. They ranged in age from twent-four to fourty-four years The managers were predominantly male (112 of 126), white, and Afrikaans, although all were fluent in English

The US sample consisted of 412 entrepreneurs, all heads of their own insurance agencies They were dominantly male (N=410) and white, with an average age of just under fourty-five years

Measure

The Allport-Vernon-Lindzey Study of Values is a self-rating instrument based on Eduard Spranger's six ideal 'types of men' (1928) The questionnaire 'aims to measure the relative prominence of six basic interests or motives' (A-V-L Manual, p 3). These are the Theoretical ('... the interests of the theoretical man are empirical, critical, and rational ... His chief aim in life is to order and systematize his knowledge',); the Economic ('... characteristically interested in what is useful .... This type is thoroughly `practical'... '); the Aesthetic ('The aesthetic man sees his highest value in form and harmony.... He regards life as a procession of events; each single impression is enjoyed for its own sake '); the Social ('The social man prizes other persons as ends, and is therefore himself kind, sympathetic, and unselfish '); the Political ('The political man is interested primarily in power.'), and the Religious ('The highest value of the religious man may be called unity. He ... seeks to comprehend the cosmos as a whole, to relate himself to its embracing totality.') (all quotes from A-V-L Manual, 1970, pp 4-5). Most individuals are, in fact, a mix of types, and, as confirmed by Guth & Tagiuri, people in different occupations tend to display different value patterns US businessmen, for example, tend to rank highest in economic, followed by political and theoretical values. (Manual, 1970; Guth & Tagiuri, 1965, Brandon & Naumes, 1977).

Hypotheses

Two primary hypotheses were examined. First, it was expected that there would be no significant difference in the scores of the two samples of RSA managers. This was based on previous findings (cf: England, Dhingra & Agarwal, 1974) that personal value systems of managers are not prone to rapid change. For example, US data on managerial values in the 1960's displays similar patterns and strengths of values as managerial data from 1980s samples (Naumes and Naumes, 1991). The second hypothesis predicted that the entrepreneurially-oriented managers from the RSA sample would not have values significantly different from those of US entrepreneurs. The pragmatic focus of US managers/entrepreneurs, and those in the 1983 RSA study could be seen as useful traits for people whose task is to direct resource allocations, think strategically, and lead others. This would also imply that educational techniques and even materials could be successfully transported between the two countries.

Results

Analyses were performed on the South African 1992 data sample as a whole (114 useable responses) compared with the 1983 study, and on the responses of the male and female respondents separately Industry sub-groupings and age groups were also compared The latter two were the only variables from the earlier South African study to show any significant differences among sub-groups. Significance was determined at the .05 level for a two tailed test, using the Z statistic.

General Pattern of Managerial Values: The hypothesis that RSA managers would display pragmatic value patterns by scoring highest on economic, theoretical, and political values, and low on the other values measured, was again investigated, and the results were compared with the 1983 value patterns (table 40.1).

The hypothesis of pragmatic value patterns was no longer supported, according to the 1992 data. While economic and theoretic values still scored above the mean, the 1992 sample had significantly lower scores on these values than the 1983 sample Religious scores had increased substantially, and significantly, from a mean of 35.2 % to a mean of 40.6 %. The religious variable also displayed a standard deviation similar to the other variables, while in the earlier study the standard deviation was much larger The importance of social values has also increased significantly when the two samples are compared Given the forced choice nature of the questionnaire, an increase in one variable must be accompanied by decreases elsewhere, in this case in theoretical and political, although the score of the 1992 sample on the theoretical value is still above the mean As shown in table 40.2, eleven of the variable pairs were significantly different from each other, the four exceptions being theoretical/political, theoretical/religious, social/aesthetic, and political/religious.

The 1983 sample consisted entirely of male managers. By 1992 there were a small number of women managers enrolled in the entrepreneurship course of study The Allport-Vernon-Lindzey norms for the United States show significant differences between male and female subjects (Manual, 1970). Accordingly, the 1992 sample was analyzed by gender (table 40.3). Of the seventy-seven subjects whose gender was identifiable from the background information, sixty-seven were male and ten female. Women were found to be significantly higher in social and lower in theoretical values. The female manager's relative lack of strength of the theoretical value, one of the pragmatic values characteristic of the male managers in both studies, is also consistent with patterns found in US research on male vs. female managerial values (Naumes and Naumes, 1991).

Managerial values across economic sectors

The 1992 study differed from its predecessor in the distribution of managers by sector As shown in table 40.4, mining was represented at a very low level, while agriculture/ forestry, unrepresented in 1983, had seven respondents. The manufacturing managers were primarily in transport (twenty-one of thirty per cent), and the service utilities sector, including broadcasting, was a larger proportion of the sample. As in 1983, there was a significant difference on the aesthetic scale between the mean scores of the service utilities managers and those in retail/ finance. The analysis of the 1992 data showed significant differences between retail/ finance and manufacturing on three variables: economic, aesthetic, and social. In all cases, however, the patterns of the variables conformed to the group as a whole, ranking high in economic and low in social and aesthetic. These results seem to indicate that managers display consistent patterns of values across sectors, in particular in ranking high in the pragmatic values of economic and theoretical orientation

Age differences in values were also studied for the RSA sample. The 1983 study had found one significant difference only, between the mean scores for social orientation between managers aged thirty-six to fourty-five and those aged fourty-six to fifty-five years. The 1992 study had proportionally fewer managers in older age groups than in 1983 (table 40.5). Again, only one significant difference was found: between managers over fourty-five years and those aged thirty-six to fourty-five on the religious value. Overall, therefore, there is little to no difference in either the pattern or strength of values across the different age groups. This is consistent with the findings for the US sample which found no significant differences within the sample based on age (Brandon and Naumes, 1977).

Finally, the value patterns of the total sample were compared with those of a sample of United States entrepreneurs The entrepreneur study was chosen for consistency with the theme of the conference, and because the RSA managers were all enrolled in the entrepreneurship track of their management education program Comparability with the 1983 group of managers, who were not selected specifically for their interest in entrepreneurship, was assumed, based on US patterns. The US entrepreneurship sample had been compared to a group of professional managers also in the insurance industry, with only minor differences identified (Brandon and Naumes, 1977). In addition, the patterns and mean strengths of the entrepreneur's top three values are consistent with other studies of business managers, including Guth and Tagiuir (1965), A-V-L (1970), and Singer, Tagiuri (1975). The results of the RSA/ US comparison are shown in table 40.6 Significant differences in the means were identified for the religious and political variables. A comparison of the male RSA managers with the virtually all-male US sample found the difference in the same two variables to be significant The South African managers scored higher on the religious orientation in the 1992 sample, while the political value was significantly more important in the US data The pattern of values in the original 1983 RSA study would appear to be more similar to the US pattern (tables 40.1 and 40.6)

Discussion

The most surprising finding of this study was evidence that change appears to be occurring in the values of RSA managers, or at least of those with an entrepreneurial focus. The significant differences from the 1983 sample, increased importance of religious and social values at the expense of political and theoretical, may be a reaction to the major political and societal events occurring in the Republic of South Africa. When a change as fundamental as the repeal of apartheid laws occurs, people may feel that old patterns no longer hold (the decline in importance of a 'theoretical ' orientation), and power relationships can not be depended on (the decline in 'political '). People may, instead, look more to a 'supreme being ' as a source of order or stability (a possible explanation for the increase in the 'religious ' values) The increased 'social ' orientation can be seen as recognition of the importance of the gap, reported by Godsell (1983), between the values of senior black employees and their white male managers.

An additional agent of change appears to be the inclusion of women managers in the 1992 study While still a small sample, their values were nonetheless somewhat different from those of male managers, emphasizing a social over theoretical orientation Similar differences have also been noted among female managers in the US (A-V-L Manual, 1970, Price & Stitt, 1979), in particular the decreased importance of the theoretical value

The value orientation of managers of both sexes, however, is still dominated by the highly pragmatic economic value. This is true both in the Republic of South Africa and the United States It is also true across age groups in both RSA samples, and among managers from all sectors of the economy This is consistent with the second hypothesis It is also consistent with the manager's role as a decision maker, as emphasized by Guth & Tagiuri (1964). The focus of management education, therefore, still needs to have a strong economic and pragmatic base, bounded by rationality about other considerations, in order to assist managers -- and present or potential entrepreneurs -- in their decision process South African managerial students would also appear to demand a focus on the ethical and social implications of their role

The differences in findings of the 1983 and 1992 studies also highlights the need for continued research Although an individual's values are thought to change slowly, if at all, it is clear that the average values of a key component of South African society are changing These changes should be further analyzed, and tracked over time In addition, popular wisdom in the United States assumes that the rebels and 'flower children ' of the 1960's and early 1970's have taken on traditional pragmatic values as they entered management, this may be borne out by the stability in value patterns of US managers over time However, women are increasing as a proportion of US managers, representing another force for change Further research, focused on potential changes, should also be conducted on the value patterns of US managers and entrepreneurs

References

Allport, Gordon W., Vernon, Philip E. and Lindzey, Gardner (1970), *Manual: Study of Values* , 3rd Edition, Houghton Mifflin Company Boston, Massachusetts

Boshoff, A B , Smith, S du T , Moore, Michael L , and Rautenbach, K (1983), *South*

African Managerial Values, SAJEMS

Brandon, Laurence G , and Naumes, W. (1977), 'A comparative study of corporate executive and entrepreneurial value orientations', *presented at the thirty-seventh Annual Meeting of the Academy of Management*, Orlando, Florida

England, George W. (1978), 'Managers and their value systems: A five-country comparative study', *Columbia Journal of World Business*, pp. 35-44

England, George W., Dhingra, O. P., and Argarwal, N. C. (1974), *The Manager and the Man*, Kent, Ohio, Kent State University

England, George W., and Lee, R. (1974), 'The relationship between managerial success in the United States, Japan, India, and Australia', *Journal of Applied Psychology*, pp. 411-419

Godsell, G., 'The work values of black and white South African employee', *Unpublished Masters thesis*, University of Pretoria, Pretoria

Guth, William D., and Tagiuri, Renato (1965), 'Personal values and corporate strategy' , *Harvard Business Review*, vol. 43, pp 123-132

Howard, A., Shudo, K , and Umeshima, M. (1983), 'Motivation and values among Japanese and American managers', *Personnel Psychology*, vol. 36, pp. 883-898

Lusk, E J., and Oliver, B L (1974), 'American mangers' personal value systems - Revisited ', *Academy of Management Journal*, vol. 17, pp. 549-554

Naumes, Margaret J., and Naumes, W. (1991), 'Managers values and perceptions of values: A comparison of men and women.', *Proceedings*, Northeast Decision Sciences Institute (Pittsburg, PA)

Naumes, William, and Naumes, Margaret J. (1991), 'A cross-cultural study of business Student values: Transportability of business education ', *presented at the International Conference on Internationalising Entrepreneurship Education, Training, and Research*, Cambridge, UK

Price, K. and Stitt, C (1979) 'Value orientation of female MBA students: Boon or barrier to managerial success ', *unpublished Working Paper. Temple University, Philadelphia*, PA

Singer, H A. (1975), 'Human values and leadership.', *Business Horizons*, August, pp 85-88

Spranger, E. (1928), *Types of Men: The Psychology and Ethics of Personality*, New York, Johnson Reprint Corporation, Translated from 5th German edition of *Lebensformen* by Paul J W Pigors (Halle Max Niemeyer Verlag American Agent: Stechert-Hafner, Inc., 31 East 10th Street, New York, NY

Appendix

Table 40.1
Mean values for South African managers

	1983	1992
Economic	49.9 (7.0)	48.6 (7.2)
heoretical	44.7 (6.4)	40.4 (6.3)*
Political	42.7 (6.4)	39.8 (6.1)*
Aesthetic	35.6 (6.9)	34.5 (8.6)
Religious	35.2 (10.2)	40.6 (7.1)*
Social	32 1 (6.8)	36.1 (6.5)*

* p < .05

Table 40.2
Matrix indicating significant differences among means of value scores: 1992

	Economic	Theoretical	Political	Aesthetic	Religious	Social
Economic	-	*	*	*	*	*
Theoretical	*	-		*		*
Political	*		-	*		*
Aesthetic	*	*	*	-	*	
Religious	*			*	-	*
Social	*	*	*		*	-

\- not applicable
* p < .05

Table 40 3
Mean values of male and female South African managers: 1992

	Male	Female
Economic	49 2 (7.0)	45.6 (5.4)
Theoretical	41 6 (5.6)	35.4 (7.1)*
Political	39.6 (5.5)	40.3 (5.4)
Religious	39 6 (6.8)	41.0 (8.4)
Social	35.2 (6.5)	39.7 (5.8)*
Aesthetic	34.7 (8 6)	38.0 (7.8)

* p < .05

Table 40 4
Composition of samples by economic sectors

Kind of Organization	N: 1983	N: 1992
Mining	62	3
Manufacturing	176	30
Service Utilities	80	45
Retail/Financial	63	26
Agriculture/Forestry	-	7

Table 40.5
Composition of samples by age groups

Age Group (years)	N: 1983	N: 1992
Below 26	3	2
26 - 35	103	35
36 - 45	150	58
46 - 55	140	17
Over 55	21	-

Table 40.6
Mean values for south african and United States managers

	RSA: 1992	US
Economic	48.6 (7.2)	47.7 (7.4)
Religious	40.6 (7.1)	35.8 (10.2)*
Theoretical	40.4 (6.3)	40.1 (6.0)
Political	39.8 (6.1)	45.5 (7.3)*
Social	36.1 (6.5)	34.7 (7.2)
Aesthetic	34.5 (8.7)	36.2 (8.4)

* $p < .05$

41 Utilizing student resources at tertiary institutions in entrepreneurial stimulation and education: A case for developing countries

Kobus Visser

Abstract

There are numerous approaches for promoting economic development through the growth and survival of local firms The Student Business Counselling Project at the University of the Western Cape, South Africa, has been operating for two years. Its most important human resources are the students who do the actual case counselling. By incorporating senior commerce students at the university into business counselling, an important new area of knowledge (and a resource of almost limitless capabilities - where a strong mutuality of interest and advantage exists) is tapped

This is of extreme importance in developing countries which have embarked on a market economy. Such countries (particularly those from the former Central and Eastern Europe affiliation) may have an abundance of technical skills, but are at the same time inadequately endowed with managerial and entrepreneurial skills Whilst small-scale enterprises and entrepreneurs form the backbone of successful market-oriented economies, these owners and managers have to be, inter alia, educated and trained in the skills required to successfully own and manage small businesses. As there are no traditional infrastructures and networks existing in many of these developing countries, it will be expected of tertiary institutions to even make more important contributions in terms of their educational roles, until a generation of entrepreneurs has been established.

Whilst these institutions have, undoubtedly, provided their students with excellent education in technical skills, so too will they have to orientate their people in a culture of business and private ownership

In this regard universities (and other tertiary educational institutions) can optimally apply their student resources to advise, consult and guide those people who have utilized

(and will increasingly utilize) the recently-gained opportunities of freedom to establish their own small businesses The latter process can often be painful and disastrous, if not approached in the appropriate manner

Students, whilst studying Economics, Business Administration, Accounting, Engineering, etc., can form an invaluable link in the delivery system (e.g organizations/institutions which finance, advise, train, guide, educate) which must be present to assist and promote business start-ups in developing countries.

This paper explains how the programme originated, the role the university envisions for itself in community upliftment and how the programme could be implemented at other similar institutions, both at a national and international level, particularly in developing countries.

Introduction

There are numerous approaches to promote economic development through the growth and survival of small-scale enterprise[1]. In this regard universities and other tertiary institutions[2] have made a major contribution towards such extension services

By incorporating senior undergraduate students (from various disciplines) into business counselling, an important area of knowledge is tapped Students at tertiary institutions form a pool of resources of almost limitless capabilities. It is vital that the knowledge and skills of these students be applied optimally.

If the argument is true that small-scale enterprise forms the root of economic development and the stability of society, then a system of service delivery[3] should be established, or integrated, to create the basis for sound economic development. In this regard, tertiary institutions have an invaluable role to play.

Purpose and objective

The purpose of this paper is to explain methods of how scarce human resources at tertiary institutions, particularly, in developing countries can be applied to assist those persons who do not possess sufficient educational and technical qualifications in gaining easier access to the mainstream economy It will focus on how student resources at tertiary institutions can be utilized in counselling and guiding individuals to initiate and operate small-scale enterprises

This paper reports on one recent innovative endeavour of providing entrepreneurial small business training and counselling to individuals who have been marginalised from the economy. It further argues that tertiary institutions should extend their activities beyond the scope of empowering only their registered group of students

Such institutions will have to shed their ivory tower and elitist images by clearly informing their communities that they (tertiary institutions) are helpful towards their respective communities by reinvesting through outreach programmes Such actions by tertiary institutions call for strategies of an interventionist nature to address the problems of endemial unemployment in developing countries.

There are numerous examples of such outreach programmes It is therefore important that tertiary institutions become part of the service delivery system of support and assistance to small business formation. Putting the argument differently, the scarce (human) resources at these institutions can and must be applied optimally

In developing countries tertiary institutions are largely dependent on substantial taxpayers' subsidization through the treasury department of central governments. Increasingly these taxpayers will expect a sound and proper return on their investment, as is the norm in developed countries. It would therefore be up to the management of these institutions to state unambiguously that the taxpayer's investment in the youth of the country is neither squandered, nor wasted.

Concern for entrepreneurial skills development

The development of entrepreneurial skills often requires individual support. Yet, the latter-mentioned activity (especially individual case-counselling) makes it a very costly exercise in the skills-transfer process. The student counselling project, as argued in this paper, suggests a method of relatively inexpensive individual case-counselling.

In a recent publication, the Development Bank of Southern Africa (1992, p. 17) asserted that individual counselling is a more effective method than group counselling. Individual counselling has emanated mainly as a result of practical problems relating to the size of small firms. In many instances (especially in the case of sole proprietorships), when the owner leaves the business temporarily, most of the activities cease. Accordingly, it became essential to provide in-situ advice and assistance.

In the past few years interest in, and the importance of, entrepreneurship has witnessed significant growth; especially since the world-wide demise of centrally-planned economies.

For instance, De Vletter (1992, pp. 3-4) reported that in Mozambique under colonial rule virtually all small-scale enterprises and skilled jobs were managed and held by the Portuguese, whilst the economy was almost exclusively controlled by Indians and Portuguese. With the departure of the majority of the Portuguese population, Mozambique was left with a ninetythree per cent illiterate population and only twenty Africans in possession of university qualifications.

Under the subsequent Marxist ideology of that country, private enterprise was tolerated, but not encouraged; De Vletter reported that the latter activity resulted in a drain of skills to surrounding countries. Both systems denied people access to the economy. However, with the reintroduction of a market economy in Mozambique independent small business began to flourish.

Despite numerous similar success stories, the starting of small firms, or micro-enterprise, is often more an act of survival than innovation (Hobbs, 1987, p. 5).

Promoting entrepreneurship education and small business development from divergent scenario's

Since the demise of the Soviet power bloc in the late 80's, those centrally - planned economies (previously defined as Second World countries) which were under the influence of the former USSR have all become part of the Third World nomenclature. Political and economical changes in Central and Eastern Europe have thus rendered the world order, which assigned countries to a three-tier status of First, Second and Third World, as ineffectual and passe.

Reference should rather be made to developed (or industrialized) countries, and developing countries. The fallacy of the syntax error of a three-tier world order is of a paternalistic nature, discriminatory, offensive and abusive by classifying people as second-rate and third-rate citizens.

Many countries with previously centrally-planned economies maintain that they are industrialized. Yet, the manufacturing industries of these countries are so obsolete that it has rendered them totally ineffective, unproductive and non-competitive against the market economies of westernized countries (cf. Willers, 1992).

Countries and regions now resorting under the umbrella of 'developing' status strive for the same goal, but will have to achieve this by different means For example, those regions and countries (such as Rumania, Hungary, Latvia, Lithuania, etc.) which recently discarded centrally-planned economies in favour of market-regulated economies have large pools of technically well-skilled and qualified people.

As these countries move through the painful transition of economic and political restructuring, more and more employees from large, unproductive factories will become redundant and displaced (Willers, 1992, p. 15). Valtr Komarek, former deputy prime minister of Czechoslovakia and candidate for prime minister in the June 1992 elections, remarked that these countries have no (or very little) managerial skills and knowledge of starting and operating (small) businesses (The New York Times, 5 January 1992).

The argument is therefore that they need substantial support in creating, inter alia, an entrepreneurial culture. For instance, in Poland alone approximately 17 000 retail outlets had come into the hands of private ownership by September 1990 (Lipton & Sachs, 1990, p. 295). These new owners need training in the basic techniques of managing their businesses and these countries can be broadly classified as natural resource deficient (NRd).

Similarly, countries and regions which have loosely pursued the principles of a market economy (such as South Africa, Zambia, Zaire, Malawi, etc.) have allowed small businesses. For different reasons, the majority of the population of these countries operated as the peripheral (or informal) sector of the economy. The latter-mentioned group can be broadly classified as human skills deficient (HSd).

The very essence of these two scenario's (i.e. NRd and HSd) which lobotomized private (small) business formation is now making way for easier access to (and participation in) ownership, wealth creation, employment creation and wealth redistribution in developing countries.

The common denominator emanating from these divergent backgrounds is the need for the development, and support of, small-scale enterprise Similarly, central to all the above transformations the need for entrepreneurs as the innovators, risk-takers and idea creators prevails

With the collapse of centrally-planned economies in Central and Eastern Europe and Africa, the latent and suppressed entrepreneurship of the affected persons will play an important role in economic restructuring and economic recovery. Cronje, et al, concluded that small business start-ups and small business formations are of the least expensive, yet most successful, ways of giving formerly disenfranchised persons access to the mainstream of the economy (1990, p 399).

Entrepreneurship and small business flourish in countries where particular economic and non-economic conditions are favourable (Burch, 1986, p 6) The result of such favourable conditions manifests itself in the people who are motivated to maximise rewards The consequence is growth, a proliferation of goods and services and general improvement in the quality of life. For example, in a comparison between the People's Republic of China (Mainland China) and the Republic of China (Taiwan) the latter is an example of prosperity (despite a lack of natural resources), whereas the former experiences shortages largely because of a system which is intolerant to innovation.

Definition

The number of definitions on the entrepreneur virtually equate the number of authors on this subject. The subject area has been covered by economists, sociologists, psychologists, political scientists and many more (cf. Dunphy, 1988, pp 80-85, Nappi & Vora, 1980, pp. 22-27; Julien, 1989, pp 29-38) Brockhaus & Horwitz (1986, p 40) are of the opinion that literature is beginning to reflect that a generic definition of the entrepreneur does not exist.

Current literature freely and generally uses the term 'entrepreneur' synonymously with 'small business owner'. In the true sense of the word this synonymity is not true. Whilst not all entrepreneurs are small business owners, the opposite also holds true (Cronje et. al, 1990, p. 397).

Nevertheless, small-scale enterprise provides the ideal and natural habitat for the typical entrepreneur and this has resulted in the synonymous use of these two terms.

For the purpose of this paper the term entrepreneur is extended to include the person(s) classified as small business owner(s).

The unfounded threat by large firms

'The demise of small business has been predicted for the last hundred years. It is again being predicted today. The small business should be even more important in the next decades, precisely because they are going to be decades of rapid change' (Drucker, 1978, pp 25 & 33).

Hisrich, in a thought-provoking review on the status of entrepreneurship, reiterated the classic mistake of governments which developed economic policy around the establishing of large-scale business (often with tax incentives) as the driving force behind the economy (1988, p.1).

However, in the majority of instances when it was realized that large-scale enterprises alone could not create economic well-being it was expected of the State to take up the slack. Cases in point are post-war developments in the USA and UK. Similarly, economic growth and development in the fifties and sixties in South Africa resulted from large-scale enterprise and government spending.

Parallel to the above developments, tertiary institutions had also been immersed in the proclivity of preparing students as managers to fit into the organizational structure and positions in large-scale enterprise. Creativity, innovation, inventiveness and ingenuity hardly, if ever, featured in the course syllabi of tertiary institutions (Meredith, 1984, p 10-18)

Meredith's statement is supported by Vosloo's contention that small and medium-sized enterprises (SME's) have been responsible for the majority of employment opportunities in both developed and developing countries (1992, p 5).

It has also been reported that there is an increasing disillusionment from commerce and industry at the mismatching of skills required by the business sector to the skills churned out through the number-crunching exercises by educational institutions (Visser, 1992, p 1)

The rationale and role of tertiary institutions in the entrepreneurship model

Even though international experience indicates that any comprehensive strategy should contain a number of objectives and programmes to support entrepreneurship stimulation and small business formation, the conceptual framework of traditional models on entrepreneurship stimulation and small business education do not include, nor do they provide for, the significant contribution of tertiary institutions (cf. Powell & Bimmerle, 1980, pp. 33-36; Scott & Twomey, 1988, pp. 5-13).

Burch (1986, pp. 3-20) presented an entrepreneurship model which brings together all the components required for an ideal entrepreneurial economy. His model (see figure 41.1) accommodates the role of tertiary institutions (e.g. universities) in two key areas: the Foundation component provides the environment and general support that help to foster entrepreneurship through inter alia education and training; the Collaborative Affiliation component is an intellectual endeavour representative of a tightly connected partnership with their goals of generating economic growth, employment creation and to introduce new technologies.

But, can society encourage entrepreneurs and small business formation? Many believe that tertiary institutions should play a role in this venture, as they can serve to decrease the failure rate of new businesses as well as to increase student awareness of and to stimulate interest in entrepreneurial careers (Hull, Bosley & Udell, 1980, p 11; Visser, 1992, p. 6).

Schöllhamer and Kuriloff (1979, p. 1) stressed that some formal education can improve one's knowledge and experience and that marketing and finance are of particular importance in small business. In this regard tertiary institutions have an integral role to play. Many (potential) entrepreneurs often have good ideas, but they lack the basic managerial background and technical skills to implement them. By assigning one (or even a small group of students from different academic disciplines) to such a small business, it can be guided and assisted under the supervision of a mentor ship programme.

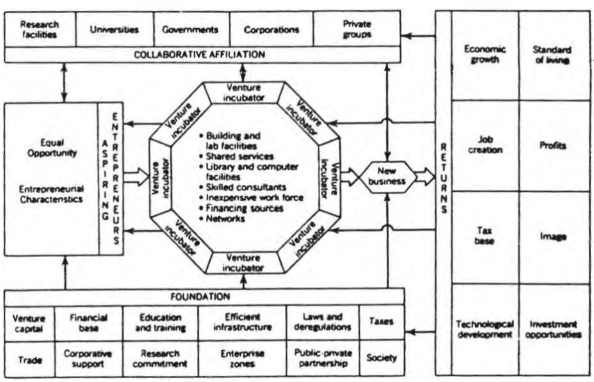

Figure 41 1 Entrepreneurship model
Source: Burch, J.G. (1986), 'Entrepreneurship', New York: Wiley. p. 13

The basic thesis of a student business counselling programme is that it might offer more advantages than the more traditional approaches towards entrepreneurship stimulation and education.

In the majority of developing countries, population growth outstrips economic growth resulting in an ever-increasing unemployed population which is skewed towards the youth. Restructuring programmes of an economic nature in developing countries are aimed at industrial strategies which emphasise the development of export-oriented industries and which utilize locally-processed raw materials and labour-intensive technologies.

Included in these strategies are the small-scale enterprise promotion based on local materials and labour. These participants generally lack expertise in management, marketing, costing and pricing, accounting and financial management as well as a lack of production management skills and capital (Nelson, 1980, p 2).

However, due to the changing economy and job market the emphasis should (and must) also change from preparing students for large enterprises to include an understanding of, and preparation for, work in small firms. Thomas (1987, pp. 2-3) emphasises the importance of instituting new 'mentor ship' programmes and the further expansion of existing links between conventional support groups and informal sector entrepreneurs.

A final argument in favour of involvement by tertiary institutions in business counselling draws on the fact that these institutions have access to a large number of a country's young leaders; but, little is done during their sojourn to utilize the vast development and build-up of skills and resources of these students outside of the academia.

Students and the needs for relevance

Since students today are much more concerned with the relevance of their education the most stimulating aspect of a student counselling project is engendered by the students who participate in it.

In times of high unemployment and low (or no) economic growth, educators will increasingly have to find acceptable answers to questions, such as: 'will these courses prepare me to make actual decisions when I am confronted with real problems?' Students feel a need to test their knowledge through an exercise which requires solutions to real problems, not by a textbook case which may be static or even contrived and irrelevant.

Small-scale enterprises and their problems provide an excellent mechanism for satisfying this need for relevance In dealing with the problems of the business community, students are given an early opportunity to test their ability to use problem-solving tools on these actual problem situations The ability of the students to integrate the various disciplines they have studied are also tested.

Participation in a student counselling project, therefore, makes students more mature and prepares them for full-time positions in the business world. Some of them may also decide to become small business entrepreneurs themselves This latter alternative is of extreme importance as the majority of students at our university come from a background of very little (and mostly no) exposure towards entrepreneurship and risk-taking (Visser & Huckle, 1991, p. 26).

The benefication process

For a long time it has been recognised that small-scale enterprises are plagued by more than just money problems (Crous, Jooste, Nortje, 1985, p. 11). Amongst others, studies by Hodgetts & Kuratko (1986, p.24), show that most small-scale enterprise failures are due to management deficiencies. Many new business ventures, for example, are begun by good craftsmen and technicians who lack the necessary management skills to compete in the business world.

Due to the lack of both sufficient human and financial resources it is virtually impossible to reach a significant number of individual small-scale enterprise which would benefit from such management assistance. In this regard innovative methods have to be found to lever scarce resources.

Incorporating senior undergraduate students in business counselling presents the following mutual benefits:

- departments of tertiary institutions participating in a programme of this nature are presented with a practical training ground to supplement the academic theory
- tertiary institutions are provided with valuable - and measurable - service opportunities which the communities they serve will appreciate. The increasing pressure of social responsibility may well demand these institutions to provide and deliver non-traditional services
- small-scale enterprise are being furnished with valuable counselling assistance they could not otherwise afford Similarly, as documented by Morse, Rohrer and Crawford (1985, p 4), such projects establish 'a positive community attitude (which) is an essential element in attracting new firms to a community as well as in encouraging existing firms to expand'
- to the tertiary institutions in general, and the participating departments in particular, the importance of the counselling programme lies in the retention and growth of these small-scale enterprises
- participating staff members will find the small business arena and its problems fertile ground for case writing, new research ideas and publication.

Factors motivating the implementation of the program

Some of the primary reasons for establishing a project of this nature (Visser & Huckle, 1991, p 26) and which may be equally applicable in other developing countries were as follows:

- the majority of South Africans have grown up with no school or home tradition of business, innovation, or entrepreneurship
- the majority of the student population at this university have no notion of themselves as 'resource creators'
- they come from a background where their predecessors have been marginalised from the economic mainstream thereby precluding them from owning property, businesses and the ability to create wealth
- students from disadvantaged communities and economic minorities have had few role models to motivate and guide them in their career development

Experience in student business counselling at the university of the Western Cape

The germinal idea for starting a programme whereby the skills and knowledge of senior commerce students could be utilized and applied to assist and guide owners and managers of small firms originated in 1988 when staff members of two university departments (namely the Department of Business Economics and the Institute for Small Business) began earnest discussions on this integral theme.

These discussions formed the basis for a project assignment to a post-graduate student in business economics in 1989 with the brief to investigate and report on the viability of such a project.

The outcome of this project report convinced the two departments to continue with the implementation of the Student Business Counselling Project (SBCP). Subsequently, the design and implementation of the project took place along four distinct patterns:

Firstly, at the beginning of the academic year students selected for this programme are being instructed in the methodologies of personal interaction and communication These are very important components of counselling as students have to consult regularly with small business owners; the basic tenet being that a sound working relationship of mutual trust and understanding has to develop

Concurrently, students attend a series of lectures, of which the curriculum is based on the functional areas of business (i.e. accounting, marketing, financing and general administration) within the entrepreneurial framework. The above mentioned sessions constitute ± thirty hours and consists of lectures, discussions, exercises, role-playing and field assignments.

These contact sessions are largely, but not exclusively, based on the extensive work done by Harper (1989) in the training of consultants for small business.

Secondly, the students are led through a series of exercises to conduct a SWOT-analysis (Strengths, Weaknesses, Opportunities and Threats) during the first few engagements with the client The objective of this exercise is to set attainable and visible objectives for the small business owner Experience suggests that, sooner rather than later, owners of small firms become disillusioned with the lack of tangible results over the short-term.

Thirdly, university staff, who act as mentors and advisors to both student counsellors and the small business owners, visit small firms to establish the need and type of managerial assistance. At this stage the programme benefits are explained to the business owners and their co-operation is obtained

Fourthly, the students are assigned to small businesses During a six-month period of field visits (constituting fortnightly visitations of at least two hours each) students submit regular progress reports to their mentors. Regular meetings between student counsellors and mentors are held to discuss progress made in the preceding period, to identify problems and to assess recommendations.

One of the major considerations of a programme of this nature refers to those small business owners participating in this project The businesses represent their livelihood and hence the importance of producing suggestions and recommendations of quality for the small business owner that can be used, understood and implemented. (For a detailed explanation of the project, cf. Visser, 1992).

Even though the programme may be regarded as being of an interventionist nature, the project was developed to benefit both the small business community and the students By incorporating senior students at tertiary institutions, an important new area of knowledge is tapped, a resource of almost limitless capabilities where a strong mutuality of interest and advantage exists - a real quid pro quo, in other words, an even exchange.

Towards a contingency approach

The isolationist activities of (sometimes) divergent programmes in economic development necessitates the implementation of a contingency approach. Put differently, the (often) quantum multiplication of foreign donor programmes of a developmental nature - each pursuing its specific objectives - grossly fragments the efficacy thereof.

Developmental work, particularly in small-scale enterprise, draws on the resources of a vast array of specialists from diverse professions and backgrounds To maximise the synergistic effect of all these inputs it is imperative that a contingency approach be followed to identify all the participants of the service delivery system.

There are two reasons for this approach. Firstly, it is well-known that real-life cases do not conform to the parameters of the academic calendar. Small firms encountering problems in the holiday periods of tertiary institutions may require assistance from other support groups, secondly, the results of suggestions by student counsellors may only take effect once the student is no longer in contact with the small business owner.

There are numerous organizations and institutions which would be in a position to assist tertiary institutions during vacation periods. Support can be elicited from Chambers of Commerce and Industries, professional institutes of, for example, accountants, engineers, architects, quantity surveyors, psychologists, etc.

Having a network of strategies which ties with customers, banks, suppliers, etc., (i.e. the contingency approach of a delivery system) greatly enhances the success rate of enterprise.

Extensive application of the concept of student counselling in the stimulation of entrepreneurship and small business formation

Although the concept of student counselling to small-scale enterprise may be foreign and innovative to many (developing) countries, all indications are that it functions adequately and favourably (Devlin & Carlin, 1988, p 72; Nelson, 1980, p. 6, Mario & Schatz, 1980, p 12).

There may be arguments against utilizing the skills of senior students at tertiary institutions to benefit the growth and development of the small business fraternity in developing countries Yet, the concept does not have to exclusively draw on the resources of commerce students The challenge (if educators are serious about development) lies in the channelling of a multiplicity of skills and resources concentrated at tertiary institutions to assist small-scale enterprise.

For many years other (university) schools and faculties have been using the concept of student counselling For example, final year medical students do advanced clinical work in hospitals under the supervision of qualified medical staff; final year dentistry students have been assisting communities in primary dental care; senior undergraduate students of social work have been counselling drug abusers, alcoholics and inmates, the skills of senior undergraduates in psychology have been put to good use in the preparation of team spirit amongst participants in team sports; students of law have been advising disadvantaged individuals of their rights, undergraduates in occupational therapy and physiotherapy have been providing much-needed services in hospitals, clinics and infirmaries. The list of examples is endless

Summary

The objective of student business counselling programmes, as a community extension service is to promote economic development through the growth and survival of (new) small firms. In a study by Cant & Machado (1991, p. 10) they unambiguously state that small-scale enterprises form the root of economic development and the stability of society.

The task of entrepreneurship stimulation and small business promotion in Central and Eastern Europe and Africa is infinitely larger than in South Africa. However, with the acceptance of South Africa back into the fold of Africa and the world, it may be beneficial and appropriate to institute exchange programmes of various kinds to stimulate small-scale enterprise formation in developing countries.

Tertiary institutions, therefore, have an important contribution to make. To reiterate: commerce students can be utilized to guide and assist with marketing, finance, purchasing and general management; accounting students can establish proper accounting systems; law undergraduates can assist small firms in legal matters, such as the choice of business entity; students in (industrial) psychology can assist small firms in what must certainly be one of the most neglected areas of small business management, namely the personnel function and the methodology thereof, students with an engineering background can provide quality advice and guidance in production and manufacturing enhancement, especially as this may open new avenues of subcontracting between large and small firms, etc.

Tertiary institutions, by there very nature, are the captive markets and the homes of the intellectually and the academically-minded youth of a country These persons have a duty towards those individuals who do not have the means, financially or otherwise, of improving skills to assist them with their endeavour to provide consumer and industrial goods, products and services Failing such assistance will be an injustice to all

In development models tertiary institutions increasingly feature as one of the key components that work together to conceive of, and give birth to, new businesses.

Similarly, the failing of teaching staff of tertiary institutions to trust their proteges in providing service of immeasurable value is an indictment against their proficiency and aptitude as educators.

In conclusion, student counselling for small-scale enterprise creates a synergism which is of benefit to both students and the community, it provides for opportunities of applied research and publication; strong bonds (links) are formed between educational institutions and the communities they serve, and, it provides for a forum through which tertiary institutions can shed their 'ivory tower' image.

Notes

[1]The term small business will be used synonymously with small-scale enterprise and small firm. The size of the firm may differ from country to country in terms of quantitative guidelines, or statistical definition For example, variables such as annual turnover, employment, asset value and even electricity usage can be applied collectively, or individually:

-Customary denominators refer to qualitative guidelines, or an economic definition, whereby firms are defined as small when:

-- they are independently owned and managed,

-- they are not dominant in their markets,
-- the owners are the decision-makers, risk-takers and risk-bearers, and
-- the owners share the profit/loss.

[2]Tertiary institutions refer to educational institutions which are not compulsory for further education. Usually, it encompasses institutions such as universities (for academic education), polytechnic institutions (in South Africa these institutions are referred to as technikons) and technical colleges (for technical disciplines and vocational skills, etc).

[3]The delivery system represents all the participants in the distribution channel which provide service opportunities to the small business sector For example, financial institutions, non-government organizations, training institutions, universities, independent consultants, chambers of commerce and industry, government departments, etc., are all to some degree involved in the promotion of small business development.

References

Brockhaus, R.H., Horwitz, P. S. (1986) 'The psychology of the entrepreneur', in Sexton, D.L., Smilor, R.W. (ed), *The Art and Science of Entrepreneurship.* Cambridge, Massachussetts,: Ballinger

Burch, J.G. (1986), *Entrepreneurship,* New York: Wiley

Cant, M C., Machado, R (1991), *The changing environment and the dilemma of the Black entrepreneur,* Unisa Alumnus. Pretoria, South Africa: University of South Africa. December

Cronje, G j. de J., Neuland, E.W., Hugo, W.M., Van Reenen, M.J. (1990), *Inleiding tot die Bestuurswese.* (Introduction to Management). Pretoria, South Africa: Southern

Crous, M.J., Jooste, C.J. & Nortje, J.D. (1985), *Behoeftebepaling by kleinsake-ondernemings met betrekking tot die aard van opleiding -, konsultasie - en nasorgdiens. (A needs analysis of small firms with regard to the nature of training, consultation and aftercare services)*, Bloemfontein, South Africa: University of the Orange Free State - Department of Business Economics

Devlin, J.S., Carlin, W.B (1988), *Entrepreneurship and economic development: The Navajo Model. Proceedings of the 33rd ICSB World Conference, Massachussetts,* Marietta, Georgia: School of Business, Kennesaw College, 9-11 June

Development, Bank of Southern Africa (1992), *A strategic framework for entrepreneurship and small enterprise development in Southern Africa,* Johannesburg: Development Bank of Southern Africa, 6 February

De Vletter, F. (1992), *Microenterprise credit strategies: Lessons from Mozambique's adjustment process* Proceedings of the 5th Annual Conference of the International Council for Small Business - Southern Africa Johannesburg, South Africa: Small Business Development Corporation

Drucker, P. F. (1978), *The future of small business in a changing world,* Proceedings from the 4th International Symposium on Small Business Seoul, Korea: Korean Federation of Small Business

Harper, M (1989), 'Consultancy for small business: The concept - training the consultants', Intermediate Technology Publications, London

Hisrich, R.D. (1988), 'Entrepreneurship. Past, present, future', *Journal of Small Business Management,* vol. 26, no 4

Hobbs, D. (1987), 'Enterprise development: Is it a viable goal for rural enterprise?', *Paper presented at National Rural Entrepreneurship Symposium*, Knoxville, Tennessee, 11 February

Hull, D.L., Bosley, J.J., Udell, G.G. (1980), 'Reviewing the hunt for the heffalump: identifying potential entrepreneurs by personality characteristics', *Journal of Small Business Management*, vol. 18, no. 1

Julien, P.A. (1989), 'The entrepreneur and economic theory', International Small Business Journal, vol. 7, no. 3

Lipton, D., Sachs, J. (1990), 'Privatization in Eastern Europe: The Case of Poland', *Brookings Papers on Economic Activity*, vol. 2.

Mario, A.B., Schatz, M., 'Expanding the SBA management assistance programme', *Journal of Small Business Management*, vol 18, no. 4

Meredith, G. (1984), 'Redirecting management education and training resources - an Australian view', *International Small business Journal*, vol. 2, no. 3

Morse, G.W., Rohrer, J.D. & Crawford, S.J. (1985), 'Retention and expansion visits: A guide to an effective economic development programme', *Bulletin 728*, Ohio: Ohio State University

Nappi, A.T., Vora, J (1980), 'Small business eligibility', *Journal of Small Business Management*, vol 18, no 4

Nelson, R.E (1980), 'Training needs of the small enterprise sector in Asian countries', *Journal of Small Business Management*, vol. 18, no. 4

Powell, J.D., Bimmerle C.F (1980), 'A model of entrepreneurship: moving toward precision and complexity', *Journal of Small Business Management*, vol 18, no. 1.

Schöllhamer, H., Kuriloff, A.H. (1979), *Entrepreneurship and Small Business Management*, New York: Wiley

Scott, M.G., Twomey, D.F. (1980), 'The long-term supply of entrepreneurs: Students' career aspirations in relation to entrepreneurship', *Journal of Small Business Management*, vol. 26, no 4

The New York Times (1992), 'Shock Therapy and Its Victims', January 5

Thomas, W.H. (1987), 'Small business community workers - A project proposal', *Cape Town: Small Business Development Corporation*

Visser, D.J. (1992), *Student business counselling for small - scale enterprise: A UWC experience*. Proceedings of the 5th Annual Conference of the International Council for Small Business - Southern Africa Johannesburg, South Africa: Small Business Development Corporation

Visser, D.J., Huckle, R.G. (1991), 'Access to success' - a business simulation for high school pupils', *Southern African Journal for Entrepreneurship and Small Business*, vol 3, no. 1

Vosloo, B (1992), *Fundamentals of a strategy for entrepreneurship and SME development*, Proceedings of the 5th Annual Conference of the International Council for Small Business - Southern Africa Johannesburg, South Africa: Small Business Development Corporation

Willers, R (1992), 'The Soviet economy in 1991', *European Commission: Directorate for Economic and Financial Affairs*, Brussels: European Commission

42 A proposed career education model for secondary schools in Bophuthatswana

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Introduction

For many years, school leavers from Bophuthatswana in Southern Africa, have been struggling to bridge the gap between secondary education and the demands of the world of work 'Employers also found that these students lacked the necessary skills, and the author decided to embark on an empirical research project to uproot this problem 'As part of the author's doctoral thesis entitled 'Career Education: A proposed model for secondary schools in Bophuthatswana', a possible solution to the problem of linking secondary education and the work arena is suggested The author has designed a career education model for secondary schools in Bophuthatswana; specially created to suit the specific needs for this country and based on his research findings concerning the private sector's perception of secondary education in Bophuthatswana, the theoretical basis of career education and the provision of career, vocational and technical education in various countries

This article firstly provides a brief outline of the author's research findings which form the background to the model. This is followed by a more detailed analysis of the proposed career education model, after which specific guidelines for its implementation, certain implications as well as recommendations are made

Findings

Findings concerning the provision of secondary education in Bophuthatswana

An analysis of secondary education in Bophuthatswana had indicated that, basically, the system is academically oriented. The scope for a choice of subjects is limited to the three official languages (Setswana, English and Afrikaans), and other general subjects, whereas commercial subjects are offered at only a few middle and high schools.

The fact that the three official languages are compulsory for all middle and high school students, not only places a heavy burden on students, it also tends to encourage students to choose easier subjects to counteract the workload of the languages. Clearly, the language policy needs to be reviewed.

Although there is an increase in the number of students doing technical/vocational subjects from 1986 to 1988 (1.5 per cent to 7.2 per cent), this is still minimal. There are, however, only six technical/vocational institutes and three manpower centres in Bophuthatswana

Due to the high growth rate in the number of high school students (5.6 per cent in 1989), many standard 10 graduates enter the labour market in Bophuthatswana; yet the fact that many school-leavers from Bophuthatswana will find employment in the Republic of South Africa, implies that Bophuthatswana should also export competitive workers.

An attempt has been made by the Government to introduce modern technology into schools, but the long-standing shortage of, inter alia, school furniture, classrooms, libraries and laboratories have adversely affected the standard and quality of education in the country.

There is, therefore, a need to re-evaluate the present situation with a view to:

- innovating the secondary school education; and
- providing mechanisms by which secondary school education could be directly related to the world of the workplace.

Findings concerning employers' perception of the link between secondary school education and the world of work in Bophuthatswana

Interviews with twenty-five personnel managers/labour relations officers in the Babelegi, Ga-Rankuwa/Mabopane and Rosslyn industrial areas, have shown that secondary school graduates lacked the skills needed by the labour market. Indications were that secondary schools in Bopthuthatswana urgently needed to establish a link between the secondary school curriculum and the expectations of the world of work.

Most of the respondents (68 per cent) indicated that the subjects offered at secondary schools do not prepare students adequately for employment. Certain subjects were labelled as irrelevant to the needs of the private sector and it was recommended that more commercially and technically oriented subjects should be taught. Nineteen respondents (76 per cent) endorsed the idea that marketable skills should be infused into traditional subjects to prepare students for employment, although traditional subjects were still seen as the basis for general background knowledge.

All respondents mentioned the value of infusing career education into the traditional subjects to prepare students for the labour market as well as for tertiary education. It was suggested that communication, marketing, and socialisation skills should be infused, as well as technical, artistic, basic economic, typing, machining, computer and word processing literacy, numeracy, presentation and management.

The majority of respondents (84 per cent) supported the statement that secondary school students should be exposed to the world of work before they choose their careers. Some firms indicated their willingness to employ students during their school vacations in order to orientate them to the expectations of the labour market, while others agreed to educational visits by classes.

Findings on career education as a possible bridge between education and the world of work

Career education was found to be individual-centred; since it aims at providing an individual not only with the knowledge required to pursue tertiary education but also with skills and values which are needed by the labour market All in all, it has been found that career education's goals and objectives in no way conflict with those of the various academic disciplines, but rather supplement them While the aims and objectives of the academic disciplines are focused chiefly on aspects relating to the subject matter, career education goals and objectives will highlight the relevance of the subject to the learner's own potential The curriculum within career education encompasses the following areas of study which are all infused into the actual learning material:

- The basic arithmetic skills in situations where one must conserve, spend, barter, build, or when solving immediate computational tasks.
- The basic communication skills in situations where one must persuade, defend, inspire, encourage or translate, as well as where one must communicate a given idea
- The basic scientific principles in situations where one must work with or modify existing environmental elements, as well as where one must replicate a known scientific formula.
- The basic social science in situations where one must deal with current social attitudes, habits, and needs, as well as where one must articulate a synthesis of the world's cultures.
- The basic physiological principles in situations where one must match psychomotor skills with ongoing maintenance, improvement, and task appropriateness of those skills, as well as where one must achieve mastery over a given physical challenge.

A curriculum that covers such a wide range of areas is truly pedagogically sound. Career education therefore has a specific curriculum to follow as well as special teaching methods. Its main purpose should be to prepare all students for successful and rewarding lives by improving their basis for occupational choice, by facilitating their acquisition of occupational skills, by enhancing their educational achievements and by making education more meaningful and relevant to their aspirations.

The infusion strategy, as one of the delivery systems of career education, is both cost-effective and time-efficient, in the sense that neither the school day nor the curriculum is interfered with when the infusion process is implemented

Any educational innovation stands the best chance of implementation when it is seen as growing out of or relevant to the cultural context of the region. The innovative potential of career education lies in making the curriculum more meaningful to the learner. In career education, the learner's self-concept, self-confidence, aspirations and needs are all brought into contact with reality

Findings regarding career, vocational and technical education in various countries

Currently, a world-wide debate is ranging over the failure of secondary education to supply the private sector with students who have marketable skills

In the United States of America, each state has designed a career education model; some of which have now been abandoned, modified and/or adapted. Currently both career and technical/vocational education are utilised to address the youth unemployment problem.

The USA recognise that preparation for a career role must begin in early childhood, and continue throughout the individual's life. Their career education models are also characterised by adaptability to changing circumstances, and exposure to many directions in the labour market With the passage of time, the labour market began to pay attention to the provision of technical/vocational education (Perkings Act of 1984).

The United Kingdom has established several youth training schemes to make an otherwise irrelevant secondary education, relevant.

The aim has been to create a better articulation between the content of schooling and subsequent application of acquired skills, attitudes and knowledge in the world of employment These attempts had not been without pitfalls. However, technical and vocational education in the United Kingdom received attention not only from educational institutions established for this purpose, but also from employers in the different industries and occupations. The growing tendency is that the Manpower Services Commission is becoming more involved with schools and the implementation of the Technical and Vocational Education Initiatives.

The United Kingdom has generally made it clear that careers education had not been introduced to solve unemployment; rather, there is a tendency to view careers education more as an opportunity to expose students to a variety of roles.The Taiwanese tend to emphasise vocational/technical education in its system of education In 1990, 30 per cent of Taiwanese students were following an academic direction whilst 70 per cent were in vocational/technical education.

The system of technical and vocational education has played a vital role in training people to make the transition from rural to urbanised society. Taiwan offers its youth a career directed education - technical and vocational education.

Israel concentrates on specific aspects of career education, namely, technical and vocational education The Organisation for Rehabilitation through Training has long taken the responsibility of equipping youth with marketable skills. Here, the Kibbutz system plays an important role.

Israel uses technical/vocational education not only to prepare a skilled labour force, but also to prepare students with general education to maintain a balance between a technological approach and the general humanistic approach as well as to provide comprehensive educational opportunities by opening differentiation in technical/vocational education.

The Republic of South Africa has joined the world-wide move towards career education. The HSRC Report (1981b) on Provision of Education in the RSA made specific recommendations regarding technical/vocational and career education The Department of Education and Training became the first department to implement the recommendation by designing a career education model which pays attention to the development of 'skills and techniques' at primary school level The model consists of the technical moulding phase, the transition phase, the exploratory phase and the specialisation phase.

The first two phases (primary school) expose pupils to skills which they will need in their lives whilst also preparing them for and introducing them to the last two phases The exploration phase (junior secondary school) helps pupils to acquire knowledge and master the basic, general and trade-oriented skills. The specialisation phase (senior secondary school) allows pupils to obtain more specialised knowledge of either a single occupation or a group of related occupations. The model is still on an experimental basis.

According to the Central Statistics Services (1988), an imbalance in the provision of technical/vocational education for the various population groups in the RSA, exists. Blacks are still left behind by other population groups in the fields of technical/vocational education.

When one looks at the various career education approaches of different countries, the conclusion is that, in developing a career education model for secondary schools in Bophuthatswana, the following should be kept in mind:

- The model should rectify the imbalance created by the over-emphasis on academic education, although care must be taken not to over-emphasise career education at the expense of the ideal of a general formative education
- There should be a close link between syllabus content and industrial applicability as well as a close contact between educational institutions and industry, so that the course content can be seen to be relevant and complementary to the work done in training schools and on-the-job training.
- Care should be taken not to introduce specialised vocational and technical education at too early an age, but rather during the middle and high schools to stimulate and promote technically-oriented thinking and creativity, to develop those faculties and abilities which are required for successful implementation techniques.
- A special effort should be made to change the attitude of the community regarding their excessive interest in academic education. The community needs to adopt a more positive attitude towards a work-related education as against purely academic education.

Bophuthatswana is in a position to adopt, adapt and modify the various models used by the above- mentioned countries to develop a model suitable to the demands of the manpower requirements and the needs of the individuals.

The proposed career education model for Bophuthatswana

Aims and objectives of the model

In developing a possible model, the basic aim of career education, namely, equipping the student with the knowledge and skills (academic and technical) needed to become a productive member of society, is taken as point of departure. This implies that a balance should be maintained between academic and vocational/technical education To realise this aim, career education should develop an individual's full potential through academic and other programmes The individual should also be exposed to work and life experiences by selectively infusing the essentials of these experiences into every lesson of every subject. The individual also needs to be equipped with daily living skills (life skills), personal-social skills, preparation skills and existing occupations Career education should expose the individual to the world of work and life experiences, through visits to and becoming acquainted with all kinds of careers practised in various environment Individuals can be assisted in their development by providing timely and effective school guidance, so that when they complete Std 10, leave or drop out before reaching Std. 10, they are either able to proceed to tertiary education, or are ready to sell their skills to the labour market

The structure of the model

Development. Although various approaches may be adopted - often depending on the scope or definition of career education - two main approaches, namely 'career education' as a subject and infusion, are cited. With an already overloaded curriculum, and the advantages of the infusion process prevailed, and the last mentioned strategy was chosen.

As a point of departure, certain prerequisites were set; in that the model should be able to address the manpower needs of the country and the social development of the citizens; while social, political and especially economic realities should not restrain the implementation of the model. The model must also be practical; it should be educationally sound and didactically implementable. It should necessitate minimum changes in terms of education structures, curriculum and other facilities lest it be too costly and unpractical. Finally, the existing teaching corps should be enabled to implement the model with minimal in-service training (assisted by books, manuals and other teaching aids).

The infusion approach could eventually bring about significant changes This is a strategy which recognises the wisdom of slowly permeating the whole curriculum, because curriculum change can occur only with the re-education of teachers. The career education elements should cut through every subject area or learning area and should be regarded by teachers as an all-embracing factor in teaching. It should be clear that teaching is a purposeful involvement of an adult with a child and therefore not accidental The teacher cannot expect to arrive at a didactical design merely as an answer to the problem of the learning situation, but should create a specific purposefully constructed situation.

A proposed school structure for infusion. For the implementation of the proposed infusion model for career education (figure 42.2), minor changes to the school structure of Bophuthatswana will become necessary. The envisaged amendments are indicated in figure 42.1, which provides a representation of the proposed school structure in which the proposed career education model for secondary schools in Bophuthatswana could be implemented.

In figure 42.1, the numbers given on the vertical axis (from 12 to 25) represent the ideal age of students linked to their various educational achievements. For instance, students aged 12, 13 and 14 should be in Standards 5, 6 and 7 respectively. The clear, unshaded boxes in the diagram represent courses of purely academic nature.

The dotted boxes representing the middle schools, high schools and colleges indicate those educational levels where career education content should be infused into traditional subjects Broadly based career-oriented education should be offered at these levels to enable students ultimately to select a specific career. At middle schools, for instance, students should be given a choice of technically oriented subjects such as Technical Drawing

From middle schools, students can move into two broad directions Firstly, they can progress to high schools where they can choose between a technically/oriented direction with a view to obtaining a technical diploma, or an academic direction to obtain admission to college or university. Secondly, some students from the middle schools may be admitted directly into the various vocational institutions as represented by the shaded boxes. These students will then qualify for vocational diplomas and proficiency certificates At this level, provision is also made for students who wish to do part-time study or 'hands-on' training by following an apprenticeship, as represented by the vertically lined boxes

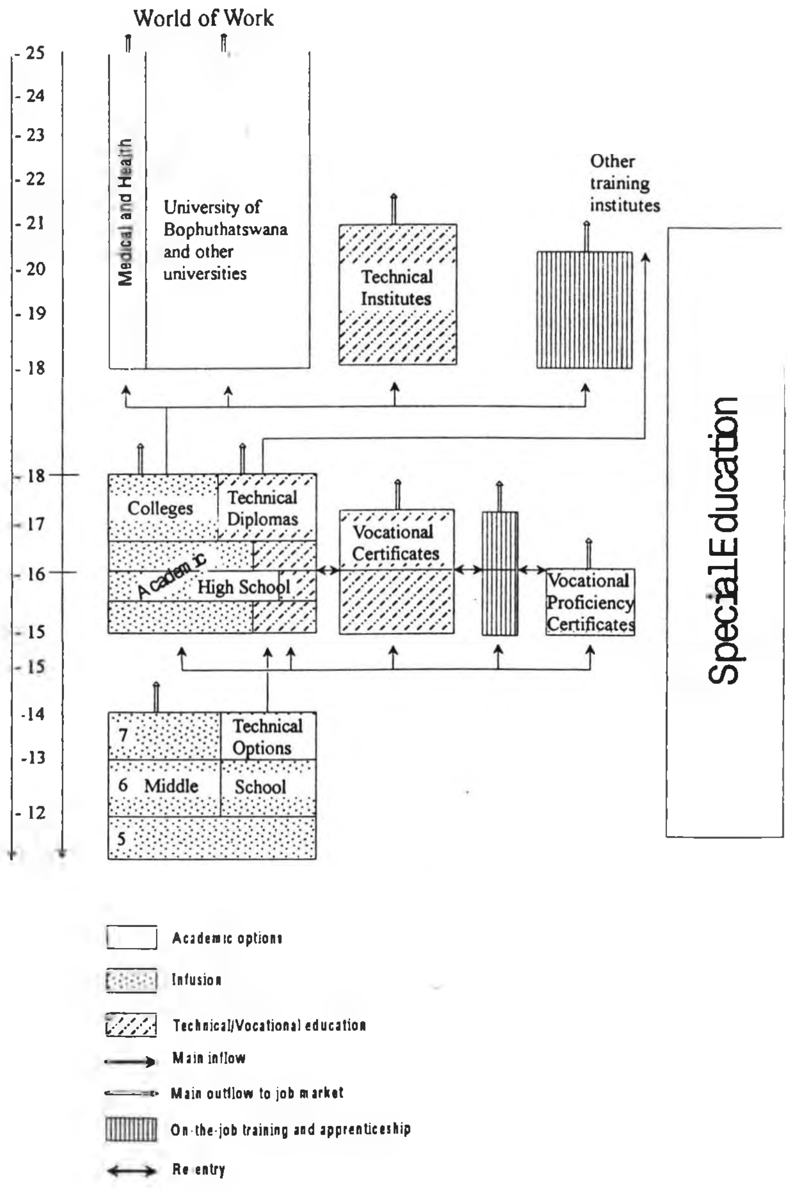

Figure 42.1 A proposed school structure for the implementation of infusion model

Proceeding from high schools, students may either continue with tertiary education at technical colleges, universities, other training institutions, or enter the labour market Institutions like manpower centres will provide students with the much needed 'hands-on' training, while technical institutions continue to offer vocational/technical education. Technical high schools and technikons, in conjunction with the employment sector will also deal with apprenticeships.

The various arrows in figure 42.1 indicate the directions of the major, although not the only, routes of progression, with some showing progress to the next level The double-edged arrows indicate re-entry at various educational levels The implication is that students may move from an academic stream to vocational/technical education, and vice versa. The arrows are also an indication that students who drop out at any level, may re-enter at that level and progress further. After obtaining a certificate or diploma at a technikon, a student may continue with an academic programme at a university

Basically, therefore, the proposed school structure aims at reducing early school dropout, by providing the necessary flexibility. This gives dropouts from one direction the opportunity to be re-admitted into another direction In addition, the dropouts may also enter the labour market and receive 'hands-on' training.

With these minimal adaptations and minor changes in the existing school structure, the proposed career education model should be implemented

A proposed infusion model. Figure 42.2 is a diagrammatic representation of the proposed infusion model (career education model) for secondary schools in Bophuthatswana It is a theoretical representation of how the needs of the world of work should be systematically selected and infused into the traditional subjects as offered in the middle and high schools of Bophuthatswana

In implementing the model, the educational planner should firstly make a thorough analysis of the world of work and identify macro type of competencies needed by workers. (Job specific training as such is not regarded as part of career education.) The broad competencies may include positive attitudes towards work, numeracy, cognitive/thinking skills, communication skills, social competency, planning ability, negotiation skills, decision-making, time management, accuracy and leadership Once these broad competencies have been identified, it is necessary to analyse them in terms of knowledge and skills needed to gain competency in a specific area

Example: Competency in decision-making

Knowledge: How do persons make a decision?
They - need specific information
- need to analyse the information
- weigh alternatives
- choose the best alternative.
- evaluate the results.

Skill: They practice decision-making by selecting study directions, subjects and also in daily activities.

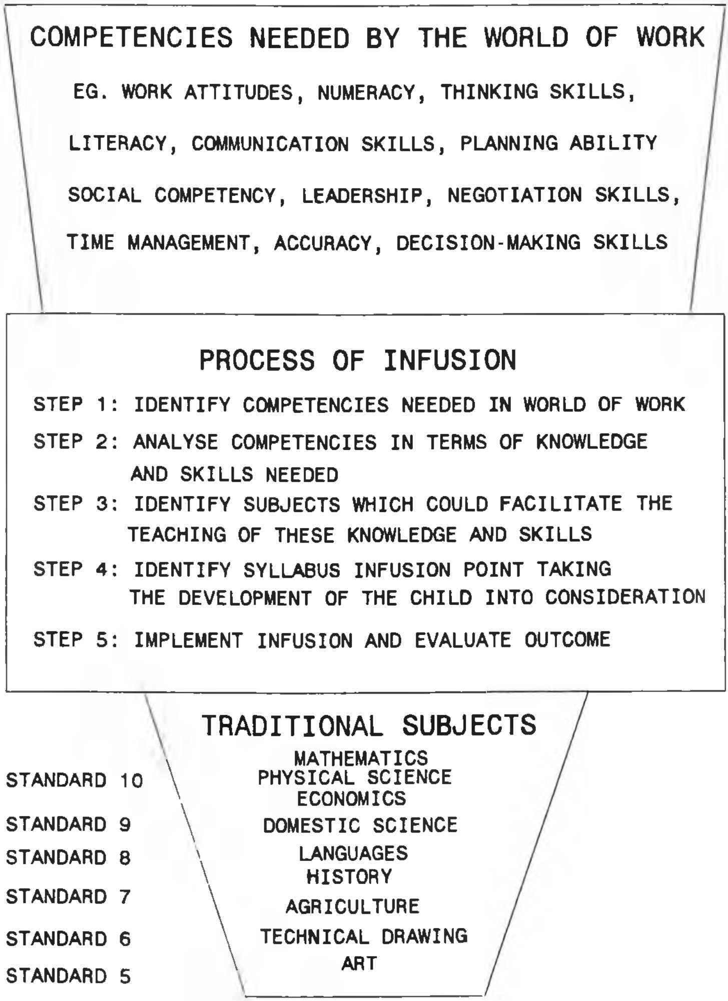

Figure 42.2 A proposed infusion model

Based on the operationalization of the competency in terms of knowledge and skills needed, the planner can now proceed to identify key subjects which would best facilitate the realization of the competency. Citing again the example of decision-making, it could be argued that all subjects, and especially Mathematics and School Guidance could best be used to teach this competency.

After the most suitable subject or combination of subjects have been identified, the planner should decide on the appropriate infusion point(s). Many of the skills and knowledge to be acquired would span across subjects and school phases. The planner should ensure that in the infusion process a gradual build up of skills and knowledge would lead to the final realization of the competency aimed at. This infusion process is not a single exercise, but a continuous process whereby the world of work is constantly monitored for major changes. These changes find their way into education through the infusion process so that the school remains relevant.

To base the above argument in practice, Mathematics as a subject could be used to demonstrate the purpose of this proposed model. The example of the Pythagoras theorem can effectively demonstrate the use of this model.

From such a lesson skills to be generated could fall into four categories:

(i) Basic numeracy skills which include adding and subtracting measurements, accuracy, speaking and listening.

(ii) Logical reasoning, planning ability and decision-making. Questions such as
- How do people arrive at decisions?
- Why is the Pythagoras theorem important?
- How can it be applied in real life situations?

could be asked to elicit feedback from students.

(iii) Integrative skills which include compiling data, co-ordinating data, research and consultation skills.

(iv) Social interaction to include group dynamics such as co-operation, service, problem solving, sensitivity, role-playing and social awareness.

Given such a perspective, an individual's full potential is realized through categories (i), (ii) and (iii). Social interaction capabilities (category (iv)) such as co-operation and problem solving accruing from the lesson facilitates the equipping of the individual with life skills.

Students could also gain insight in how to apply the knowledge learned in their daily life. Insight in the theorem of Pythagoras could for example be of great use in marking out the foundations of their homes.

The students must be directly exposed to the 'world of work'. This can be done through educational tours and first-hand work experience. The main aim of educational tours (in which industries, hospitals, banks etc. are visited), is to make students aware of the availability of various work opportunities in the labour market.

Students should be offered opportunities to work during school vacations. This would enable students to acquire a realistic 'feel' of actual work; so that, through working, the student is able to gain insight into the relevant and expected work values, work attitudes, levels of productivity, punctuality, the importance of communication, the required behavioural patterns and observance of rules and regulations. The work experience would also assist the student in making a proper choice of career, which would add to his/her self-esteem.

Taking a cue from the above, the infusion strategy involves student activity, observation and expression - the ingredients of good teaching and learning.

Implementing the model at various secondary school phases.

(1) The middle school phase (Stds 5 - 7). Middle school students in Bophuthatswana are between the ages of twelve and fourteen. At this stage, the students should be made aware

of their personal and social responsibilities towards the community within which they live as part of their academic programme.

(a) Curriculum. To develop an individual's full potential through academic programmes, the existing General Curriculum for Standard 5 should be retained, except that students should be allowed to do only two languages.

(b) Educational tours. One of the aims of the model is to expose the students to the world of work through educational tours The flaws in Bophuthatswana's existing education system do not only lie in its academic character but also in the fact that students remain in the classroom for almost the whole of their school career.

The middle school students should be purposefully exposed to the world of the workplace Organised tours to various industries and factories should be undertaken; in small, manageable groups. The American Office of Education designed an Employer-Based Model to narrow the gap which existed between the secondary education leavers and the expectations of industries. The main purpose of such an exercise should be to expose students to as many job opportunities as possible, so that by the time they reach Standard 10 they would be aware of the various career opportunities awaiting them.

(c) Work experience. In order to equip the individual middle school student with daily living experiences, personal skills, work attitudes and values, the student need not necessarily start working during the school vacations at this stage of his life. It is sufficient for these students to visit industries, factories, institutions such as hospitals, banks, and other educational institutions.

(2) The high school phase (Stds 8 - 10). High schools in Bophuthatswana provide education for the 15 - 17 year-olds. Most dropouts are found in this age group, and are mostly due to economic reasons.

(a) Curriculum As with the middle school, students in the high school phase should have the widest possible scope of subject choices available to them Hence it is suggested that the study packages for Standards 8-10 should be adhered to. These study packages group subjects into the following career directions: Humanities, Science, Technical, Commercial, Agriculture and Housecraft directions The subjects offered in these directions should be infused with the attitudes, knowledge and skills which will contribute to a programme of career development, and should be integrated with and reinforced by several educational tour experiences The positive attitudes of those educators who monitor these experiences could play a vital role as well.

(b) Educational tours High school students are also required to explore the world of work with a view to selecting the career direction which will not only interest them but which is also within their abilities Purposeful and well-planned educational tours, not for the whole school but for individual classes, are a partial solution to bridging the gap between an academically-oriented education and the demands of industry.

(c) Work experience. At Standard 9 and 10 level, arrangements should be made for high school students to be employed during their school vacations at factories and other employment institutions, to expose them to first-hand working experiences.

(3) The technical/vocational institutions phase. For the students who cannot cope with the demands of formal education, this model makes provision in the form of outflows and re-entries. Students dropping out may either join the labour market and receive on-the-job training or can be admitted to manpower centres to obtain either a vocational diploma or vocational proficiency certificate Should these students later wish to be re-admitted into the formal education system, they should be able to do so

Care should be taken that a balance is maintained in the provision of technical/vocational education as represented by the shaded and vertically lined boxes in figure 42.1 The infusion process implemented at these levels may ensure that broad based career education continues to have its impact. Hence the infusion process should be implemented for technical diplomas, vocational certificates, vocational proficiency and in technical and other training institutions.

Implementation of a career education model for secondary schools in Bophuthatswana

Some steps to be taken before implementing the model. The proposed career education model for secondary schools in Bophuthatswana is not a radical departure from the existing provision of secondary education in the country Bophuthatswana is a Third World country with its people still entrenched in academic education It is therefore necessary that some steps be taken before the implementation of the career education model.

Firstly, although it is late in the day, it is, however necessary to convince people of the importance of technical and vocational education in a developing country. Concerted efforts should be made to reach all parties involved; by organising talks, seminars, conferences and other means of communication. Not only is it vital that the people change their attitudes towards technical/vocational education; but more importantly, the teachers who are the vehicle through which the ideas of the importance of technical/vocational education should be conveyed, should be oriented and given in-service and general training in the implementation of the career education model for secondary schools in Bophuthatswana.

'Curriculum change' essentially implies 'people change', therefore, ample time is needed for teachers to gain new knowledge, insight, and skills related to a new programme emphasis. By means of in-service training, teachers should adopt a new approach to the teaching of the traditional subjects, to enable them to infuse those skills necessary in adult life into every lesson taught. Colleges of education could play an important role in this regard Another important task would be to shift the emphasis in teaching from success in examinations to 'success in life'. It is useless to get distinctions in every subject in examinations and end up a hopeless failure in life.

In order to succeed in changing both the teachers' approach and attitudes, colleges of education, in-service training centres, in-service courses and universities should also be involved in producing teachers who would be ready to take up the challenge of the proposed education model The traditional chalkboard methods and the rote learning methods aimed at producing good examination results must be changed, in favour of methods producing good citizens who would lead a meaningful, fruitful and productive, enjoyable adult life.

Students, as receivers of education, should be motivated and exposed to challenging academic and work experiences, to afford them opportunities which would facilitate their realistic choice of future careers.

Ultimately, the infusion strategy is a deliberate, continuous process that will eventually provide a career focus for the total curriculum if it is systematically carried out.

Suggested implementation guidelines for teachers. South Africa is currently facing a situation where its education system is producing a surplus of certain categories of manpower, while there is an acute shortage in other categories (Engelbrecht and Nieuwenhuis, 1988, p 158). Bophuthatswana is experiencing the same problem. This is partly the result of a system which has become too academically oriented, and partly because of ineffective guidance and channelling

The principle of correlation of subjects should be applied, since the knowledge received from the labour market and daily living experiences should be correlated with the subject matter taught.

When implementing the proposed career education model for secondary schools, one should take heed of the following two sets of guidelines:

(1) Guidelines for middle schools

- Middle school teachers must emphasise growth and competency in the use of basic skills (figure 42.2), which are tools for the student to achieve career goals and to enhance the ability to participate in social activities
- In exposing students to the job market, an effort should also be made to help students acquire the skills (figure 42.2), necessary for making a correct selection on the basis of pertinent criteria.
- During the middle school years, students' attention must be focused on specific types of careers. This will help the student to realistically face decisions about future educational requirements needed to achieve his/her career aspirations.
- In helping the student to narrow down the range of career possibilities, the teacher must also assist the student to select certain specific elements for specific exploration, guided by the student's interest and potential.

The academic programme of the student must, at all times, receive the serious attention of both the teacher, student and the parents

(2) Guidelines for high schools

- Continuity of purpose from the middle school to the high school must be maintained under all circumstances.
- The continuous refinement and application of basic skills as well as remediation of those skills in which the student may be deficient should be emphasised
- The high school teacher must emphasise the acquisition of marketable skills arising from the adolescent's need to become economically independent.
- By the time the student reaches standard 10, it can be expected that he/she should have already selected a specific career direction. The high school should, in turn, offer the student an opportunity to explore those career options available within the selected career direction.
- In the selection of specific careers, students will also have an opportunity to engage in the initial preparatory knowledge and skill-building experiences

The success of the implementation of the career education model for Bophuthatswana depends on the commitment of the teachers as well as on the active involvement of students, the private sector and the parents The teachers' resourcefulness could play a major role in the infusion strategy, to ensure the maximum success of the proposed education model.

Financial implications

The proposed career education model for secondary schools in Bophuthatswana is quite cost-effective. All that is needed for its implementation, is that the schools in Bophuthatswana should be normalised This means that the pupil-teacher-ratio, the pupil-classroom-ratio and the per capita expenditure should be normalised. The implication is that the current ratios and the expenditure are not normal, for instance, in certain areas, especially the Odi and Moretele regions, there have been schools where a teacher handles fifty students in a standard 10 class, although the accepted pupil-teacher-ratio for both middle and high schools in the whole country is 1.35. The same problem occurs with regard to the pupil-classroom-ratio (Republic of Bophuthatswana, 1986a, p 13) Full use should be made of the existing manpower centres as institutions where the non-formal education problem can be addressed, as well as where students who drop out, due to their inability to cope with the academic demands of high schools, could be channelled into on-the-job training

To implement this model, the Government of Bophuthatswana should provide the normal services of budgeting for the erection of additional classrooms, the training of more teachers, the provision of career education resource materials and the equipping of middle and high schools with all the facilities necessary to support teachers in their educative activities Government has already embarked on the erection of an In-Service Training Centre at Mmabatho If the Centre is properly utilised, it could have an impact on providing teachers with methods and techniques of implementing the proposed career education model.

The University of Bophuthatswana, through the National Education Council, is already involved in the curriculum development of colleges of education. This expertise could be employed in curriculum development for secondary education, should the need arise

An added expenditure may be that the Government of Bophuthatswana should subsidise the transport of students moving from schools to workshops, industries and institutions in an attempt to expose the students to as many career opportunities as possible As there are regulations governing entry into certain factories, it may become necessary for Government to demand that schools should secure written guarantees concerning the students' safety before such factories are visited.

Conclusion

If the proposed model for career education in Bophuthatswana is successfully implemented even to a modest degree, schools would have the opportunity of participating as a resource for ideas, as a resource of educational expertise and as an organising centre for educational activities and lifelong learning. Added to this, schools would not only promote learning but would also enhance the self-concepts of both the teachers and learners Once implemented, such a programme enables students to take advantage of opportunities presented in the world beyond the school It will also equip them with the ability to pursue tasks to completion, the ability to communicate, the ability to think logically, the ability to grow personally and the ability to apply knowledge to reality Finally it is hoped that this model will bring the life of the school and its community into a closer relationship

Recommendations

Not only the Department of Education in Bophuthatswana, but possibly also other countries which are struggling to bridge the gap between secondary education and the demands of the employment market, will find the proposed career education model of value. Although this solution is at this stage only embodied in the shape of a proposed model for secondary school education, it is hoped that its test in practice will prove it worthy of even wider implementation; in the interest of all those who have been frustrated by their inadequate schooling for so long

References

Dedmond, R.M. (1989), *Choices and challenges: career education in Virginia, program management guide,* Commonwealth of Virginia Department of Education, Virginia

Engelbrecht, S.W.H. & Nieuwenhuis, F.J. (1988), 'Educational strategies for the future' in Marais, H.C. (ed.), *South Africa: perspectives on the future,* Owen Burgess Publishers,, Hillcrest

HSRC (Human Sciences Research Council) REPORT (1981b), *Report of the Work Committee: Teaching of the natural sciences, mathematics and technical subjects,* HSRC, Pretoria

Hartshorne, K.B. (1988), 'Conflicting perceptions of the education of black South Africans with particular reference to alternative education', *Africa Insight*, 18(1), pp. 14-19

Haxby, P. (1989), 'Apprenticeship in the United Kingdom: from ITB's to YTS', *European Journal of Education*, 24(2), pp. 167-179

Hoyt, K.B. (1987), 'Perceptions of career education supporters concerning the current nature and status of the career education movement', *Journal of Career Development*, 13(3), pp. 5-15

Hoyt, K.B. (1988), 'Bringing equity of opportunity for career development to all', Remarks prepared for *presentation at the National Career Development Association* 1988 Convention luncheon meeting, Chicago, 22 March

Iram, Y. (1985), 'Models of vocational training: Israel and Switzerland: an analytical and interpretive comparison', in van Dael, H. & Vansteenkiste, M. (eds.), *The impact of technology on society and education: a comparative perspective,* Proceedings of the Congress of the Comparative Society in Europe, Belgium, 1-5 July

Jallade, J.P. (1989), 'Recent trends in vocational education and training: an overview', *European Journal of Education,* 24(2), pp. 103-125

Lauglo, J. & Lillis, K. (1988), "Vocationalization' in international perspective' in Lauglo, J. & Lillis, K. (eds.), *Vocationalizing education: an international perspective,* pp. 3-26, Pergamon Press, Oxford

Lewis, A.M. (1985), *Descriptions of the vocational training systems,* European Centre for the Development of Vocational Training, United Kingdom

Lu, L. (1989), 'Students need to think, ask, listen, read, speak, write and do', *Free China Review,* 39(5), pp. 28-31

Republic of Bophuthatswana (1986),

-1986 Department of Education. Annual Report 1986. Mmabatho: Craft Press

-1988 Department of Education. Annual Report 1988. Mmabatho: Craft Press

-1989 Department of Education. Annual Report 1989. Mmabatho: Craft Press

Republic of South Africa (1988), Statistics compiled by The Central Statistical Services, Government Printer, Pretoria

Part E

Australia

43 Entrepreneurship: Industry policy priorities and entrepreneurial education in Australia

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Abstract

Four fields of national policy - general economic policy, industry policy, education policy and specific research and development policy - are strongly interrelated Unfortunately, in Australia, policy makers in the four fields have not recognized that the discipline of Entrepreneurship - with its emphasis on managing the innovation process - holds the key to effective co-ordination between the four vital policy areas The paper argues that innovation strategy, not cost reduction or research expenditure, is the key to developing successful, export-oriented products and world competitiveness. Viable innovation strategy depends on the relationship between government, capital availability, development capital and industrial developers In turn, this relationship requires a cadre of entrepreneurial business managers educated not in the 'traditional' MBA mainstream but in the discipline of Entrepreneurship, specifically focused on learning the practical skills involved in venture evaluation and management of the innovation process The paper concludes by describing the philosophy and performance of Swinburne University of Technology's School of Innovation and Enterprise, a school at the forefront of entrepreneurial education in Australia and thus a school with important implications for the nation's industry policy priorities.

Entrepreneurship and industry policy priorities

Macro economics versus micro focus: On specific entrepreneurial skills and issues

There is absolutely no argument among policy makers (or political parties) that Australian industry needs to become 'world-competitive'. Unfortunately, there is precious little in the policy sphere to indicate that policy makers (and political parties) have any idea that achieving the goal will require a detailed industry policy based on a firm understanding of some critical relationships of which the relationship between entrepreneurship and innovation is the most important.

In a recent analysis of the 'value-added' concept to Australia's competitiveness, (Scott-Kemmis, 1991), it was concluded that the government is currently advised by neo-classical economic theorists who subscribe to a view of economics in which technological change is considered to occur outside the economic system, occurs only through capital investment and neglects product and process innovation Policy makers (and political parties) seem to believe that the broad brush strokes of macro economic policy can paint over the network of cracks in the fragmented set of measures which are loosely and undeservedly known as Australia's 'industry policy'. The political policy makers believe that Australian industry can be made world-competitive without the need for a structured, detailed industry policy. The authors of this paper do not share the faith that macro economic settings - no matter how correct and desirable - can remove the necessity for a detailed industry policy.

In his master work, 'Capitalism, Socialism and Democracy', Joseph Schumpeter (1979), presented a challenging, controversial and stimulating analysis of the role of the entrepreneur in the market economy and explained why, in his time, the entrepreneur had come to face an increasingly hostile intellectual environment By the late 1970's, in the industrialized western countries, including Australia, the failure of macro economic policy to solve infrastructure problems marked the beginning of the end of the economic orthodoxy whose limitations Schumpeter had warned against. But Schumpeter's focus on the central role of the entrepreneur as the agent of economically successful innovation has not yet been reflected in the prescriptions of economic, industry, and research policy makers in Australia.

The legacy of the financial excesses of the 1980's, the inability of ideologically driven macro economic theories to solve industry-specific and firm-specific problems and the unsystematic history of both industry policy and science/technology policy, in Australia, make it crucial to consider the relationships between five often misunderstood words - 'innovation', 'entrepreneurship', 'research', 'development' and 'commercialisation'. The authors regard a thorough understanding of these relationships as the essential basis for producing a detailed industry policy for an Australia that seeks to be 'world-competitive'. The authors are not alone in this view.

Adam (1992) states:

> 'Our relatively poor performance in the commercialisation of Australian research, reveals an underlying weakness in the coupling between research and conventional market intelligence Engineering development (and subsequent 'commercialisation' of research) is not the most pressing requirement for capital in a high-growth company, since such a company frequently spends large amounts of capital on market-access and distribution networks, as well as manufacturing facilities Competent leadership skills in marketing and financial management are as important as engineering and R&D capabilities in high-growth companies Large companies, in industries with high degrees of technical complexity, frequently possess this critical mix of complementary

skills; small companies rarely enjoy such a luxury. If Australia is to be successful in building opportunities, we will have to undertake (simultaneously) two quite distinct activities. In companies with good marketing/financial leadership and management, we will have to insert new patentable technology, and in companies with brilliant technology we will need complementary brilliance in marketing and finance. Board members with appropriate vision, experience and integrity, are required for small fragile companies. Concurrently, we will need to expose a generation of young, talented Australians to professional opportunities which will allow them to acquire leadership skills in engineering, development and commercialisation.'

There is a pressing need for Australia to decide on a range of strategic businesses which we can develop and operate profitably for world markets and to adjust our scientific research funding, engineering development funding, economic policy and industry policy accordingly.

Pappas, Carter, Evans and Koop (1991, pp. 2-5) in commenting on the decline in Australia's wealth, state:

> ' ... our standard of living is set to fall unless we shift our wealth generation away from our traditional export base in natural resources to manufactured goods and services, where world trade is growing fastest ... Innovation is a critical determinant of sustained export growth.'

Understanding key relationships: 'entrepreneurship', 'innovation', 'research', 'development' and 'commercialization'

Entrepreneurship and Innovation. Hindle (1991, p 1) has observed

> 'During the late 1980's the Australian media - particularly the financial media - have been permeated by negative connotations of the word 'entrepreneur'. Entrepreneur is a difficult word to define but all positive connotations revolve around the concept of 'making it happen'. In this perspective, the entrepreneur can be seen as a creator: one who turns a potential exchange into an actual exchange; one without whom the transaction may never occur. Extrapolating - in the case where the demand exists but the supply does not - the entrepreneur may actually create the supply as well as effect the exchange. Thus, we arrive at the most positive concept of entrepreneurship: where the entrepreneur is defined as a person intimately involved in the process of innovation management and implementation. In this perspective, the entrepreneur is the creative agent who converts a good idea or a perceived market opportunity into a commercial reality. Here, the entrepreneur makes something new happen. He or she creates a viable business where none was before'.

He goes on to provide a concise technical definition of entrepreneurship (Hindle, 1991, p 10):

> 'Entrepreneurship is the activity of changing the parameters of prevailing economic behaviour within an industry by creating and operating a genuinely new venture, with high growth potential. A 'genuinely new venture' is one where the mode of wealth and creation and delivery is generically distinct from existing combinations of production, distribution, exchange and competition which characterize the industry. 'High growth potential' is where the pace of both sales growth and demand for supporting resources

is, or is expected to be, at least three times as rapid as that currently experienced by established firms within the industry '

Research, development and commercialisation. Under Hindle's definition of entrepreneurship, 'innovation' is identified as the tool of the entrepreneur. Entrepreneurship is the management of innovation The process of innovation management - which results in the creation of commercially viable new enterprises creating commercially viable new products - can be illustrated by the following equation (Gillin, Hindle & Shedden, 1991, p. 4):

R + D + C = Product

or

Research + Development [1] + Commercialisation = Product

It is appropriate to consider the elements of the equation individually, and particularly the 'R', because it is this 'science' component of research that the media, funding authorities and policy makers usually consider as 'innovative' rather than the entrepreneurial components of innovation: D' and 'C'. This misplaced emphasis produces poor policy and practice

Table 43.1 shows that the emphasis in Australia's 'Research and Development' effort and expenditure is BIG on 'R' and small on 'd'.

Table 43.1
Australia's expenditure on R&D by type of research (1986-87)

	Percent of Total Expenditure				
	Pure Basic	**Strategic Basic**	**Applied Re-search**	**Product D'ment**	**Total**
Business	0.1	0.6	11.9	24.0	36.6
General Government	2.7	6 7	18.1	7.3	34.8
Higher Education	10 4	6.9	8.0	1.8	27.1
Private (Non-profit)	0 3	0.8	0.3	0.1	1.5
TOTAL	13.5	15.0	38 3	33.2	100

Source: Australian S&T Data Brief 89-90 (Pappas Carter Evans & Koop, 1991)

The BIG 'R' small 'd' emphasis is wrong It takes no account of the need to bridge the development and commercialisation gap - the place where the entrepreneur operates - between bright ideas and salable products and services. BIG 'R' small 'd' is the simplistic attitude that regards getting to the moon as a 'great achievement of science' rather than recognising the reality that placing a man on the moon (or a new product into a new market) results from the triumphant combination of engineering development and the entrepreneurial management of innovation

Prominent examples that highlight the commercialisation effort required for advanced technology are Sarich's orbital engine, Pacific Dunlop's pulsar battery and T eletronics' pacemaker products

All involved BIG 'C' and little 'r'.

The typical claim on resources during the various stages of the genesis of an innovation is represented in table 43.2.

Table 43.2
Resource allocation in the innovation process

	Research	Development	Commercialisation
Effort	2%	20%	80 - 96%
Funds (Total = $10m)	0.2	2m	8.0 - 9.6
Time	1 year	4 years	6 - 10 years

Pappas, Carter, Evans & Koop report:

> 'What is rarely acknowledged is that commercialisation is far and away the dominant and major factor in the innovation process. It is in the commercialisation of an invention that most of the product effort is absorbed and the majority of funds expended. In fact, in a successful innovation, as little as 2 per cent to 20 per cent of the total effort is likely to be committed to invention [for which read 'research' or 'science'][2]. This will mean that of the $10 million allocated to a particular project, as little as $200,000 is likely to be spent during the invention process and as much as $9.8 million on commercialising it. In the ten years that it takes to bring the project to fruition, the invention will typically be completed in one year and the commercialisation [for which read the entrepreneurial management of innovation][3] process may take up to ten years'. (Pappas, Carter, Evans and Koop, 1991).

What explains the misplaced emphasis? Perhaps it is history. In the 1950's and 60's most USA technological companies strongly subscribed to the concept that 'research = profits' (a view otherwise known as 'technology push') in which new technology endeavours to find or create a market. A major proponent of this strategy was Bell Laboratories. But they, like many others, have since rejected this philosophy for an emphasis on the development of market driven products and services as the way to increase profits. Seeking knowledge for its own sake, patenting research or rewarding ideas, are good things in themselves. But, of themselves, they do not produce profitable products, businesses, industries and world-competitiveness. This only occurs when researched ideas are successfully commercialized. As Pappas et al (1991, p.17) state: 'The transistor (a Bell invention) was a significant discovery, but the major innovation successes in this industry stem from customer-driven follow-on innovation, such as miniaturisation and the portability of radios'.

Past over-valuation of 'research' and underestimation of the importance of commercialisation (through entrepreneurial management of innovation) by Australian governments, and academics in the 1980's is probably derived from the outdated USA concept that investment in research will result in guaranteed and increased company profits.

By contrast, the 1990s have commenced with a greater awareness of both the need for 'market pull' on technology and the importance of innovation. Innovation is the total, entrepreneurial process by which we turn a device into a product that is salable both in Australia and overseas. Ultimately, the equation combining Research, Development, and Commercialisation can be reduced to the equation:

Device + Marketing = Product

This equation (Gillin, Hindle & Shedden, 1991, p. 5) implies that innovative product/business developers and entrepreneurs need to be aware of a host of marketing variables, especially the general market's size and growth rate and the company's particular potential market share and growth rate. Only in the light of detailed marketing awareness can research can transcend the status of 'intellectually interesting' and achieve the status of 'potentially profitable'.

Technology: Distinguishing evaluation from valuation

When one enters the realms of technologically sophisticated new products, the relationships discussed in the previous section imply two distinct abilities: to evaluate the practical efficacy on the new technology and to place a dollar value on it. Generally, Australia's scientific and engineering skills are fully capable of evaluation: the assessment of a potential product's technical feasibility. However, it is vital to stress that technical feasibility evaluation ('will it work?') and commercial valuation ('will products and businesses embodying the technology be profitable?') are distinct activities requiring different skills and emphases.

Australia's major policy and practical problems lie in the area of technology valuation : i.e. assessment of the commercial feasibility of a business or project, involving a given technology, converted to a product or products Is the technology ready to commercialize? Does it require further R&D? Are additional market research and product development necessary or justifiable?

In order to appraise the economic attractiveness of a technology which may still require some additional R&D, a number of complicated issues must be considered Perhaps most importantly, one must estimate the probability of commercial success This encompasses a range of important issues, many of which cannot be quantified These include:

- o The quality and experience of the research personnel
- o The quality, quantity and availability of resources.
- o Competitive on-going research
- o Critical flaws in the R&D and the project as a whole.
- o The target market(s) for the end-product(s) or process(es).
    - Size of the market(s).
    - Is the planned level of research sufficient?
    - Will the investors get a suitable return on investment in the R&D?
    - Structure, conduct and performance of the competition
    - Does the product/process fill an end-user need or want?
    - Hence, will it sell (given that it will function as intended)?

Resolution of all these issues must be incorporated into a projected cash flow and integrated business plan which presents a base case scenario; an action plan which reflects the risks inherent in the project, yet provides a realistic window into future events; in particular, future financial returns

Doing this requires appropriate education: an education in innovation and entrepreneurship.

Provision of that appropriate education is vital to national industry policy and, through it, to the development of world-competitive products, businesses and industries An appropriate education in these areas, featuring the central role of integrated business planning, involves substantially different emphases from the 'standard' MBA programs of traditional business schools providing such an education, focused on successful commercialisation of new technology and management of high-growth innovative enterprises is the mission of the world's first graduate School of Innovation and Enterprise

Only articulate well-educated entrepreneurs will have the capacity to generate and execute the innovation strategies which, as the next section will argue, are going to be vital to Australia's ability to be world-competitive. The potential importance of the School of Innovation and Enterprise to the nation will be discussed, below, in section 3

Innovation strategy not cost reduction or research expenditure is the key to successful export oriented products and world competitiveness

Compare different nations' private business expenditure on R&D as a percentage of GDP, demonstrates that Australia has a far lower investment in high technology industries than other small OECD countries (Stalker, 1992). Moreover, Stalker's analysis of 1989 OECD figures for value added as a percentage of GDP for a number of industries shows most countries concentrate a far higher proportion of their research and development dollar the high technology industries than Australia He identifies an additional element of a nation's international competitive advantage as the fundamental commitment of a company towards achieving success in export markets for its products - not just regarding export as a marginal cost afterthought.

Pappas et al. (1991) have concluded from a study of some ninteen Australian exporters that an element of proprietary product or process advantage has played a key role in competitive success. Research at the School of Innovation and Enterprise is currently evaluating an observation by Austrade that companies who develop opportunities with only a national market in view, seldom, if ever, make the conversion into export markets. The relationship between a company's vision for export sales at initial start-up and subsequent success in the national and overseas market place may be critical to Australia's future export income.

Table 43.3
Exports of goods and non-factor services: 1965-86

(% of GDP)	**(% of GDP) 1965**	**(% of GDP) 1986**
Small Countries		
Australia	15	16
Sweden	22	33
Finland	20	27
Canada	19	27
Spain	11	20
Belgium	43	69
Austria	25	37
Netherlands	43	54
Denmark	29	32
Switzerland	29	37
Large Countries		
United States	5	7
Japan	11	12

Source World Bank, 1988

Yetton, Davis and Swan (1991), observed that there are two implications of the figures displayed in table 3 One is that Australia already has a number of significant, internationally competitive manufacturing firms. The other is that these firms do not export nearly enough of their total production The US, UK and Sweden, have a higher proportionate number of firms which both export from their home base and produce overseas.

Broad-brush, macro-economic prescriptions for solving Australia's problems of world-competitiveness through increased export activity are fundamentally cost centred They begin with the assumption that the major step in curing the problem is a recommendation to lower firms' cost curves and/or raise the quality and reliability of their products. This, plus a limited program of 'research' grants, argue the macro-economic policy prescribers, will be enough to make successful exporters out of domestically oriented firms.

Others - including the authors of this paper - argue that cost-centred, macro prescriptions are too simplistic to be successful without careful attention to the numerous factors (outlined in preceding sections of the paper) which are all as important as or more important than input cost levels in determining international competitiveness. This is not to say that any particular broad-brush prescription based on an overview of the whole economy is either wrong or undesirable. Hindle, for one, is an enthusiastic supporter of the Liberal Party of Australia's 'Fightback!' program of reforms (Hewson et al.). But we argue that such broadly focused reform prescriptions, valuable as they are, are only initial steps: not the complete path to success. In short, they are necessary but not sufficient There is no escaping the need for a detailed industry policy containing a strong commitment to addressing the intricate issues involved in the management of innovation.

Successful innovators know this even if policy makers do not.

Gillin and Hindle (1988) demonstrated the importance which six successful, entrepreneurial, exporting Australian companies placed on development expenditures when seeking export opportunities Analysis of their R & D expenditure shows a very strong emphasis on development (rather than research) and a high concentration of effort on both product and process innovation in overcoming the development gap between applied research and commercial sales In every case, it was market-pull on the technological development that made these entrepreneurs successful both in the national and overseas market Input costs scarcely rated a mention

Gillin and Hindle (1988) classified the success factors nominated by the six successful chief executives of the companies just discussed. Pappas et al (1991) have identified a number of obstacles to successful innovation. Table 43.4 compares Gillin and Hindle's success factors with Pappas et al.'s 'obstacles'. The success factors are ranked in order of importance by the usual system of weighted averages but there was universal consensus in the Gillin and Hindle research that all categories are interrelated and very close to one another in importance The comparison demonstrates, vividly, that there are vital issues which an innovation-oriented industry policy must address which are simply not capable of being subsumed by economy-wide prescriptions such as labour market reform, input cost reduction and shifts in general taxation policy.

Innovation is a very specific activity covering a very general field. It requires specific policy attention in all business areas: marketing, management, technology, finance. And innovation, above all, demands functional integration of all business areas Since, in a paper of this scope, we cannot deal with every issue raised in table 43 4, we will conclude our summary of the areas which an innovation-oriented industry policy needs to address with a consideration of the relationship between government, capital availability, development capital and the important, specialized role of industrial developers

Table 43 4
Comparisons of success factors and obstacles in innovative venturing

Business Area	Gillin & Hindle, 1988 Success factors in innovation	P.C.E. & K., 1991 obstacles to innovation
Marketing	(1) Technological push plus niche feed-back (2) Identification of non vulnerable niche markets (3) Development of niche	(1) Poor market access (2) Low market share. (3) Inaccurate judgement of: markets, customers and competitors. (4) Raw retail costs.
Management	(1) A team-building product champion (2) Building organisational structure to suit entrepreneurial behaviour. (3) Management style (autocracy dis-guised as democracy). (4) Stability and endurance of the en-trepreneurial leader (5) Balance and brinkmanship (6) The entrepreneur getting out at the right time	Not dealt with.
Functional Integration	(1) Careful choosing of the 'number two' executive in the organisation. (2) Responsiveness to feedback. (3) Awareness of synergy and strategic thinking (4) Crossing boundaries between func-tional areas	Not dealt with.
Technology	(1) Choose technology which develops with the market. (2) Stay one step behind the leading edge (3) Guard against acquisition of unpro-ductive resources (4) Avoid unnecessary perfectionism	(1) Technical failure (2)Technical shortfall (3) Limited awareness of process technology and labour costs.
Finance	(1) Debt aversion (2) Accountability is more important than accounting (3) Understanding funding require-ments.	(1) Insufficiency of avail-able development capital

The relationship between government, capital availability, development capital and industrial developers

In the Gillin and Hindle research (1988), an additional general factor identified by one CEO (which caused considerable surprise to the other CEO respondents) was the 'Government Assistance Factor' in which interest and assistance of government agencies was seen as a key ingredient of entrepreneurial success The CEO found that 'big brother having a genuine interest in little me' was a huge and valuable stimulus Another respondent commented 'Don't give us R & D grants; give us sales orders'. The feeling was that many government initiatives in Australia, to date, had been clumsy, uncoordinated and more rhetorical than productive of new commercial products because Australian government buyers (unlike those in the USA) simply would not support local entrepreneurs' products All agreed that an extra success factor could be support by government through order placement. this would initiate markets and stimulate competition and activity.

Porter (1991, p. 620) asserts that 'Governments cannot create competitive industries, firms must do so' He argues that Government should foster and even amplify the forces associated with competitive advantage namely: 'factor conditions, firm strategy, structure and rivalry; demand conditions, and related and supporting industries'. Such action will 'create opportunities and pressures, for continued innovation' The Japanese Government understands this better than any other 'By stimulating early demand, confronting industries with the need for frontier technology through symbolic co-operative projects, encouraging rivalry, establishing prizes to highlight and reward quality, the face of innovation and upgrading is accelerated'

Upgrading of an economy requires that ample capital is available at low real cost and is allocated efficiently through banking and capital markets to investments with the highest productivity. A particularly important dimension to be considered is access to seed capital, (Gillin, Hindle & Shedden, 1991). Ian Shedden has fabricated a striking analogy:

> 'Competitive industrial development has strong parallels with the chicken industry Each relies on a balanced effort in all its stages Seed capital fills a role not dissimilar to impregnating eggs, keeping them warm, hatching them and looking after the chicks in their early days. Venture/Mezzanine Capital feeds the youngsters up to the stage where the large companies harvest the fully grown chicken To finance only the later stages of industrial growth because the early stages are too hard is as unlikely to result in renewed economic growth in Australia as is the continued viability of a chicken farm with no hatchery'.

The financial press and the 1991 Industries Commission draft report on Available Capital (I C. Report 18, 1991) refer to 'Venture Capital' as if it were one entity covering all phases of product development and the innovation process That this is not true leads to many misconceptions of the development process and the part finance plays in it.

From the time a new idea, service or project is spawned, there is a development gap where seed capital is needed to evaluate, research markets, establish companies, make projects studies, produce prototypes, operate pilot plants, and look for major funding This covers the interface between the 'D' and 'C' of the innovation equation, presented previously Only after this messy, highly technical, difficult set of activities is adequately funded is there the possibility of producing something most venture capitalists would feel comfortable in funding While the MIC[4] scheme played lip service to the need for this seed capital, very few of the venture capital funds in Australia invested in such activities. This is not surprising, since they were bankers and business men, not industrial developers

Ian Shedden (1992) dramatically puts the case for policy to address the need for development funding:

> 'If the nation's acknowledged development gap is not funded effectively for the next 5 years, Australia will confirm its role of tourist paradise and resource exporter to the world, at the bottom of the totem pole in the western world; a third world country where you can drink the water The building boom will then be caused by building more tourist resorts and our education can concentrate on training our children to be good servants and cooks'.

The costs required to fund the development gap - i.e., the transference of technology into market driven products - are usually of a direct nature, e.g., the screening of opportunities and prototype development There is also a limit to how much a single industrial developer can invest and control effectively in bridging the development gap A typical range for annual budgeting of potential developers in 1992 is.

- $ 250,000 to 1 million on screening activities $ 1 to 10 million in seeding early stage projects;
- $ 1 million to $ 10 million in start-up funds
- i.e. a total of $ 1.25 to 11 million per annum The higher figures will only be effectively handled by very experienced developers By contrast, the venture capitalist invests primarily through equity in an established (albeit young) commercial company.

Successful industrial developers are very rare in Australia, but some do exist. Many have disappeared since the stock market crash of 1987. Most of the survivors are in a 'holding pattern' because of lack of funds Many have found survival patterns that make them profitable, and they are despite all the difficulties, still developing new opportunities. There are probably between 30 and 50 actually operating at present, and some at least can demonstrate that they are presently profitable and will, in the medium term, make sufficient large gains to make their original investment highly profitable There is also a reserve of trained and experienced talent that will once more emerge from the shadows if and when funding is available.

Neither the superannuation funds managers nor the government itself want government coercion or more bureaucratic interference trying to force capital into seed and development funding So, the only solution offered is to 'leave it to market forces' This is tantamount to conceding that nothing will be done because, as this paper has indicated, the macro-focused policy prescriptions are simply too broad-brush to embrace the detailed and sensitive relationships between innovation, entrepreneurship and the development gap.

Masterly inactivity will not work Force will not work That makes the task of creating a development capital policy within an industry policy very hard indeed But there is no escaping the urgent need for such a policy. And there is at least one example of successful partnership between government, academia and industry in this area

During the past six years, the Industry Research and Development Board has assisted the creation and growth of some three hundred small companies, now employing some several thousand people and generating over $ 1,000 million sales This activity has built on scientific strengths in the CSIRO and our universities and has led to the first emergings of a new Australian engineering-development culture Many of these small companies have been provided seed/venture funding by the surviving MIC organisations and will grow to respectable businesses with strong export sales The IR&D Board scheme has been operating for only six years, and considerably more time is needed for further growth of many more small companies. Product development cycles are shortening but it still takes some fourteen years for new science to graduate into a profitable product. So, IR&D Board funding will remain a vital component of engineering product and process development for some years to come in Australia

The IR&D Board scheme resembles well-intentioned macro economic policies in this respect: it is necessary but not sufficient There is an urgent need for an innovation investment capital strategy as part of industry policy. While there are suggestions as to how this might be done[5], there is no scope in this paper to go beyond the normative statement that we ought - indeed must have - such a policy Unless Australia launches a coherent industrial development program in the near future, to provide the new niche service and manufacturing industries that will dominate the early years of next century, we face a bleak future indeed The 1980's have left a feeling among many that industrial development this is a risky and difficult field, for which Australia has little competitive technology an few experienced and competent industrial developers The authors of this paper believe that by spreading the risk and having competent developers carefully manage the development the investment will be relatively low risk and relatively high return

But we are in a minority.

Financing for large and well established businesses is poorly enough catered for at present As one goes further back along the development chain, availability of capital becomes increasingly scarce The banks are in crisis. Large companies are reticent about funding, establishing or managing any ventures or new business concepts which cover the development gap (between identifying a new piece of technology or a new business concept and establishing it as a viable and growing business) that lie outside their core businesses. Governments and their policy advisors are content with a broad-brush approach and a blind faith in 'market forces'.

The desired, 'world-competitive' future begins to look like the undesired, introverted past: long on rhetoric and hope but short on reality and capital.

Amidst the gloom, one light shines. It is a growing number of programs committed to the importance of education in technology-management and entrepreneurship

Entrepreneurship, national policy and education

Industry development is not primarily a matter of research, or good science, or good banking or good bean counting It is about the combination of engineering development and good business practice - in short, the management of innovation

Industry policy must therefore foster the commercial application of research to meet market niches by innovative engineering Fostering such development requires the availability of seed capital which has been singularly unavailable in Australia, and greater support for entrepreneurial education

In fostering R & D investment by companies that seek to innovate and win greater sales volumes and export orders, industry policy should focus on incentives. For example R & D grants based on a percentage of gross sales from the companies share in government procurements or as allowable R & D expenditures obtained from income tax reductions based on export income from commercialising new products and services The policy needs to reward those who are successful in the market place These processes demand the input of managers skilled in relating research, engineering and commercialisation through effective innovation However, the availability of training and award programs for managing innovation are limited and it will be some time before the effectiveness of these programs can be measured in terms of new ventures, new jobs or new export industries Relevant industry policy must incorporate a major initiative to fostering relevant entrepreneurial education based on managing growth and change and in particular the management of innovation

Unfortunately, Australia's lack of a detailed, coherent industry policy is mirrored in the general lack of educational attention to issues of science, technology, entrepreneurship and innovation. Fortunately, some significant, specific educational initiatives are underway.

These have been analysed, recently, by Professor Fred Jevons and his colleagues in a report to the National Board of Employment, Education and Training and the Department of Industry, Technology and Commerce, (Jevons Report), entitled, Science and Technology Issues in Management Education The study aimed to find out how well Australia's formal management education covers issues related to science and technology (S & T). All MBA programs and a selection of graduate diplomas and Bachelor of Business courses were surveyed revealing that little coherent attention is given to S&T issues in general management education However, Jevons and his team were heartened by a selection of specialist programs which did address these issues and the report contained brief descriptions of them. Jevons wrote: Perhaps the most remarkable of the specialist programs is the Master of Enterprise Innovation at Swinburne Institute (now University) of Technology.'

The next section of the paper presents an overview of the entity which houses this 'most remarkable' program.

The school of innovation and enterprise

Precise mission

The School of Innovation and Enterprise (SIE) has a precise mission: to teach and nurture ethical Australian entrepreneurs[6].

SIE is a new and vital post-graduate institution providing research, consultancy and degree-award education for the business creators and managers of tomorrow It has strong international affiliations - especially with America's leading school of entrepreneurial education, Babson College, Boston, Massachusetts (a college ranked in the top 20 of American business schools). But SIE is the first graduate school in the world dedicated exclusively to entrepreneurial education based upon the practice of innovation.

From professional commentators to the man in the street, the Australian public is aware of the critical economic, social and political importance of developing new businesses created by genuine entrepreneurs[7]. Unless Australia can build dynamic new ventures and innovatively rejuvenate its traditional enterprises, there can be no question of 'world-competitiveness' or sustained national development The very survival of the national economy is in jeopardy However, committed, ethical and erudite entrepreneurs do not materialize from the ether and cannot be made by legislation, wishful thinking or traditional management education.

Today, would-be entrepreneurs need to acquire generic expertise at a rate more rapid than 'experience' alone can provide They require a focused, professional education All too many pay lip service to Australia's need for genuine, ethical entrepreneurship All too few understand the unique requirements of entrepreneurial education[8]

Tomorrow's entrepreneurs aim to create Australia's economic destiny

The School of Innovation and Enterprise aims to create tomorrow's entrepreneurs

Broad goals

- To create a range of comprehensive, post-graduate, degree-award programs and special-purpose short courses which equip students with the understanding, skills and experiences required to manage the innovation process in new venture creation, current venture improvement and development of new Australian products and enterprises capable of operating successfully in the global marketplace.
- To provide a research centre of internationally-recognized excellence in the field of Entrepreneurship
- To apply the results of research to the improvement of Australian business practice, the teaching of entrepreneurship and to the development of government policy.
- To provide internationally-supervised doctoral research degrees in the discipline of Entrepreneurship.
- To blend research with academic and practical teaching in order to transfer the concepts and skills of entrepreneurship and the wealth creation process.
- To act as a focus for the study and promotion of wealth creation in Australia and to become the recognized centre for entrepreneurial studies in Australia and East Asia.
- To develop and maintain combined academic and practitioner networks between parties interested in the issues of innovation management, wealth creation and entrepreneurship in Australia and overseas.
- To generate the skills base and synergies required to effectively direct accumulated capital, scientific and other innovations, and human resources into the creation of productive, value added, world competitive Australian enterprises, products and services.
- To provide private-sector, public-sector and non-profit organisations with a pool of entrepreneurial expertise and a wide range of training and consulting services centred on transferring the skills involved in managing the process of innovation
- To promote an understanding of the process of new business and wealth creation in the Australian community and to highlight the significant role played by this process in both the quality of life and the standard of living enjoyed by Australians

Educational philosophy and practice

As established national educational institutions, Swinburne University of Technology and its Faculty of Engineering are particularly renowned for the excellence of their tertiary degree-award courses and co-operative education programs within industry. The SIE firmly adheres to the established Swinburne tradition of excellence in applied education and the Institution's growing reputation for pure and applied research. At the same time, SIE is a totally new and distinct entity, dedicated to offering a dynamic alternative to the established parameters and patterns of management education which prevail in the majority of established business schools (including Swinburne's own Faculty of Business).

SIE's essential philosophical and methodological distinction is well illustrated by comparing the established Master of Business Administration (MBA) degree offered by 'traditional' business schools with the School of Innovation and Enterprise's Master of Enterprise Innovation (MEI) degree. The very name 'Business Administration' carries an implicit assumption that the core education offered will draw its methods and examples from the realm of existing firms operating in mature markets. On the other hand, the Master of Enterprise Innovation degree endeavours to equip students to manage new ventures (or change existing practice in established entities) in markets characterized by rapid growth. There is a trinity of emphasis on growth management, change management and innovation

SIE is designed as a self-contained graduate school dedicated to excellence in entrepreneurial education It is entirely independent of both Swinburne's Faculties of Business and Engineering. It does not rely on 'service subject' teachers and it is not in any way 'in thrall' to either Business or Engineering as a 'mother' discipline. In particular, the relationship with the Faculty of Engineering has its roots in administrative history - not intellectual predisposition. SIE is building its own Faculty (see below) of full and part-time professional educators dedicated to teaching the management of innovation to practising managers. Its full-time academic staff combine high-calibre academic credentials in both teaching and research with extensive entrepreneurial experience. Its part-time staff are all entrepreneurially successful practitioners who either have substantial teaching experience or undertake a special Fellows Program (see below) designed to enable them to impart their practical knowledge of innovation and enterprise as effective communicators and skilled instructors.

Substantial overseas and Australian experience has demonstrated that the form, content and effectiveness of entrepreneurial instruction is enhanced by emphasising certain teaching methods. SIE is constantly refining and developing its instructional techniques and course curricula (see below).

Organisation and activities

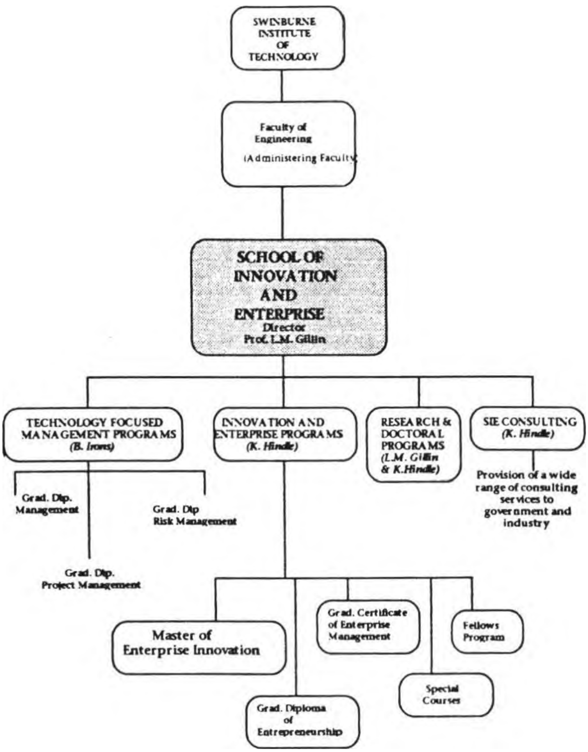

Figure 43 1 Functional organization cart

Research and doctoral programs

SIE has a strong commitment to research in Entrepreneurship and associated disciplines There are currently three Ph D. theses in progress: a comparison of Australian and United States venture capital; an evaluation of innovation in Australian manufacturing industry, and an analysis of a process for commercialising high technology.

SIE publishes Innovation and Entrepreneurship Research Monographs, an ad hoc series embracing a wide range of topic categories: including pure and applied research in Entrepreneurship, case studies; teaching manuals and materials Research papers in the series are often of international standard as evidenced by the recent acceptance of an I&R Monograph for publication in the prestigious international scholarly periodical, The Journal of Entrepreneurship and Regional Development and the publication of a number of articles in the proceedings of North American and European conferences on Entrepreneurship. It is hoped to start a journal - if resources are ever sufficient to ensure a regular publication of world standard. Authors, under the auspices of the school, regularly presents papers at major international conferences.

An SIE research inventory is available.

Innovation and entrepreneurship award programs

At the heart of the School of Innovation and Enterprise are its core post-graduate programs specifically devoted to the academic discipline of Entrepreneurship. They range from Graduate Certificate to Master's level An overview and summary of each course within the Masters Degree and Graduate Diploma programs are provided as Appendix one of this document

Master of Enterprise Innovation Degree. This may be regarded as the SIE's 'flagship' program. It is the world's first Master's degree by course work in the discipline of Entrepreneurship It involves three years part-time study and provides a comprehensive education in all aspects required to manage a medium to large scale enterprise operating in volatile growth markets It is interesting to note that some of the current students in the program are already the holders of MBAs from respected universities The SIE now has approximately five applicants for every available place in the program

Graduate Diploma in Entrepreneurship and Innovation. The Graduate Diploma in Entrepreneurship involves two years of part-time study and is primarily aimed at the person who must acquire the conceptual framework and practical acumen needed to successfully plan, launch and manage a new small-scale venture as an entrepreneur in his or her own right or as an 'intrapreneurial' manager in charge of an innovative responsibility centre within an established organisation At the core of the course is provision of the theoretical and practical skills required to produce a comprehensive business plan integrating marketing, organisational behaviour and financial planning into a flexible corporate strategy. The second year of the Graduate Diploma contains the same subjects as the first year of the Masters program

Graduate Certificate of Enterprise Management. The Graduate Certificate of Enterprise Management is a very innovative program - especially with respect to the way it is delivered The students do not come to the school, the school goes to the students - in their workplace It is a fully-credentialled Swinburne award course comprising four innovation management courses - marketing, organisational behaviour, financial planning and corporate strategy. Each course requires a minimum of twelve and a maximum of twenty four students and can be delivered in the work place if they are all employees of the same organisation. Each course comprises forty-two contact hours of class time - with cases and materials customized to be relevant to the precise managerial needs of the participants without sacrificing any academic rigour Classes are delivered in two intensive three-day (twenty-one contact hour) blocks spaced at intervals of between four to eight weeks In the interval, students conduct an intensive, supervised field project of direct practical relevance and financial benefit to their organisation.

Technology focused management award programs

Graduate Diploma in Management. The school provides this generic graduate diploma program serving the specific needs of people who have technological backgrounds and have recently assumed duties requiring management of technology-based responsibility centres

Two subject-specific graduate diplomas are also provided They are:

Graduate Diploma in Risk Management.

Graduate Diploma in Project Management.

Non-award general and customized training courses.

SIE provides a wide range of management training courses, educating staff at all levels and in many disciplines to practice innovation to improve performance Clients range from some of Australia's largest organisations seeking extensive customized programs to individuals attending a one-day standard course.

BHP-Swinburne fellows program

SIE recently hosted its second Fellows Program (sponsored by BHP - Australia's largest company) in which Professor Bill Bygrave of Babson College headed a team teaching practising entrepreneur/managers how to impart their knowledge by becoming good teachers The Fellows Program is planned as an annual event - one of a series of specialist seminars - featuring internationally prominent scholars - which SIE hopes to develop

Consultancy

SIE Consulting offers expertise in technology transfer and the core management disciplines of marketing, finance, organisational behaviour and corporate strategy During its evolution since 1985, the school has provided numerous educational (as well as general) consultancies to a range of public and private instrumentalities (a list of references can be supplied on request)

SIE's distinctive competence in consultancy stresses two elements.

- Dedication to effective skills transfer between Swinburne and the commercial world
- Cost-effective provision of products and services based on problem solving through the profitable application of innovation

SIE can provide clients with a diverse range of additional resources: from mainframe computer power, to specialist software and technical systems; to secondment of specialist staff.

Every organisation needs allies SIE networking can assist clients' corporate performance through alliances with associated companies, establishment of joint ventures and development of effective corporate communications.

The faculty

Full-time academic and administrative staff

Prof. L M Gillin, Professor
Mr K.G. Hindle, Principal Lecturer
Dr B K. Johnson, Principal Lecturer
Mr B Irons, Senior Lecturer
Mr J. Legge, Lecturer

Ms J. White, School Administration Manager

Part-time 'Pracademic' teaching fellows

Mr I. Shedden (Managing Director Shedden Pacific Ltd)
Mr B Ball (Venture Capitalist, Advent Management Group)
Dr B Whan (Director, Victorian Innovation Centre)
Dr J Bailey (Director, Clark Hummerston Bailey Former Founder and Director of the Centre for the Development of Entrepreneurs, Chisholm Institute of Technology)
Mr P. Pascoe (Barrister at Law)
Mr R. Wheeldon (Consultant, NEC)
Mr K. Tant, Senior Lecturer in Finance, Monash University.

One of the features of second and third years in the MEI program is that every course is taught by a two-person team with the academic complemented by a practitioner who is a master of the subject matter of the course

Conclusion: Demand, supply and the future

Since 1985, when the Graduate Diploma in Entrepreneurial Studies was introduced, activities have grown so that, in 1992, SIE has budgeted for the following student load:

Master of Enterprise Innovation	47 students
Graduate Diploma in Entrepreneurship & Innovation	50 students
Graduate Diploma in Management	95 students
Graduate Certificate in Enterprise Management	40 students
Research Studies: Ph D	5 students
Research Studies: Masters	5 students

The school's programs are heavily in demand Both the Masters and Graduate Diploma programs have many more applicants than there are places on offer. The academic and professional status of applicants is rising dramatically.

Constraints upon consolidation of achievements and further development come from the supply-side of the market SIE is operating on a scale which exceeds the limits set by public sector funding provisions. The current student numbers are only being supported because of the willingness of the academic staff of the school to undertake heavy teaching and administrative loads and the generosity and commitment of Fellows who provide their services on an honorary basis or for a nominal fee. The physical and support resources available to the school are restricted and do not reflect the demand for places in SIE's award programs and the national importance of entrepreneurial education. The most critical need is simply: space The school would benefit enormously from being housed in one integrated complex rather than dispersed among various enclaves of Swinburne's fragmented and over-crowded Hawthorn campus. While extra revenue from consultancy and specific sponsorships of particular programs (such as BHP's generous support of the Fellows Program) are beginning to benefit the school, there is no doubt that SIE's future development will be conditional upon its ability to attract substantially increased support and resources in the near future - either from government or the corporate sector, or hopefully, a combination of the two.

Given the recommendations of the Jevons report to vigorously support initiatives like the SIE (Jevons Report, p. 28) and the universal lip service given to Australia's need to become 'world competitive', the outlook is not as bright as it should be.

Speaking of the United States in 1983, Vesper, in his masterly study of entrepreneurship and national policy raises the thorny problems about acquiring public and private resources for entrepreneurial education:

> '...it appears that there is a fairly strong case amidst the data for the value of professional education as a support for entrepreneurship, especially for engineering and science training, but also for training in business National policies clearly can play an influential role in these fields They have done so substantially in engineering and science through research programs and various types of fellowships But they have not done so in business education, presumably because the government has assumed that business can take care of itself in the free enterprise system. In fact, however, the system does not leave the enterprise to be free .And existing business typically is not particularly inclined to support programs for the development of entrepreneurs which would, after all, simply introduce more competition, something businesses do not desire, even though it may be good for the economy as a whole. Hence there may be a national-interest role for policies that strengthen the entrepreneurial component of business education, as a counterpoint to the business community's support of established business-oriented business education.' (Vesper, 1983, pp. 47-48)

This paper has argued beyond 'may be' We have argued that there definitely is a national-interest role for entrepreneurial education and that the School of Innovation and Enterprise has a central part to play because its philosophy and programs are totally committed to the principles which should guide the establishment of an industry policy which addresses national priorities. But we are not holding our breath waiting for either government or industry to deliver a coherent policy framework which embraces an adequately funded entrepreneurial education system

The problems are legion and the outlook less than rosy.

- Until government accepts the need for a detailed industry policy embracing the ingredients we suggested in part one of this paper, it is unlikely that government will do anything with the Jevons Report's recommendations but put them on the shelf.
- The publicly funded system has indicated it will not increase its support for the school. Unless a major private sector sponsor can be found to support its development, the SIE will have to cut back rather than increase its activities. As indicated by Vesper, (1983, pp 47-48), the private sector is generally more willing to support traditional rather than entrepreneurial education.
- Existing academic fiefdoms - the traditional business schools and engineering departments contain many staff who are actively hostile to entrepreneurial education, regarding it as unnecessary and a drain on resources which would (they believe) otherwise be applied in more traditional areas.
- People genuinely qualified (both academically and by virtue of their capacity to perform in the 'real world') to teach entrepreneurship are rare and have less tolerance for the strictures of the publicly-funded tertiary education system in Australia than do most academic staff. For instance, many of SIE's full-time faculty have proven ability to earn much more money in private practice than academia can ever pay They love their work but love in a cold climate eventually freezes and the ice breaks.

At the moment, though the situation is brittle, the ice has not cracked

Despite all constraints, SIE faces the future with hope because its greatest resource is undiminished: the commitment and energy of its staff and students. But hope will not spring eternal. The fate of a unique and vital institution, the world's first graduate school exclusively dedicated to education in entrepreneurship and innovation, hangs in the balance between a government and private sector that drift in an industry policy vacuum; good at the rhetoric of 'world competitiveness', but bad at facing the necessity of genuine commitment to framing and funding policies which can convert rhetoric to reality.

Notes

[1] Note 'development' can be defined as the 'application of research to real market oriented problems'

[2] Authors' insert

[3] Authors' insert.

[4] The Management Investment Company Scheme was established in 1983 by government on the recommendation of the Espie Report (1983)

[5] Ian Shedden (1992), has put forward a proposal for an Australian Industry Development Fund Such a Fund could be administered by a Technology Development Council, set up under the auspices of the Institution of Engineers, Australia, comprising experienced industrial developers and with one or two members nominated by the Insurance Industry Such a council could negotiate a scheme for providing and monitoring a seed capital initiative and provide a formula for the assessment of potential developers. Government need play no part, apart from encouraging the industrial developers and the Super Funds to enter into dialogue Appropriate tax incentives would need to be available to the Fund

[6] A detailed discussion of the ambiguities, incongruities and definitional problems involved in using the word 'entrepreneur' as a technically precise economic term is provided in: Hindle, K. (1991), 'Entrepreneurship A Concise Technical Definition', Innovation and Entrepreneurship Research Monographs, Swinburne Institute of Technology, School of Innovation and Enterprise, Number 91-07-01, S I T. Press, Hawthorn, Victoria

[7] See, Hindle, Kevin and Gillin, Murray (1991), 'Government Involvement in Entrepreneurship and New Business Creation in Australia A Quantitative Analysis of Public Perceptions and Opinions.' Innovation and Entrepreneurship Research Monographs, Swinburne Institute of Technology, School of Innovation and Enterprise, Number 91-05-01, S.I.T. Press, Hawthorn, Victoria The paper has been accepted for international publication in The Journal of Entrepreneurship and Regional Development

[8] Entrepreneurship (with a capital 'E') is a distinct academic discipline in its own right In 1989, the American Academy of Management Sciences accorded independent status to Entrepreneurship, placing it on the same academic footing as such established managerial disciplines as Marketing and Organisational Behaviour

References

Adam, C. (1992), 'A Perspective on Growth', *Engineering Round Table*, Canberra, April

Espie et al, (1983), *Developing High Technology Enterprises for Australia. A report prepared by the High Technology Financing Committee for the Minister for Science and Technology*, Australian Academy of Technological Sciences, Clunies Ross House, 191 Royal Parade, Parkville, Victoria, Australia

Gillin, L.M. & Hindle, K.G. (1988), 'Key Success Factors in Australian New Venture Management', *Frontiers of Entrepreneurship Research*, Babson College, USA

Gillin, L.M (1992), 'Entrepreneurship Curricula in Australian Universities', *Internationalizing Entrepreneurship Conference*, Cambridge, UK, July

Gillin, L.M., Hindle, K.G., and Shedden, I. (1991), 'Fostering Innovation: An Integral Component of Industrial Policy', *Proceedings of the Target 2000 Conference on Defence Industry Spin-Offs for the 21st Century,* The Institution of Engineers, Australia and the Strategic & Defence Studies Centre, Australian National University, Canberra

Hartwell, M. and Lane, J (1989), *Champions of Enterprise. Australian Entrepreneurship 1788-1990,* Focus Books, Sydney

Hewson, J., Fischer, T. (1991), Access Economics and Others, *Fightback! Taxation and Expenditure Reforms for Jobs and Growth. The Liberal and National Parties' plan to rebuild and reward Australia*, Pirie Printers, Fyshwick, ACT, November

Hindle, K., and White, J. (1991), 'The Market Share of Entrepreneurial Education: Implications and Imperatives', *Innovation and Entrepreneurship Research Monographs,* Swinburne Institute of Technology, School of Innovation and Entrepreneurship, Number 91-07-02, S.I.T. Press, Hawthorn, Victoria

Hindle, K. and Gillin, L.M (1991), 'Government Involvement in Entrepreneurship and New Business Creation in Australia A Quantitative Analysis of Public Perceptions and Opinions.', *Entrepreneurship & Regional Development,* 3, pp. 379-393

Hindle, Kevin (1991), 'Entrepreneurship: A Concise Technical Definition', *Innovation and Entrepreneurship Research Monographs,* Swinburne University of Technology, School of Innovation and Enterprise, Number 91-07-01, S.I.T. Press, Hawthorn, Victoria

Hindle, K.G., Mittag, R and Gillin, L.M (1992), 'A Test of the Venture Capital Hypothesis Applying an Amended Theory of Business Planning to the Survival and Development of an Insolvent Enterprise.', *Innovation and Entrepreneurship Research Monographs,* Swinburne University of Technology, School of Innovation and Enterprise, Number 92-05-02, S.I.T. Press, Hawthorn, Victoria, 1992, Paper delivered to the 1992 Babson Entrepreneurship Research Conference, INSEAD, Fontainebleau, France, June

I C. Report 18, (1991), Industry Commission, *Availability of Capital, Industry Commission Report No. 18*, Australian Government Publishing Service, Canberra, December

Jevons, F., Dowling, F.B and Saupin, M (1992), *Science and Technology Issues in Management Education. A Report to the National Board of Employment, Education and Training and the Department of Industry, Technology and Commerce*, DITAC, Australian Government Publishing Service, Canberra

Jones, Barry (1982), *Sleepers, Wake!*, Oxford University Press, Melbourne

Kasper, Wolfgang (1984), 'Productivity Growth and Rejuvenation of Australian Capitalism - in memory of Joseph A. Schumpeter's 100th Birthday', *Economic Papers*, The Economic Society of Australia, vol 3 no. 4, December, pp. 9-19.

McMullen, W.E. & Long, W. (1987), 'Entrepreneurship Education in the Nineties', *Journal of Business Venturing*, vol. 2, pp 261-275

Pappas, Carter, Evans and Koop (1991), *Innovation in Australia, Industry Research and Development Board*, Australian Government Printing Service

Porter, M.E. (1991), *The Competitive Advantage of Nations*, McMullan Press Ltd, London

Ryan, Fergus (1989), *Report of Inquiry - Victorian Economic Development Corporation*, Ordered by the Legislative assembly to be printed no. 39, Parliament of Victoria, Jean Gordon Government Printer, Melbourne

Schumpeter, J A. (1979), *Capitalism, Socialism and Democracy*, George Allen & Unwin, London, (First Published, Harper & Row, New York, 1942)

Scott-Kemmis, D. (1991), *The Value Added by Professional Engineers to the Economy*, IEAust., APESA, and Centre for Technology and Social Change, University of Wollongong

Shedden, I. (1992), *Business Concept for an Australian Industry Development Fund*, unpublished

Stalker, R. (1992), 'Review of 1989 OECD Research Statistics', *Engineering Round Table, IEAust*, Canberra

Thompson, R (1988), 'Business Plans: Myth and Reality', *Nation's Business*, vol. 76, no. 8, August, pp 16-23

Thurston, P. (1983), 'Should Smaller Companies Make Formal Plans?', *Harvard Business Review*, September-October

Timmons, J A. (1980), 'A Business Plan is More than a Financing Device', *Harvard Business Review*, March-April

Timmons, J A. (1990), *New Venture Creation. Entrepreneurship In The 1990s*, Third Edition, Irwin, Homewood, Illinois

Vesper, K.H. (1983), 'Entrepreneurship and National Policy', *Heller Institute for Small Business Policy Papers*, Monograph sponsored by the Graduate School of Industrial Administration, Carnegie-Mellon University, Walter E. Heller International Corporation Institute for Small Business

Veliz, C. (1988), 'The Closing of the Australian Mind', *IPA Review*, February-April

Veliz, C. (1988), 'Australian Universities More is Better', *IPA Review*, May-July

Yetton, P., Davis, J & Swan, P (1991), *Going International*, Report of Australian Manufacturing Council, AGSM

44 Internationalizing entrepreneurship: Education and program: An Australian perspective

John Saee

'Entrepreneurship is the act of being an entrepreneur, a derivative of the french term entreprendre, which means to undertake, to pursue opportunities, to fulfil needs and wants through innovation and starting Business' (J. G Burch, 1986).

Introduction

Australian tertiary institutions and to some extent Australian entrepreneurs have in recent years been successfully internationalizing education and training in the Asian pacific region and other parts of the world

Export education by Australian institutions was particularly stimulated by today's society that regards education as a stepping stone to future opportunities. Not only is this opinion evident in Australian society, but it is also gaining currency world-wide.

Export of education services are most commonly conceived of as students coming to Australia to study but they can also include correspondence courses for overseas students, the the electronic transmission of lectures and courses overseas, and Australian entrepreneurs travelling personally overseas to provide various forms of education.

Education of exports can be provided by the formal sector and the non-formal sector. The formal sector comprises public and private secondary schools and universities and college of Technical and Further education (TAFE)

The non-formal sector is made up of private colleges and institutes which, in the main, provide courses in commerce and related subjects and English language but also offer a wide range of other subjects Traditionally, the formal sector has awarded successful students with statutory recognized educational qualifications However it is becoming increasingly common for each sector to provide courses leading to official or unofficial qualifications.

Direct earnings from the full-fee paying overseas student program for 1989 were $174,309,868, a seventy-five per cent increase on revenue earned in 1988 which was estimated at $100 million.

The Bureau of Industry Economics (BIE) suggested that student's non-tuition expenditure (which included expenditure in Australia by foreign students on items such as living expenses) in 1988 as probably equivalent to tuition expenditure in that year. On that basis, in 1989, Australia's total foreign exchange earnings from the export of education services could be almost $350 million.

Further statistics on revenue, number of students by each educational sector, student's country of origin and chosen disciplines of studies by overseas students as diagramatised, are appended to this seminar paper

International Development of programmes of universities and colleges here-after to be known as IDP: a historical perspective

The IDP concept was first expressed in 1960 in an agreement between the Australian vice-chancellor's committee and the then Department of External Affairs which formed IDP's predecessor, the Australian-Asian Universities Co-operation Scheme (AAUCS). The concept was based on the belief that by working together Australian institutions could make their most effective contributions to the development of education institutions overseas.

Since 1969 IDP has built its reputation primarily in Southeast and the south pacific.
Whilst the company offers its services to countries in other parts of the world. The regional office network enables close contact to be maintained between IDP and its clients. The network is a firm expression of IDP's long-term commitment to overseas education assistance

IDP, and its overall services as well as its international marketing management strategies profile

I D P. (which stands for the International Development Program of Australian Universities and Colleges) is Australia's international education organisation. It draws on Australia's education resources to assist in developing overseas education institutions and education systems, particularly through human resource development; to foster international education and entrepreneurship and to provide information and counselling about Australian education opportunities. These activities are supported by an office network which extends throughout Asia Pacific region

IDP plays a number of significant roles with aims to contribute cost-effectively to economic and social development This is carried out through providing assistance to increase the effectiveness of education systems overseas and particularly tertiary education institutions and individuals to support education development And also facilitating the enrolment of overseas students in Australian education institutions.

Australia's education institutions comprise of some sixty-five universities and higher education level colleges over 230 colleges of Technical and Further education (TAFE), and many English language colleges, business colleges and secondary schools IDP's ready access to the resources and expertise of these institutions enables it to deliver a comprehensive range of services.

In conjunction with the IPD , some 300 private and public tertiary institutions including business colleges have successfully exported their education and training programmes abroad

IDP core program is supported by an annual allocation in the Australian aid budget and aims to strengthen the teaching, research and administrative capacities of higher education institutions in developing countries. In 1989/ 90 the allocation was 8.1 million within IDP's total budget of $44 million.

Over the past twenty years or so, hundreds of Asian, Pacific and Australian academics, scientists and technologists have participated in the program in a wide range of disciplines. Specific activities include; secondments of Australian staff to participating institutions; visiting advisory assignments by Australian staff; short courses led by Australian staff; fellowships for overseas staff tenable in Australia; study visits to Australia by overseas staff; joint research; and preparation and publication of text books and manuals The growth of the core program network of institutions, consultants and academics has provided the framework within which IDP's services has been progressively developed especially those related to the provision of Australia's higher education resources on a cost recovery basis.

For prospective overseas students, IDP provides accurate and comprehensive information on study opportunities in Australia; a range of materials on Australian education institutions, their courses and education services; counselling on study options; assistance with enrolment processing, pre departure orientation sessions In addition IDP in association with Australian education institutions, undertakes contracts for a range of services relating to international development assistance projects. These include services of project design, development and management such as identification of project possibilities; preparation of tender proposals; preparation and management of projects for overseas governments, preparation and management of cultural relations projects and support for overseas activities of Australian education institutions.

There are technical assistance projects in fields such as institutional and system development; education planning and management; curriculum development and evaluation; course design; education technology and library development

Training programs are available for such people as academic staff, education administrators, providers of technical services, English language specialists, librarians Program may range from individual postgraduate, fellowship to short course courses for staff And there are services relating to training packages such as selection and placement; help with travel arrangements, visas and medical checks; orientations to Australian conditions; and assistance with accommodations.

IDP has established the English language Centre of Australia (ELCA) in Bangkok and similar centres throughout south east and east Asia may also be established IDP's has also designed and implemented English language programs It also provides consultancy services on the teaching of English and instructor training programs, and recruits suitably qualified and experienced English language instructors to work in institutions overseas.

They design and administer special purpose English courses such as scientific writing, report writing, seminar and conference participation both in Australia and overseas. Arrangement of consultancy services are available in specific areas such as curriculum development, writing course materials and application of instructional methodologies It also has ready access to place and support English language instructors in appropriate postgraduate courses in Australian institutions and place and support groups in appropriate English courses in Australia, including general English, English for academic purposes and English for occupational purposes

A new test of English language proficiency, the International English Language Testing

System (IELTS) has been developed by IDP in partnership with the British council and has been available since October 1989.

The new test is designed to assess effectively the English language skills and the English language training needs of each candidate in the key skills of listening, speaking and writing.

IELTS is based on an extensive revision of the British council's existing English language Testing Service (ELTS) which has been in operation since 1980 The new test is broad in scope, allowing for screening of students wishing to enter English medium higher education and also certain general training programs, including TAFE and upper secondary school courses

IDP administers IELTS through subsidiary company IELTS Australia. IDP is also experienced in other areas of English language testing and can screen groups of candidates for English-medium study overseas and recommend appropriate periods of preparatory English language training. It can also provide English language testing services to other specific objectives.

The appointments service assists overseas governments and education institutions to recruit and appoint Australian academic and administrative staff. The service, which is offered on a cost recovery basis is supported by IDP's network of consultants and a register of expertise IDP offers the following services to institutions in the region which seek to appoint staff from Australia such as searches for and provision of names and contact addresses of potential candidates. Drafting and placement of advertisements in selected major newspapers or journals and circulation to appropriate Australian institutions.

Distribution of information provided by the overseas employing institution to prospective applications Selecting of Australian members of interviews panels. Provision of venues and logistical support for the conduct of interviews in Australia Preparation and forwarding of interview reports gibing detailed assessments of applicants In collaboration with relevant Australian and overseas authorities, selection and appointment of staff for activities supported by the Australian aid budget.

IDP responds to the needs of Australian institutions and changes in policy and practice in education both overseas and in Australia by organising workshops, seminars and conferences which provide a forum for opinion and debate., information exchange and collective action. Also by publishing educational materials such as textbooks and course manual, proceedings or workshops, directories and brochures on courses and institutions and by fostering links between Australia and overseas education institutions by arranging visits from overseas education policy makers, academics and administrators.

At the request of Australian government, the international development program of Australian universities and colleges (IDP), in association with Qantas has established Australian education centres in a number of locations in the Asian pacific region. The Centres offer a complete service on Australian education, providing information, counselling and application processing to overseas students as well as support for the promotion and recruitment of Australian education are represented through Australian education centres higher, technical and secondary education and institutions offering non-formal courses in English language business and special studies.

Australian education centres are the only such centres endorsed by the Australian government and all student enquiries received by the Australian diplomatic missions are referred to them.

The services for overseas students are free, impartial and comprehensive information on the Australian education system, a wide range of publications and audio-visual materials including directories on Australian education and institutional handbooks, brochures and video tapes, counselling on study options; a computerised information system-cou-search-using the latest technology to provide accurate course listings and descriptions; processing of applications to institutions; assistance with visa applications; seminars, interviews and pre-departure orientation; English language testing, and assistance with travel arrangement

IDP's support for member subscribers

The services for Australian subscribers are a network of overseas offices to support the recruitment activities of Australian education institutions, attractive office facilities and interview rooms, display and storage of institutional materials; arrangement of advertising campaigns, seminars and student interview schedules for individual institutions or groups of institutions; publication of directories and materials on Australian education, generic representation at education exhibitions; publications and briefing papers on overseas education systems and institutions, assistance with visits to education institutions, ministries and agencies; market and promotional advice; in application processing service, including verification of student credentials and issues of acceptance advice forms if required, English language testing, and supervision of off-shore tests, examinations and courses.

Services for governments and other agencies include services for sponsored student programs including selection, placement, pre-departure orientation and travel arrangements Also there is assistance with documentation including visa application, collection of fees for transfer to government agencies and commissioned research.

Why do overseas students choose Australian as their education destination?

Overseas students indicated that a variety of factors which influence their reasons for choosing Australia These include the award of a scholarship to study in this country (Harris et al, 1990) That is the students are directly offered a place at an Australian institution via way of personal achievement and a paid agreement.

Australia it would seem, is considered to have relatively low costs of living and study expenses. in fact, 62 9 per cent of overseas students believe the cost of study in Australia was less than or equal to the cost of study in other comparable countries (Steadman et al, 1990) This is a definite advantage when overseas students and their families are considering an international education as many of these students are from working class families and the majority of financial support comes from relatives. And yet another study undertaken by, the IDP, on behalf of AIDAB (Australian International Development Aid Bureau) indicates that education fees and the standard of living in Australia is noticeably higher than that in other comparable countries. (Browne et al)

The high standard of education in Australia draws overseas students to this country. Sixty one per cent of overseas students believe the quality of degree programs being undertaken in Australia was better than or equal to than in comparable countries (Steadman et al, 1990).

The restricted access to tertiary education in their home country has forced students to seek education in a foreign country. For example the country may offer only one or two tertiary institutions with limited placements, or the student may live in a remote area not in lose proximity to an institution. Thus Australia would be viewed in a positive light as it offers many universities, colleges of advanced education and private tertiary institutions from which they can choose from.

Travel costs are lower than other education providers and time differences between Australia and the students' home countries are less (Industry Commission, p 26) The low incidence of travel costs thus acts as a great benefit for Australia as an education destination

Research findings on export of education

Australian Trade Commission (Austrade) in its survey into export education revealed that Australia's education and training sector experienced substantial growth in revenue from tuition fees from overseas full paying students in 1989 At the same time overall overseas full fee paying student numbers increased to 42,000 in 1989.

The survey also found that the revenue derived from tuition fees from overseas students and the number of overseas full fee paying students studying at Australian institutions has increased significantly each year since the start of the full fee paying student program in 1986. Revenues from tuition fees in 1989 was $174 million, compared with $100 million from tuition fees in 1988 and $25 million in 1987. Most revenue growth in 1989 was recorded in the tertiary and secondary sectors, with revenue earnings in the tertiary sector increasing by almost 300 per cent to $63 million The education sector expected exported earnings from tuition fees for 1990 was in excessive of $270 while the numbers of full fee paying students in Australia in 1990 were expected to reach 60,000.

Australian government's policy on full fee paying overseas students

Driven by the desire to internationalise education and training as a means of generating revenues, Australian government initiated new policy in 1986 allowing universities and other educational institutions to offer places to overseas student at full cost. While no limits were placed on the number of full fee paying overseas students who could be accepted, the government put in place guide-lines aimed at preventing the displacement of Australian students in the form of specified minimum course fee for full fee paying overseas students. At the same time, overseas student visa procedures were streamlined to assist institutions in marketing their courses.

The effects of these changes was a dramatic increase in students numbers with student arrivals more than doubling between 1896 and 1989. In particular, the number of students entering Australia to study non-formal courses increased sharply

Australia's immigration policies regarding overseas students underwent various and frequent changes from 1987 onwards These changes arose from concerns that the 'exports of education' sector was being exploited by some students and institutions It was felt by many in the industry that the relaxed regulations in the early part of 1987 allowed 'non genuine' students primarily interested in working and/ or overstaying, to enter Australia with relative ease Student visa regulations and procedures were tightened and the bona fides of students was assessed. however, tightening regulations were not just aimed at students Concerns that some institutions were targeting 'wrong' or 'non-genuine' students led to stricter rules being imposed on institutions through the Department of Education, Employment and Training (DEET)

The number of students coming for English Language Intensive Courses Students (ELICOS) and other short courses fell significantly following the tightening of entry procedures Generally, institutions in the formal sector were not affected except where they offered non formal courses such as English language training.

There was a dramatic reduction in student arrivals from peoples republic of china (PRC) from over 20,000 in 1989 to an expected few hundred in 1990. Whereas under prior entry requirements about fife per cent of applications from the PRC were rejected, the rejection rate increased to about ninety-five per cent during 1990.

Cost and benefit-analysis of overseas students in Australia

In broad terms, the benefits to Australia from the education services come from the financial income of educational institutions and the expenditure of students on goods and services in Australia, less the cost of providing the exports of education are similar to those from the export of other goods and services However, there are also some important differences

One set of differences arises from the fact that most foreign consumers of the service reside in Australia while they are educated. This means that they:

- Consume goods and services which may be priced at less that their real cost (transport, health, children's education etc.) and in some circumstances may add to congestions,
- Contribute to taxation and tariff revenues when they consume ancillory goods and services.
- May obtain jobs and affect remuneration and employment opportunities for Australians , and may overstay their allowed time and compromise Australia's immigration processes.

The other main differences from conventional exports arise because of the history of government involvement in the provision of domestic education. Institutions in the sector are unused to having to supply places in response to market forces They may be badly organised to take advantage of net benefits available from catering to foreign demand Because institutions cannot know what value domestic students attach to particular courses, it is possible that they accept foreign students at the cost of a place to a domestic student who may have valued it more highly. This means that providing places to foreign students in some circumstances may create net costs.

Substantiality of export marketing Australian education

World-wide export education is a multi-billion dollar industry. It is estimated that Australia alone generates around a billion dollar in the form of export earning from overseas students (J Dawkins, 1992). The market for education services is an international one and is of considerable size The following table illustrates the geographical distribution of overseas students enrolled in various countries

Table 44.1
Number of post-students enrolled by country

Country	1960	1970	1980	1984
USA	53.1	144.7	325.6	342.1
France	27.1	34.5	114 2	133.8
USSR	.....	27.9	62.9	.....
Germany	21.7	27.8	61.8	76.9
UK.	12.4	24.6	56 8	....
Canada	7.3	22.3	32.3	32.6
Australia	1.9	5.9	8.1	12.0
Other	86.9	206.4	259.6	255.2
Total	210.4	494.1	920.5	......

Source: Harris and Jarrett, 1990

Overall, it is established that in 1989, over one million students were studying abroad. Here in Australia, in 1990 there were 70,000 overseas students studying in Australian educational institutions. Of these 44,000 were full-fee paying overseas students. Of the 44,000 some 21,000 were enrolled in formal studies in public institutions such as secondary schools, TAFE colleges and universities. The remaining 23,000 fee-paying students undertook relatively short, non-formal courses, mostly in private institutions. These students concentrated in English and business studies but also studied areas such as aviation, computing and the arts (Dawkins, 1990).

As at June, 1990, there were 970 institutions, both public and private, offering courses approved by the department of employment, education and training for full fee paying overseas students. Of these, 484 were privately funded colleges offering courses in areas such as secretarial, business or religious studies and ELICOS.

Overseas students can spend money on Australian education both abroad and in Australia. One form of expenditure offshore is on courses provide by Australian institutions outside Australia. Furthermore before arriving for Australian-based courses, students must pay visa fees to the Australian government and may purchase travel to Australian with Qantas.

The great bulk of students expenditure, however is on fees and goods and services provided in Australia. (NB: additional statistics regarding expenditure on education fees and goods and services can be viewed in the appendix.)

Wider costs and benefits inherent in export marketing of education

The presence of students in Australia can have effects beyond immediate effects in markets for the goods and services that they require:

Balance of payments

Some commentators noted about benefits that the exports of education provide to the balance of payments. Many would argue that in any assessment of the desirability of particular activities, special weight should be given to those which earn foreign exchange. A corollary is that increase support should be given for exporters, especially in establishing industries such as education

If foreign exchange is given no special weight, benefits from providing goods and services do not vary accordingly to whether the expenditure was derived from funds from abroad or in Australia

Immigration issue

Students can overstay their visas This can produce costs if, as undoubtedly occurred in the early stages of the development of the informal sector, the immigration process is compromised and illegal immigrants adopt the guise of students

From a benefit cost perspective the problem of overstay suggests two questions:

- At what level of temporary immigration do we begin to attract a level of no bonafide student such that the gains from exporting to genuine students are exceeded by the costs associated with the overstayers. ?
- What are the least costly method of controlling temporary immigration, where costs are measured in terms of administrative resources and discouragement of bona fide students ?

Students in Australia may also work In principle this could cause displacement of domestic workers. It could also be an inducement for those with dishonest motives to come to Australia with little intention to study This could again have the effects of undermining immigration procedures

Non-tangible benefits from enrolling overseas students

Some of the most frequently mentioned benefits from education exports occur when students return home These benefits are generated from both full fee paying overseas students and students who benefit from assistance through aid program.

Trade and commercial benefits

Students may acquire brand loyalties to Australian products from the expenditure in this country which may imply greater future demand than would otherwise have been the case Similarly, there may be increased facilitation of trade between countries as a result of personal and institutional relationship developed here by individuals able to facilitate or influence trading liaisons with Australia in the future

Australian educated people may also influence the development in their home countries of standards and regulations which are compatible with Australian standards

This has in the past proved to be of considerable value to Australian exporters

International relations/diplomatic benefits

Some commentators hold the view that Australia benefits politically from having an active overseas student policy. The Goldring Committee(ie., Report of the committee of review of private overseas student policy) revealed that there were many people in senior government and political positions in other countries in the region who have studied in Australia and whose attitude towards Australia were generally more favourable as a result

Cultural and educational benefits

The presence of overseas students in Australian institutions is said to provide an enrichment of the educational environment. Australian students benefit because they are exposed to a diverse range of people, customs and ideas, and gain a more international perspective.

Again the evidence is anecdotal, but there is a widespread view that Australian students and institutions benefit.

TAFE Queens land listed several benefits, including cultural exchange, overseas recognition of awards, conduct of additional classes which would otherwise be uneconomic, and increased responsiveness of institutions to establish new courses to meet local and overseas demand.

Additional potential benefits and costs of overseas student studying in Australia are articulated below:

Table 44.2

	Benefits	Costs
Private		
	1 Enriched educational experience for some Australian students	1 Qualified Australian students may be crowded out
	2 Enhanced future exports	2 Standards diluted of admissions procedures are widely variable
	3 Regional increases in employment and income	3 Increased racial prejudice may occur
Institutions		
	4 Revenue from fees	4 Excessive numbers of students in some courses and unis
	5 Increased student numbers which exploit economies of scale - particularly at the postgrad level	5 Foregone research output by academic staff
	6 Increased research output	6 Bureaucratic and support services req'd for overseas students which are not fully covered by fees
Government		
	7 Revenue from fees and taxation	7 Possible subsidisation (medical transport, education of children) funded by Australian taxpayer
	8 Aid allocation tied to Australian institutions	8 Need to respond electorally to to some of the above
	9 Reduced unemployment benefits as employing expands	
Society (additional to the above)		
	10 Foreign exchange earnings (fees, trade, tourism)	9 Expenditure effects of the additional expenditures associated with overseas students
	11 Enhanced international under-standing and goodwill	
	12 Immigration of trained manpower	

Source: Harris and Jarrett, 1990

Potential benefits and costs of overseas student study for the developing countries are as follows:

Table 44.3

	Benefits	Costs
Private		
	1 Greater access to higher education, particularly to postgrad courses not available at home	1 Private costs of tuition and living
	2 Broadened experience	2 Income for egone while studying
	3 On-going contacts and collaboration	
Institutions		
	4 Fewer undergrade students may relieve domestic resource pressures	3 Weakened by short-term and/or long-term loss of best students overseas
	5 Staff trained to higher levels as result of overseas postgrad training	4 Government funding may remain limited as pressure to expand local education budget reduced
Government		
	6 Saved expenditure on higher education, especially if funded by aid	
Society		
	7 Enhanced international understanding	5 May allow desirable domestic reforms to be put off
	8 Productivity increases to a greater degree than otherwise, especially in respect to postgrad study	6 Dependence may be maintained 7 May promote inequality 8 Loss of foreign exchange may worsen balance of payments 9 Lost output during time overseas

Source: Harris and Jarrett, 1990

Promotional campaign

Overseas promotion has become increasingly important both in terms of a, attracting overseas students and b, providing information relevant to students needs

Tertiary institutions in their attempts to capture their market shares, have developed marketing strategies aimed at overseas markets

Whilst exploring detailed marketing strategies as adopted by individual tertiary and/or training institution may be fascinating, however due to constraints of space and time here, I only wish to focus on broad promotional strategies being widely adopted by these institutions

Current promotional activities

Overseas promotion by Australian educational exporters has two objectives The first is the more general aim of raising the awareness of Australia as an educational exporter and diverting potential students away from other destinations, in particular those in the northern hemisphere towards Australian educational opportunities. This is a form of 'generic' promotion of Australian educational opportunities and institutions as a whole.

The second is the specific task of converting this awareness into enrolments at particular Australian institutions.

Institutions meet these objectives in a variety of ways Many take part in joint promotion co-ordinated by Austrade and the Australian Education Centres (AECs). Some are directly represented overseas, others employ private agents to represent their interests and to recruit students Interviews or lectures are conducted by the staff from some institutions in overseas countries Most institutions use a combination of these method.

Students in other countries intending to study abroad will seek information from a variety of sources on the study possibilities available to them In the case of study opportunities in Australia, this could come from AECs education agents, embassy or direct from institutions themselves Word of mouth advice is said to be important

Direct representation

In overseas markets there are a large number of private agents who specialise in promoting educational institutions and their courses and recruiting students These agents work within a consultancy arrangement and usually represent a small number of institutions and are generally rewarded on a commission basis paid by the student, institution or both.

Agents can also arrange visa, travel and services for a fee paid by the applicant. Agent may represent institutions from a number of countries.

The ELICOS association expressed the view that private agents' commissions paid by Australian institutions range from seven per cent to twenty per cent of course fees the association also indicated that while most public sector colleges are paying their agents ten per cent of the course fee for which each student recruited, the vast majority of private colleges were paying their agents fifteen pe cent

State government promotional activities

Some states are involved in the direct promotion of education services in overseas markets. The New South Wales Government established the Education Export Advisory Council (EEAC) in 1989, one role of which is to develop strategies to stimulate the marketing of education services to overseas students. It acts to co-ordinate and market the industry.

The recent New South Wales Export Education Industry Task Force Report recommended a feasibility study of specialist marketing arrangements for the N.S.W's education export industry and support for education by the funding of liaison officers for North east and South East Asia.

Austrade

Austrade provides assistance to providers of export of education through its education and training export development program as well as through the export market development grant scheme

Education and training export development program

Between 1986 and June 1990 Australian exporters of education were able to use Austrade's export support program in South East and North Asian markets by subscribing to the education and training export development program. In other markets Austrade provided support on a fee for service basis. The program's aim was to facilitate entry into world markets. Particularly those where demand for education exceeded domestic capacity to supply, and to increase awareness in other countries of Australia's capability as a competitive supplier of education.

Export market development grant scheme

Under this scheme grants are provided to small to medium sized exporters to seek out and develop overseas markets. Austrade provides cash grants based on eligible expenditures incurred on export promotion on the preceding year. changes were made to the scheme in 1990. The number of payments is now limited to 8. The minimum expenditure threshold was increased from $10,000 to $30,000 with expenditure after the first $15,000 eligible for re-imbursement. The maximum grant was increased to $250,000(with a export ceiling of $ twenty-five million) and the grant rate reduced to fifty per cent of eligible expenditure Small exporters can group together and claim as an Approved Trading Body

Australian international development aid bureau (AIDAB)

Through AIDAB, Australia assists developing countries in strengthening their human base through a range of education and training program Programs include the Equity and Merit Scholarship Scheme (EMMS). The sponsored training program and various education and training activities in individual countries In addition, many development projects provide valuable professional training for citizens of developing countries. this training is undertaken in the developing country as well as in Australia.

Many students trained in Australia takes up key positions in government and business on their return home. With their professional qualifications and language skills developed in Australia Many students on return play n important role in major development co-operation projects The students play key roles in projects funded by Australia and involving Australian companies

During 1992 the Equity and Merit Scholarship scheme will see almost 3000 students from more than thirty developing countries studying in Australia

It is instructive to note that under this scheme, women receive half of the scholarships

Most scholarships are for students from the Asia/Pacific region, but some African countries are included The scholarships cover full tuition fees usually fares to and from Australia and living allowances

Internationalizing Australia's training and education

Cottrill (1989) states that there is some urgency about marketing activities if Australia is to make the best use of the limited time span that exists or any competitive advantages Australia still has in higher education

Japan and Korea have recently started to put into place that investment in higher education which will take them to the forefront of research- a repeat of what they have done in manufacturing Cottrill also maintains that competition from America and the UK is superior in certain design features as ell as in the range of the education services on offer. These superior features can include provision of within home country language and course studies serving a consortium of foreign country institution. The overseas country consortia may also offer credit transfer for studies between member institutions, and speedy admission procedures.

In Malaysia a consortium of northern British universities has gained a dominant market position for these reasons

In Indonesia, the US is more attractive than Australia to Indonesian organisations sending students abroad, or to Indonesians going abroad

In 1987 there were less than 1,000 Indonesians undertaking formal secondary or tertiary courses of study in Australia. In the US in the same year there were 10,000 Indonesian students doing tertiary courses, of whom 7,000 were undergraduate. A particular state, California, was the most attractive with 4,000 students (Aaneson, 1988).

Finally, export education, as noted earlier, has enormous economic, social, political, cultural and diplomatic benefits for Australia made possible through the initiatives of government, public and private tertiary institutions. Thus we must develop strategic planning to manage the process of internationalising Australia's training and education programs in an effective manner.

Consistent with this strategic guiding principle, we must relentlessly pursue a high degree of academic excellence whilst maintaining our services with integrity, sensitivity and an open mind Conduct of our recruitment campaign must be performed in an ethical and responsible manner. Mutual obligations on the part of both student and the institution, are to be made explicit in clear, comprehensive and actionable contract (Browne op-cit) This act covers both parties in the event that should future confusion occur, there is a contractual agreement that can be called upon for documentation of both parties' agreements. Only such a coherent policy we would continue to achieve a profitable future for Australia on a long-term basis

Finally, it would be deemed necessary to provide Australian social study curriculum in addition to English lessons for overseas students (i.e. prior to their undertaking tertiary education) at least for a period of six months in order for international students to gain a sound understanding of the Australian social system, including culture, government structure and legal system. Australian academic staff involved in international education may also be required to undergo cultural orientation on international students cultural heritage(s) in order to become effective educational service providers Infrastructural support, including accommodation, library and computer facilities should be expanded in order to better cater for international students

References

Aenenson, C., Overseas training office, *Indonesian Government,* Bappenas, Jakarta

Austrade (1989), 'Education and training export development 1989, *Annual report and survey*

Austrade media release

Burch, John G. (1986), *Entrepreneurship,* John Wiley and Sons, New York

Browne, R K and Dale, R. H., *Overseas students educational opportunity and challenge*

Cottrill, L. (1989), *For sale-Australian education,* Canberra

Educational training and consultancy services, *International development program of Australian universities and colleges*

Harris, G T and Jarret, F T. (1990), *Educating overseas students in Australia - who benefits,* Allen and Unwin, Sydney

Idp, *Australian education centres,* pamphlet in association with Qantas
Industry commission (1991), *Export of education services - draft report,* june
Steadman, G. T. and Dagwell, R. H. (1990), 'A survey of overseas students in Queensland' *Australian Unis Review*

Appendix

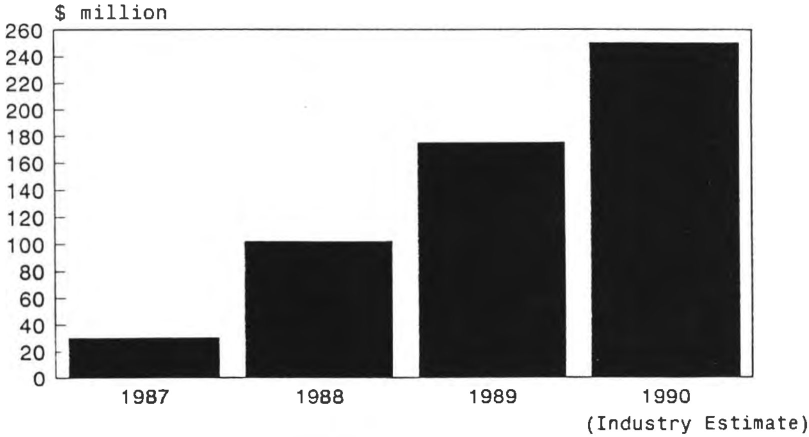

Figure 44.1 Revenue growth from full fee paying students, 1987-90

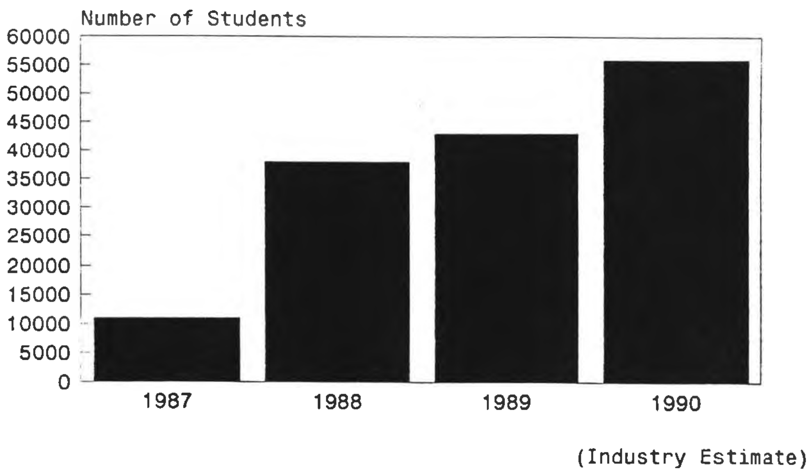

Figure 44.2 Full fee paying student enrolment growth in Australia

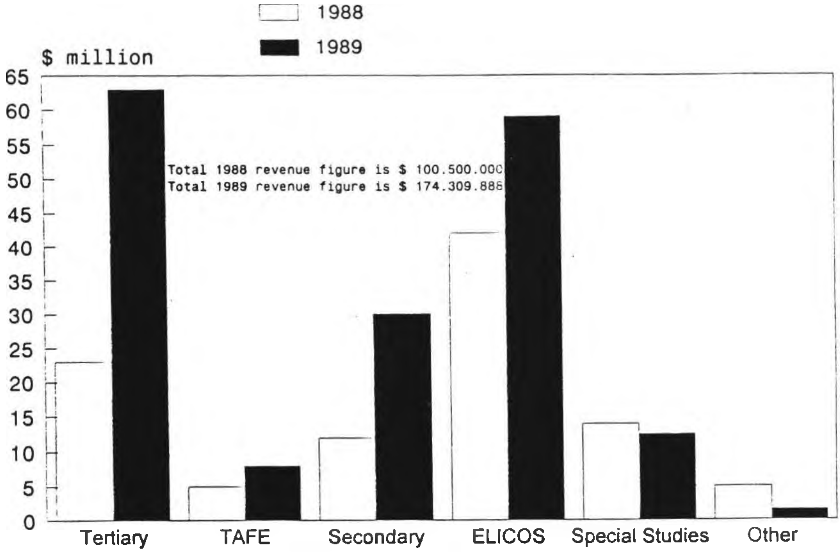

Figure 44.3 Revenue figure for 1989 by sector (compared to 1988)

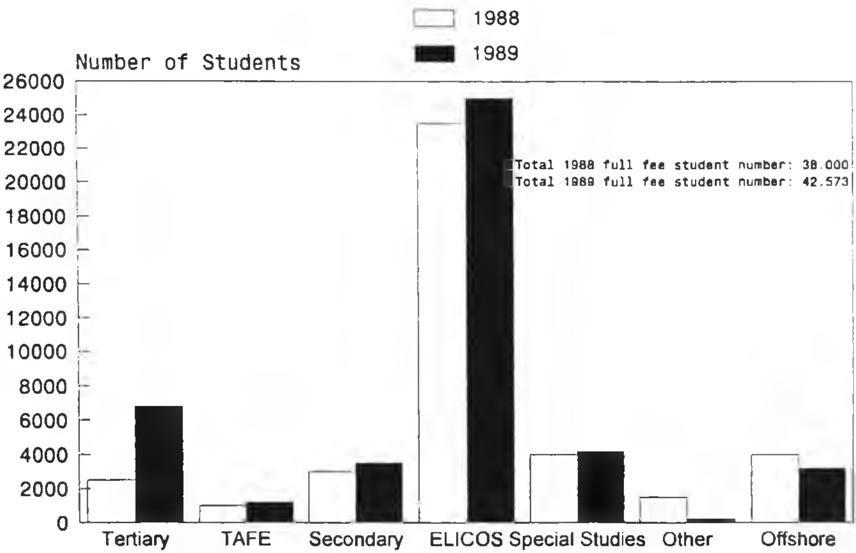

Figure 44.4 1989 full fee student numbers by sector (compared to 1988)

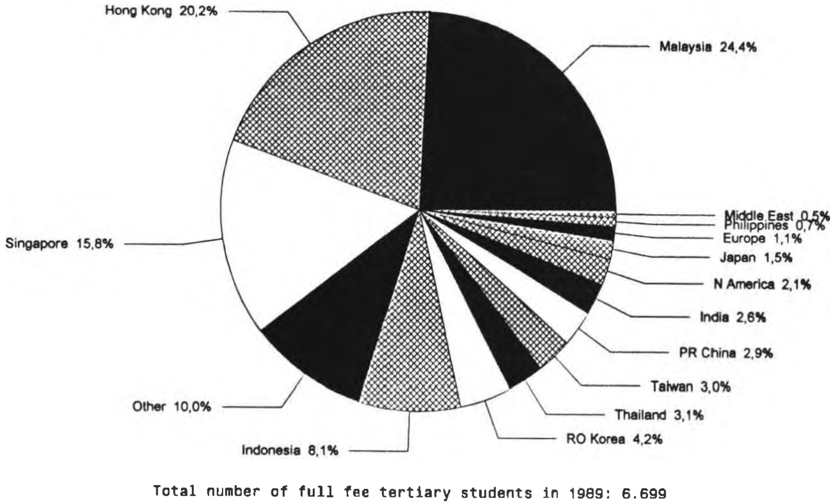

Figure 44.5 Country of origin of full fee paying students undertaking tertiary studies in 1989

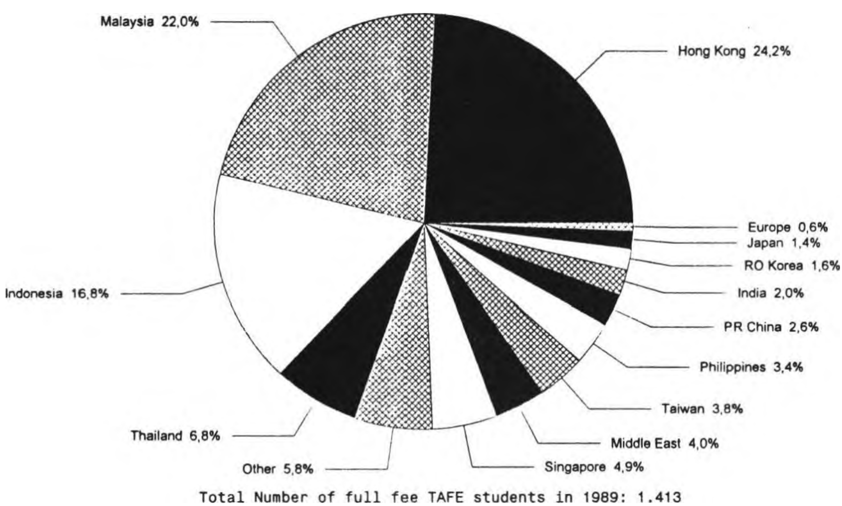

Figure 44.6 Country of origin of full fee paying students undertaking TAFE studies in 1989

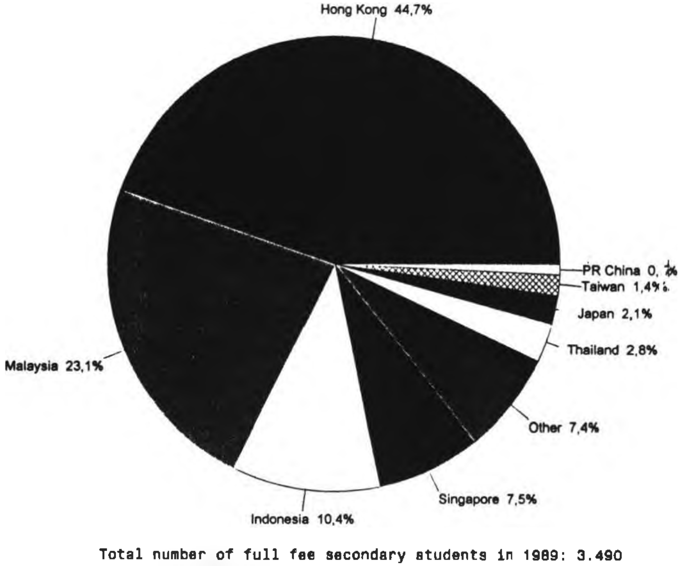

Figure 44.7 Country of origin of full fee paying students undertaking secondary studies in 1989

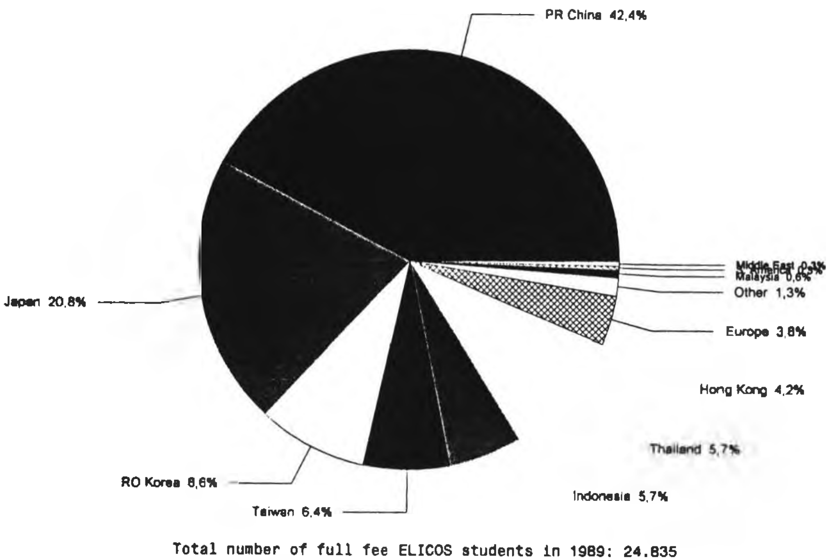

Figure 44.8 Country of origin of full fee paying students undertaking ELICOS studies in 1989

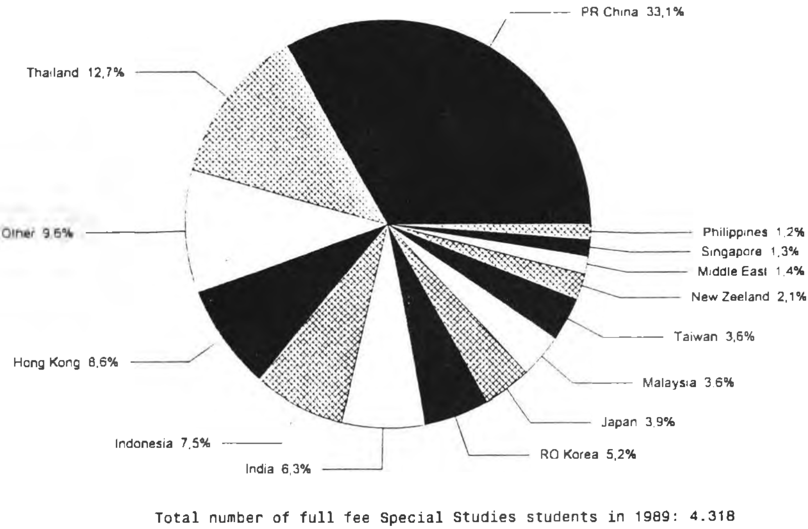

Figure 44.9 Country of origin of full fee paying students undertaking special studies in 1989

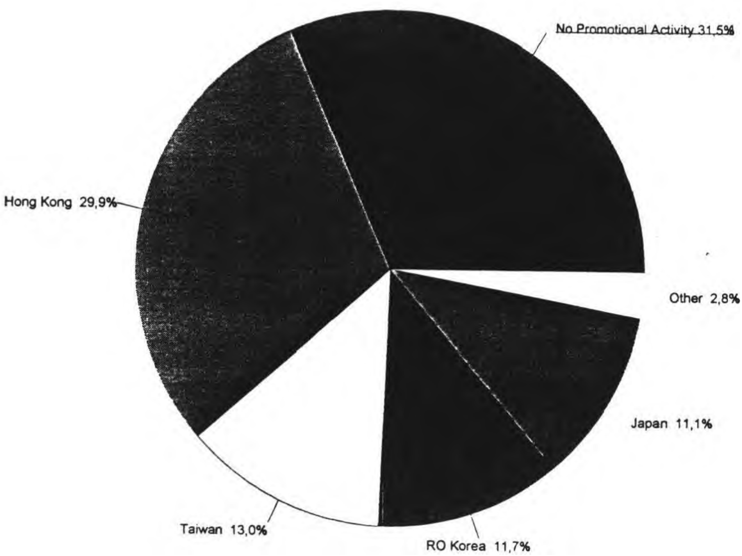

Figure 44.10 Markets for institutions' promotional activities in North Asia during 1989

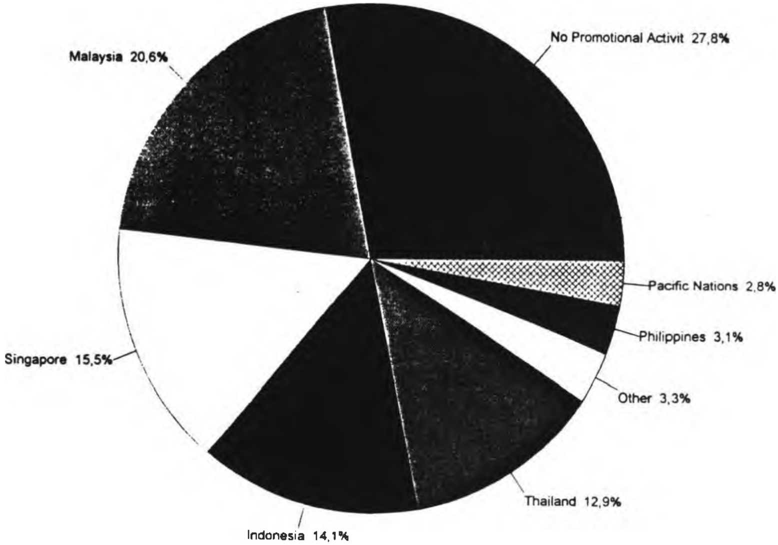

Figure 44.11 Markets for institutions' promotional activities in Oceania & South East Asia during 1989

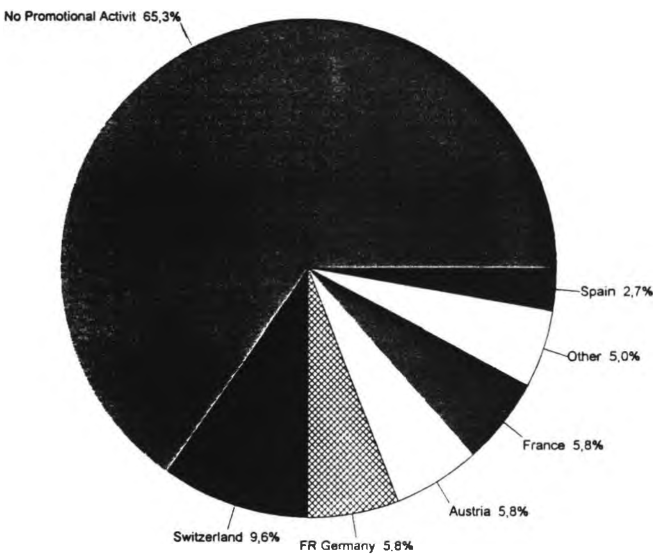

Figure 44.12 Markets for institutions' promotional activities in Europe during 1989

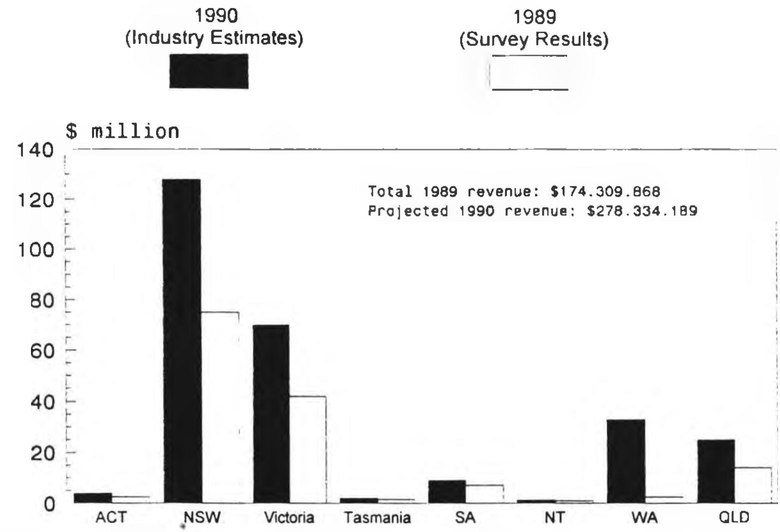

Figure 44.13 1989 revenue and projected 1990 revenue by state

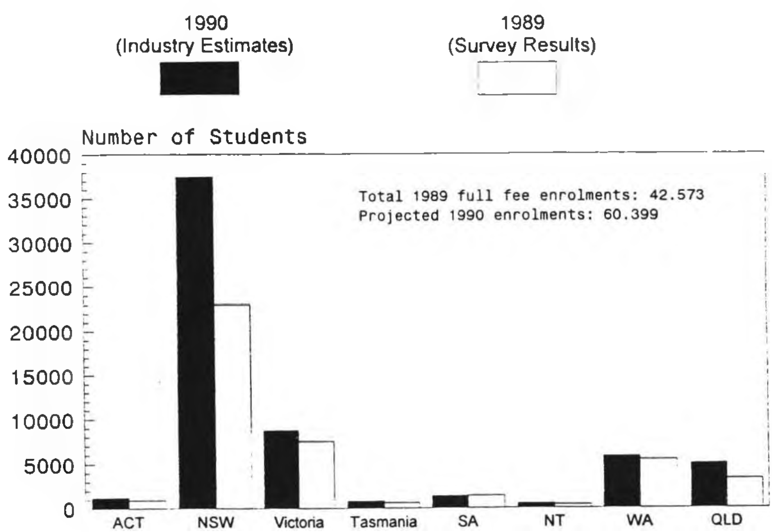

Figure 44.14 1989 Student enrolments & projected 1990 enrolments by state

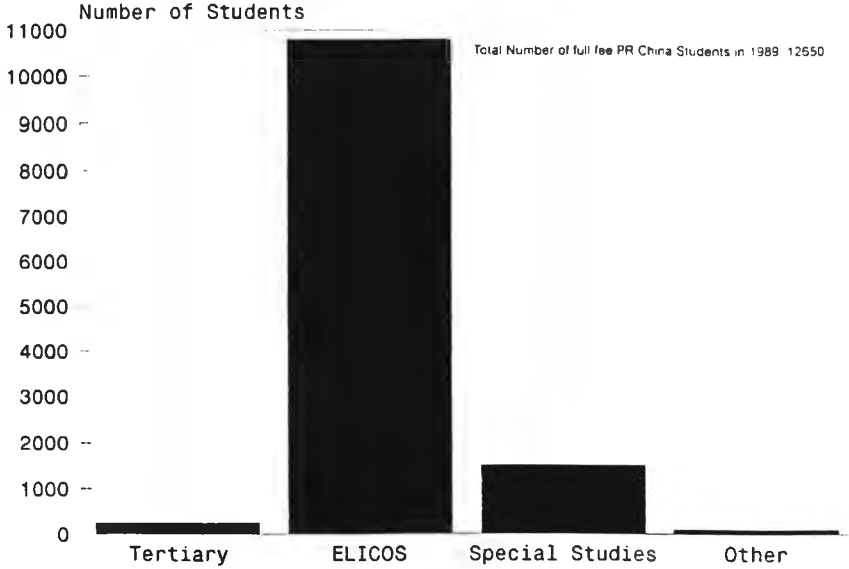

Figure 44.15 Disciplines studied by full fee paying students from the peoples' Republic of China in 1989

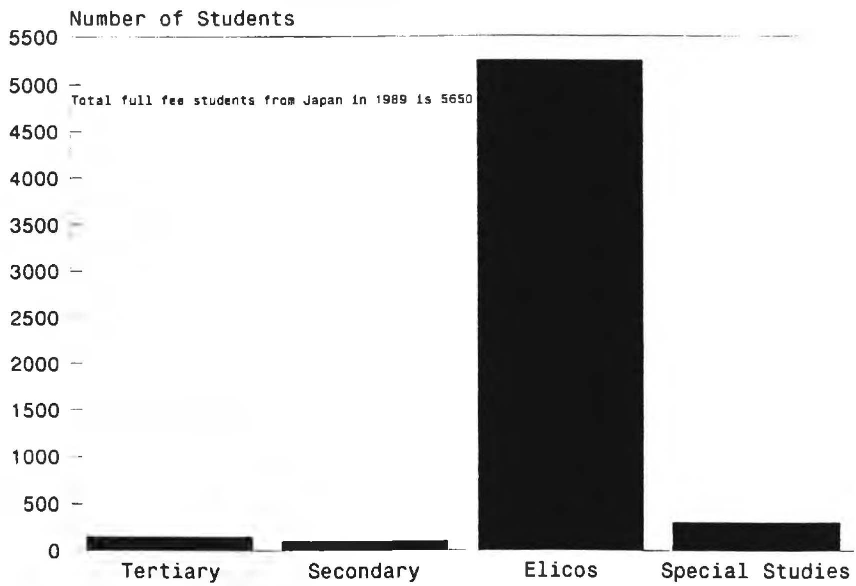

Figure 44.16 Disciplines studied by full fee paying students from Japan in 1989

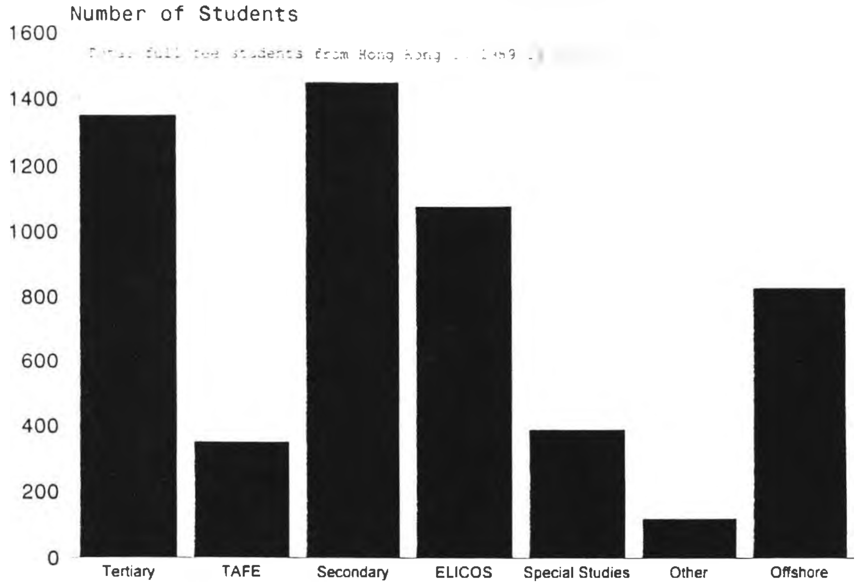

Figure 44.17 Disciplines studied by full fee paying students from Hong Kong in 1989

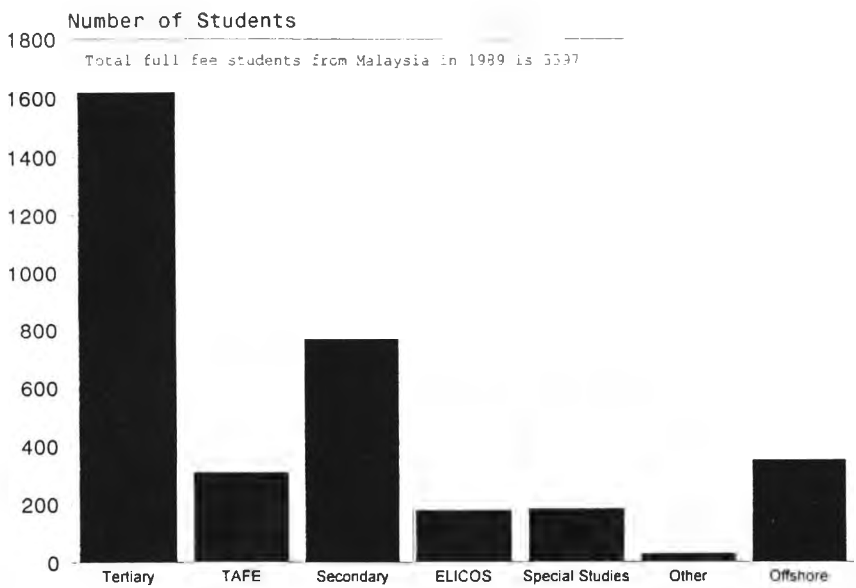

Figure 44.18 Disciplines studied by full fee paying students from Malaysia in 1989

45 Teaching entrepreneurship to mixed-discipline student groups at the University of Western Australia

David Hilditch

At the University of Western Australia, Entrepreneurship is taught in the Faculty of Economics and Commerce Two courses are available, both similar in content and structure and each of one semester (thirteen weeks) duration. One course is offered in the undergraduate programme in the Department of Management and the other is an MBA elective in the Graduate School of Management The latter course was designed in 1980, whilst the undergraduate course was established in 1986 in the Department of Electrical and Electronic Engineering, but was delivered by the Department of Management The initiative taken by the Head of Department of Electrical and Electronic Engineering to include Entrepreneurship in the engineering curriculum was in response to the increasing need for Honours students to understand the processes of commercial exploitation of intellectual property and to learn how to establish new ventures. The Western Australian Government through its Department of State Development was very supportive and provided a grant of $30,000 to assist the establishment of the course The decision to deliver the course in the Department of Management was made after the Faculty of Economics and Commerce included Entrepreneurship as a management elective at second or third year undergraduate level The principle objective of this paper is to outline the methodology used in teaching Entrepreneurship in the undergraduate programme and to comment upon students' learning experiences.

The first student intake was highly differentiated with enrolments from three Faculties. The course now has a reasonably predictable student mix comprising 75 per cent Economics & Commerce students, 15 per cent Engineering students and 10 per cent Science students, with total enrolments of around 100. See figure 45.1.

STUDENT ENROLMENTS

DISCIPLINE	1989	1990	1991	1992
B. Commerce	47	77	75	59
B. Economics	18	11	9	13
B. Engineering	24	9	8	0
B. Eng. Hons	14	5	5	5
B. Science	0	0	0	3
M. Science	3	3	2	2
Pg. Dip. Science	5	3	7	1
Other	1	0	1	1
TOTAL	112	108	107	84

Figure 45.1 Discipline by student enrolments (1989-92)

Another significant variable in the student mix is the year of study This ranges from first year Commerce to postgraduate level Biotechnology, but the majority are second and third year Economics & Commerce students See figure 45.2.

STUDENT ENROLMENTS

YEAR OF STUDY	1989	1990	1991	1992
First year	2	6	2	4
Second year	32	37	43	28
Third year	31	45	40	42
Fourth year	38	14	13	6
Masters	3	3	2	2
Pg. Diploma	5	3	7	1
Other	1			1
TOTAL	112	108	107	84

Figure 45.2 Year of study by enrolments (1989 - 1992)

The Entrepreneurship course has no prerequisites; students enter at the point where it fits their overall study plan. The course is designed to ensure that no category of students is disadvantaged (particularly engineering and science students) through a lack of knowledge of some of the basic business skills such as marketing and finance. There is not a detailed approach to the teaching of business skills; the main emphasis is to get students to use more of their right brain attributes; to be creative, innovative lateral thinkers, working together and learning from each other.

The course has evolved over the past six years after commencing with a fairly typical format derived from a leading business school in the USA. Many of the case studies were North American and publications originated in the USA. In recent years however there has been a marked upturn in research in other countries, including Australia, and the course has been adjusted to introduce as much new content as possible, including published Australian case studies. Multi-media is also an important factor; classes include videos, guest speakers, project presentations and experiential exercises.

Students are continuously assessed. They are required to submit two individual assignments (30 per cent), a business plan (40 per cent) and sit a final examination (30 per cent).

The two individual assignments are case studies and are equally weighted. Students are given about 10 days to complete each assignment which focuses on a particular aspect of entrepreneurship studies. For instance, in 1992 Case Study No 1 required students to determine whether or not a 'window of opportunity' was correctly identified by an entrepreneur setting up a new venture and whether a 'sustainable competitive advantage' existed. Case Study No. 2 required students to analyse the marketing strategies employed by an entrepreneur beyond start-up.

The major assignment is the preparation of a business plan for a new venture. In the first week of Semester, teams of four or five students are randomly selected, whilst ensuring that at least one engineering and/or science student is allocated to each team Tutorial preferences are also taken into consideration. Students are required to generate an idea of their own (a product, not a service) and to write a business plan which has to be presented at the end of Semester in both written and oral form. Over a period of approximately twelve weeks each team is required to make decisions, resolve problems and deal with intergroup conflict in very much the same way that any group of professionals involved in a start-up company would, of necessity, work together to write a business plan. Each student is expected to be responsible for preparing a discrete section of the business plan e.g., marketing, or manufacturing, or financial analysis etc. and to provide regular feedback to team members at weekly progress meetings.

In practice, students generally allocate duties and responsibilities on the basis of their particular interest or skills, which usually results in a sustainable commitment to progress the business plan in an orderly way through its several stages, aided by tutor support and encouragement. All students are encouraged to think and act entrepreneurially, and focus on the process rather than be concerned about picking winners. To stimulate real time thinking, students are required to own the venture in the first instance, in equal proportions, and to determine an equitable basis for ongoing participation, management, and/or subsequent divestment.

The emphasis on a product also ensures that students have to consider alternative manufacturing strategies or licence arrangements.

In 1992 there were seventeen business plans. These varied from very simple low technology products with little or no research and development to high technology products with intensive research and development programmes and consequent long lead times to a market entry position. See figure 45.3.

UNDERWATER SUNGLASSES
AUTOMATIC FERTILISER
ZIPPED TOWELS
REFREEZABLE ICE PACK
BIOMETRIC ATM
GENEALOGICAL CHARTING
SOLAR SHOWER
ROOFRACK LOCKING DEVICE
EDUCATION CASSETTES
BUMPER BEEPER
MULTI GLOVE
POWER WRENCH
AUTOMATIC SHEEP SHEARER
VELCRO STRAPS
IRON SAFETY HOLDER
CURRY PUFFS

Figure 45.3 List of business plans (1992)

After the initial idea generation stage, students are required to submit a one page proposal of their new venture for approval Thereafter students are expected to meet at least twice each week, once in the tutorial session and once in their own time

Progress reports also have to be prepared and submitted at the end of each week through to week nine. Tutors review progress, discuss difficulties, and provide help and guidance There are usually three teams in each tutorial and this has generally proved to be an optimum number for tutors to manage

Students sometimes take time to settle into their roles. Invariably they do not know each other, group dynamics and behaviour patterns vary. Some teams work very well together from commencement of the business plan whilst others take more time to settle and sometimes never really become fully focused on the task Occasionally a team requires tutor intervention, usually to resolve inequitable work loads resulting from absence or low motivation At any time prior to the business plan submission date, students in each team can apply for a redistribution of the final grade to take account of inequities, provided all students agree In four years, this situation has occurred only twice

In week twelve each team has to make a ten minute oral presentation of their business plan to a group of 'potential investors'. Teams are graded on clarity and timeliness of the presentation, use of visual aids, credibility and overall appeal 10 per cent of the total allocation of 40 per cent for the business plan is awarded for the oral presentation Students are required to submit their business plans in written form in week thirty These are evaluated on product choice and application, content and structure, supporting data, and presentation style Generally, students' business plans are of an extremely high standard, well researched and presented. Overall results in the course in the three year period 1989 to 1991 have been normally distributed with a mean of 67.2 per cent (Grade B) and a Standard Deviation of 5.7 per cent. Few students gain a high distinction (above 80 per cent, Grade A+) and only occasionally do students fail the course (See figure 45.4).

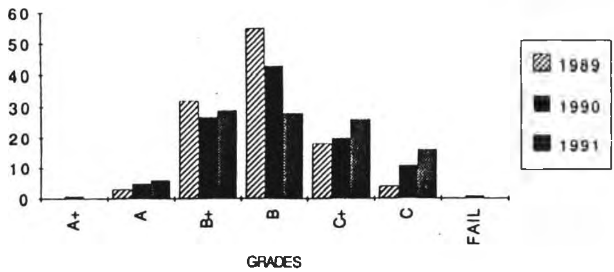

Figure 45.4 Overall grades (1989-1991)

The course is evaluated each year by students and is rated well in comparison to other mainstream management units. Student - course compatibility usually scores highest, in 1992 the highest ranked response was 'This course is relevant to my future' The business plan is considered by most students to be one of the most valuable learning experiences

It is evident that the undergraduate Entrepreneurship course at the University of Western Australia provides students the opportunity to broaden their learning experiences and enables them to meet new challenges with confidence and vigour They are afforded freedom to be creative, innovative and to challenge the status quo This conditioning is essential for business survival in the 1990's. As Daniel Muzyka states (1992, INSEAD):

> 'Entrepreneurship is a response to what is happening in the world At the moment there is a lot of restructuring going on - which creates both problems and opportunities. Also people are disgruntled about corporations and want to be able to choose less conventional directions'.

Finally, it is perhaps worth commenting on two other variables which may have some influence on the structuring of the entrepreurship course in the future; female participation and overseas student enrolments. Between 1989 and 1992 females accounted for 22 per cent to 33 per cent of ttal student enrolments. (See figure 45.5).

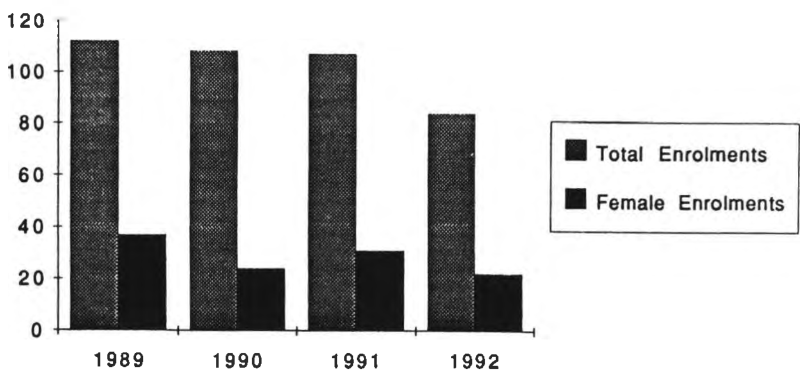

Figure 45.5 Female participation by enrolments (1989-92)

There is no significant evidence of increased female participation in the course, despite global trends of increasing numbers of women entrepreneurs (Robert Hisrich, 1992, 'Entrepreneurship') particularly those women returning to the work force later in life This suggests that female graduates at the University of Western Australia do not see entrepreneurship as an initial career choice. However more research is needed to validate this argument.

Secondly, overseas student enrolments have shown a steady increase, from less than 1 per cent in 1989 to 17 per cent in 1992 (See figure 45.6).

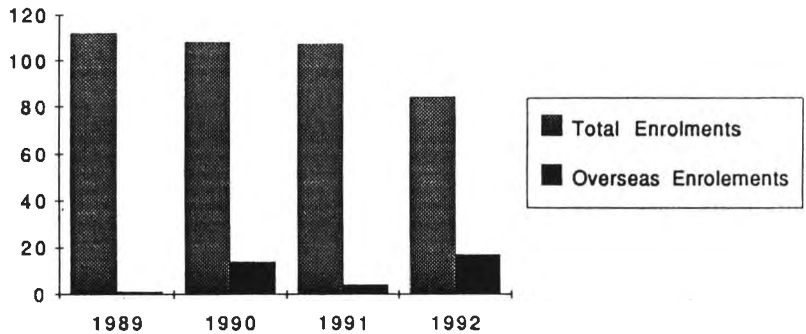

Figure 45.6 Overseas enrolments (1989-92)

Most overseas students are from South East Asia and of Chinese descent. The impact of this variable was evident for the first time in 1992 particularly in the preparation of the business plans. In the future there will be adjustments to the course outline to include the internationalisation of entrepreneurship, with specific focus on the Pacific Rim economies, particularly Singapore, Hong Kong and Malaysia.

46 Training the hidden entrepreneur

Dianne L. W. Wingham

Abstract

The key message in this paper is that there is an inherent problem with the continuing reliance upon the traditional methods and systems of providing functional training in the operational aspects of a business or profession. Progression through the hierarchy, earned by competent professional practitioners, often leaves them with the perception that they are becoming less qualified to perform the tasks included in their job description In short, they are suffering from a view held, and which enjoys wide support, that management is the natural environment of Engineers, Doctors and Teachers and Care-givers among others, who have reached the peak of their profession This perception is fatuously based on the assumption that through interaction in the workplace, specialists will develop substantial management skill

A commonly reported problem with the training undertaken by skilled entrepreneurs, is that they are 'trained' to undertake the operational aspects of the business, but remain relatively unskilled in the management of organisations and the people therein This view is stressed by the findings of a recent study of Directors of Childcare Centres These centres are set up at community instigation, and substantially regulated by Government with contributions from users calculated on the capacity of the user to pay The participants in the study, represent a number of small 'businesses' which are currently subject to external funding, and are therefore not perceived as needing to make a profit in terms of return on investment The criteria for selection of a Director are such, that most are being operated by managers with little or no management training In short, the fundamental perception reported, was that Directors, who had all undergone rigourous training in the provision of

safe care to children under the age of five years, were not trained in even the most fundamental aspects of the major component part of their job, Management In their ignorance of the role of manager, they were also unaware of the complexity of the management tasks before them

Failure to bridge the skills barriers was also a major contributor to the perception among Directors, that they had plateaued in their career growth and development, and these issues are highlighted within the data gathered in the two studies undertaken. The paper which resulted from the reported perceptions of plateauing has already been published, and it is the management skills deficiency which is to be addressed in this paper.

Introduction

Considerable attention has been given over time, to determining training needs of small business owners/managers, based on reported perceptions. Interest in the process of growth through interaction to bring about change, is not purely academic, with organisational interest in the subject reflected in behavioural changes being sought through the adoption by management of motivation training and skills based management processes. However, almost all of these studies have focused on the training needs of the clearly identified group of small or medium size firms and entrepreneurs in business for quantifiable profit. The group which is increasingly demonstrating need, is the community based partially funded service provider, which is substantially regulated by governments at all levels The provision of childcare is just such a business

Trends

It appears that traditional approaches to childcare provision have dictated that the Directors of childcare centres, must have extensive experience within the 'caring role' The person is a highly trained and experienced 'technician' selected for a position based on this demonstrable quality. It is then implied in the job description, and expected by the consumers, that these are the basic skills requirements for the person who will then undertake the management role, (for which no training has been given on or off the job). Despite the considerable volume of research into the links between job satisfaction and the acceptance of role, little or no attention is paid to the either determining the level of administrative skills required by Directors, or in recognising the changing nature of the role (from hands-on care provision to management administration) This latter activity generally forms the total co-ordinating tasks. As such, the skills needs and the gap identified are the focus of this paper, as together they are the principal contentious issue in the provision of increasing levels and of quality child care in the community, as greater numbers of women enter the labour market

Expectations which are held, and taken to the job by directors, are identified in the following list [with emphasis added].

That the job should have the following characteristics and values:

- Mentally challenging work with which the individual can cope successfully
- Personal interest in the work itself
- Rewards for performance in line with personal aspirations that are just and understood, (from knowledge of the job)
- Work which is not too physically (or mentally) tiring

- Working conditions which are compatible with the individual's (understood) physical needs and work goals,
- High self-esteem on the part of the employee, (based on a perception that the task is within their skills and ability)
- Help in attaining interesting (compatible) work pay, (promotions) and in minimising role conflict and ambiguity;

(Locke, 1976)

Research hypothesis

The hypothesis developed in the first study, to test the perceptions of the Childcare Directors that their level of training was inadequate is identified below:

- H1: The level of training in management skills will significantly and positively relate to the Directors' perception of their ability to manage the centre, (to the extent of the identified expectations see above)

The positive and significant correlation (which is taken to validate Hypothesis 1) means that there is a strong likelihood that Directors who perceive deficiencies in their training, will also perceive difficulties in adequately performing the tasks of the role.

Definitions

Levels of job satisfaction were studied and the extent to which they were positively related to the level of job competency reported The meaning as defined by Locke (1976) is used to focus this study on a validated conceptual definition of the phenomenon being measured, while other terms have also been defined to clarify the analysis

- *Job satisfaction:*
  'A pleasurable or positive emotional state resulting from the appraisal of one's job or job experience'

To ensure that this definition is perceived in isolation from the concepts of morale and job-involvement, while acknowledging the impact of each, the definition of these states is provided, and included to clarify the parameters of job satisfaction in this study

- *Morale :*
  'An attitude of satisfaction with, desire to continue in and a willingness to strive for the goals of a particular group or organisation'.
  (Viteles, 1953)
- *Job -'involvement':*
  'To be preoccupied, or to be absorbed fully by the job or aspects of the complex interrelationship of tasks which form the job'.
  (Source: Collins Dictionary)

It can be seen that an element of each is essential for a worker to experience job satisfaction, yet neither perception is job satisfaction Directors were seen as highly committed, yet this was not perceived as job satisfaction, and this in turn was defined for the studies.

- *Commitment:*
'The strength of an individual's identification with and involvement in an organisation.'
(Porter et al., 1974)

Generally, in the qualitative and quantitative data collected, Directors expressed substantial commitment levels to the concept of Child Care, and somewhat less commitment to the particular Centre under their governance Largely, this was explained in interview as a lack of faith in the Committee rather than in the staff of the Centre

- *Small Business:*
'Is defined by the Beddall Report (1990) as being a business which is independently owned /managed, with the principal decision making functions resting with the owner or managers '

Currently the Centres continue to exist due to substantial government funding, increasingly there is dependence upon self funding activities. a change in government may conceivably result in extensive pruning of external funding, and increasing reliance upon entrepreneurial input.

- *Entrepreneur:*
'Although directors do not satisfy the requirement of being an innovator (Schumpeter, 1934), and accepting the view of Churchill and Lewis (1986) that there is generally no accepted definition or model of what an entrepreneur is or does, the term is used within the context of this study to indicate the person managing a small business, within the guide-lines of the Beddall Report (1990), and recognising the reliance upon the Director for the continuation of the service, through reliable unding bases '

This research is conducted on the basis of the definitions given.

Limitations

This study was based on the responses to a questionnaire distributed to all Directors of Commonwealth Funded Childcare Centres in Western Australia, and as such represents the perceptions of a discrete group within one industry in the community. Other qualitative sources of data derive from a follow-up study which consisted of open ended discussions with randomly selected members of this group representing sixty per cent of the initial respondents

Although the component parts of the questionnaire are extensively validated, conclusions have been drawn and claims posited, these are in relation to the particular sample, and no direct claims were made about the ability to generalise outcomes across the industry, the study is based on an attempt to incorporate findings related to Directors of childcare centres with the major current approaches to synchronous research into identified training deficiencies among small firms.

Significance

The initial response rate to the questionnaire, which was sixty-seven per cent, was deemed to be acceptable, and it is believed that this survey provides an important indication of the inadequacy of the training of childcare directors, and effect of this inadequacy on the reported job satisfaction levels

What does emerge with the analysis of gathered data, is the similarity between the structure and identified skills needs of the Centres studied, and the small businesses which provide goods and services to the community, operating within uncertain budget constraints, subject to meta-shifts with changing political fortunes Ostensibly this is an ideal model for observation of the needs of the small business in generic terms.

According to Holland (1989) performance is a function of ability and motivation (Performance = F[Ability * motivation]). The absence of either, may explain a low performance levels Further, Holland describes ability in terms of a combination of aptitude, training and experience: {Ability = [Aptitude * (training + experience)]}. As high performance levels and ability are of such significance to Directors, the relationship of the inadequate training and job satisfaction which reflect the level of confidence with which Directors approach management tasks is not difficult to understand (Given the needs identified from those posited by Locke (1976) This high need to achieve, is among the factors identified (Boyd and Gumpert, 1983) as a significant stressors in small business managers. (It is rated second as a significant satisfier by seventy-three per cent of directors)

Skill utilization

O'Brien and Dowling (1981) used regression analysis to demonstrate that skill-utilization was the strongest predictor of job satisfaction as established by O'Brien (1980). Also, that the job attributes of skill-utilization, influence and variety, may be found to be associated with higher levels of job satisfaction. Clearly the directors of childcare centres are not using their professional skills, and they can not be assured of their influence levels, or introduce variety of activity to a job whose skills are alien to their experiences and expertise They clearly, but to differing levels, do not possess the skills required to administer the centres as efficient managers.

General job satisfaction

The areas of influence on the motivation levels of directors were identified Overall feeling toward the current job was investigated through the process of requiring Directors to relate their own feelings to each of the satisfaction levels. It is worth noting that there were no respondents who reported total dissatisfaction with their present job In discussion, seventy-three per cent identified lack of performance fluency as negatively impacting on the perceptions of satisfaction. More than sixty-six per cent of the sample reported deriving substantial satisfaction from their job, if a non-specific global measure of job satisfaction is used, with none reporting dissatisfaction Other items were found to have varying levels of impact on the levels of global job satisfaction

Respondents ranked the skills based need for information and knowledge of their role as follows. From most to least important:

Table 46 1
Knowledge of the application of management issues

A likert-type scale was used for recording the skills based training requirements of directors of government funded child-care centres (one representing the lowest through to six the highest) collated response. The list provided information on two levels, firstly the knowledge of the value of the skill, and subsequently the individual profficiency level.

- a) Trade unions	1	2	3	**4**	5	6
- j) General admin	1	2	3	4	**5**	6
- c) Reward Systems	1	2	3	4	**5**	6
- d) General training	1	**2**	3	4	5	6
- f) Employment legislation	1	2	3	4	5	**6**
- g) Wage application	1	2	3	4	**5**	6
- h) Hiring	1	2	3	**4**	5	6
- i) Firing	1	2	3	4	5	**6**
- j) Accounting	1	2	3	4	5	**6**
- k) Occ.health and safety legislation	1	2	3	**4**	5	6
- l) Taxation	1	2	3	4	**5**	6
- b) Mentoring	1	2	3	**4**	5	6
- l) Parent counselling	1	2	3	4	**5**	6
- m)Performance evaluation	1	2	3	4	5	**6**
- k) AIDS	1	**2**	3	4	5	6
- e) Childcare training update	1	2	**3**	4	5	6

Indications from this study are supported by literature which indicates that there is a growing interest in competency based in training in management and human resource management in small business Hornsbey and Kuratko (1990) suggest that this may be the result of the increasing importance being placed on human resource management practices in small firms Amba-Rao and Pendse (1985), McEvoy (1983); Hoy and Vaught (1980); Burke (1979); and Smith (1977), view human resource management problems as a major barrier to business success. Also, they maintain that small firms will continue to have problems in the area of human resources management until they change their attitude to this aspect of their business and recognise the contribution it makes to the overall viability of the business This can only be achieved through initiating a comprehensive training programme

Independent training options

Results of the initial survey showed the mean length of service in childcare as six years, the mean age of the respondents as thirty-fours of age, (therefore well within the exploratory phase of their careers), with the average current period of tenure at the Director level, as 2 5 years As all the centres are still operating, and they are effective in their provision of service,while also satisficing in relation to their staffing issues, clearly some of the respondents have developed their own sources of information and skills training Training is actively saught be Directors who acknowledge the deficiencies of their technical training, and recognition of management skills deficiency has caused the majority of directors to enrol in courses to offset this problem Where these courses are available, an added deterrent to course attendance is the need (due to the ratio of staff to children requirements) for the Director to be on the premises most if not all of the time Therefore attendance at evening classes is used to suppliment skills development.

Directors, should have adequate and appropriate skills, which reflect both the changing childcare provision laws, and the extensive, compounding employment legislation

Implications

Data relating to the impact of training needs on the levels of satisfaction were analysed using the Savery (1989) system of summing the scores of respondent satisfaction levels from the different items (expressed as a ranked percentage of the responses) This indicated the frequency of participant selection of the upper levels of the Likert-type scale, expressing the strength of perception of the variable in relation to her own job. The variables are ranked by participants to reflect their personal perceptions and values, indicating ranked preferences the combined scores as a percentage of responses on the very important segment of the scale

Table 46.2
Ranked satisfaction variables

	Variable	Rank Score
1	Interest and challenge in work itself	78 %
2	Possibility for good performance	76 %
3	Security of employment	73 %
4	Access to reliable management skills	72 %
5	Responsibility	72 %
6	Feeling of achievement	70 %
7	Opportunities for advancement	64 %

The variables are ranked by the participants to reflect their personal value. Issues found to be substantially significant in the self assessment of performance rating higher than personal gain in the majority of responses

Minding the kids

Day care centres are springing up around the country to take care of children while parents are at work (Benway et al., 1987), these are small businesses which have evolved due to an identified need However, due to the nature of the role which is seen as over-seeing the care of children, the selection of Directors, into the principle executive management position, is made on the basis of demonstrated professional training and competency in the provision of childcare with no indication of the extent or specialised needs of the administrative component.

Difficulties identified

The identified deficiencies reported by Directors in this study are twofold, the first of which is seen as being imposed through lack of management skills training This is a problem commonly to be found among the large number of industries in which the cost of training provision cannot be determined only in financial terms, because of the dependence upon unique skills of each member. A further problem relating to the skills acquisition for Directors, is the emphasis among available management training courses, which are largely reflective profit maximisation Further difficulties result from perceived differences identified (Hisrich and Brush, 1984, Chaganti, 1986, Bowman and Hisrich, 1986 Chusmir, Koberg, and Mills, 1988) between the gender based differences in the ways in which managers determine strategies This difference reduces the opportunities for Directors (the respondents were all women) to develop reliable role models from among small business researched The service provision in small business is not as well served by training groups as is the product oriented industry.

In conclusion

Job satisfaction results from the perception that the current job fulfils or allows the fulfilment of important personal job values, providing that those values are congruent with identified needs. And while needs are 'objective' in that they exist regardless of what the person wants, values are 'subjective' in the sense that they are 'in consciousness' (Locke, 1976).

Certain value judgements relating to job features are made by the Directors to identify discrepancies in their perceived objective and subjective levels of satisfaction, these were identified in the initial survey, and were the basis of a substantial part of the qualitative data gathering approach of the interviews Interesting work and the possibility for good performance, ranked highly among the respondents, with efficiency and relationships alongside them This study hoped to capture insights such as these, and use them as a basis for identifying the particular unmet training needs of the Directors.

Outcomes

Outcomes of the study which have been achieved are the inclusion of several management units in the basic training course, and although this is a step toward professionalising the Director's role, it concentrated largely on the accounting, financial and accountability aspects of management Although McEvoy in the 1984 study identified that small business managers allowed accounting, finance, marketing, and production to take precedence over human resource management, Hess (1987) found that they also ranked human resource management as the second most important management activity, and the on-going training needs to enable Directors to assimilate these skills are not currently being dealt with These needs can only be met through the establishment of structured training programmes which teach people management skills, and give a perception of management activities which recognise the discrete tasks and responsibilities of the role of the Director as these relate to the recent literature on small business

Qualitative data gathered to support the responses to an extensive mailed questionnaire which formed the basis of the original study of these hidden entrepreneurs adds significantly to the perception that the Directors have undergone a transition in their role, from hands-on caring to entrepreneurial administration, and that the system has been slow to recognise the peculiar needs of the group, and to respond through the application of skills based training in management.

References

Ahlburg, D A (1988), 'Desires occupational change among working women', *Journal of Industrial Relations*, vol. 30, no. 1, pp. 68-82, March

Amba-Rao, S.C. and Pendse, D. (1984), 'Human resource compensation and maintenance practices american', *Journal of Small Business,* pp. 19-29, Fall

Annual report of the Australian early childhood association Inc.: September 1986 - August 1987, unpublished

Burke, K. (1979), 'The human side of small business (with apologies to Douglas McGregor)', *The Chartered Accountant in Australia*, vol. 50, no. 4, p 27

Burns, A. (1981), 'Childcare in conflict: The role of the community', *Australian Journal of Early Childhood*, vol. 6, pp 22-27, September

Chaganti, R. (1986), 'Management in women owne enterprises', *Journal of Small Business Management,* pp. 18-29, October

Chusmir, L.H., Koberg, C.S. and Mills, J. (1988), 'Male - female differences in the association of managerial style and personal values', *The Journal of Applied Psychology,* pp 65-78, Fall

Cole, L.R. (1989), 'Child care and business', *Business & Economic view,* vol. 35, no 2, pp. 4-9, January/ March

Glasson, M. (1987), 'Childcare and AIDS', *Rattler,* no. 4, pp 7-8, Summer

Hackett. R.D. (1989) 'Work attitudes and employee absenteeism', *Journal of Occupational Psychology,* vol 62, no. 3, pp. 235-248, September

Hackman, R.L and Lawler, E.E. (1971), 'Employee reactions to job characteristics', *Journal of Applied Psychology,* vol. 55, no. 3, pp 259-286

Herzberg, F (1968), *Work and the nature of man,* Staples press, London

Hess, D.W. (1987), 'Relevance of small business courses to management needs?', JSBM, vol 25, no. 1, pp 26-34

Hisrich and Brush (1984), 'The woman entrepreneur. management skills and business problems', *Journal of Small Business Management,* pp 30-37, Januar

Holland, B K. (1989), 'Motivation and job satisfaction', *Journal of Property Management,* vol. 54, no. 5, pp. 32-36, September/ October

Hoy, F and Vaught, B.C (1980), 'The rural entrepreneur - A study in frustration', *Journal of Small Business Management,* vol 18, no. 1, pp 19-24

Hornsby, J.S and Kuratko, D.F (1990), 'Human resource management in small business management: Critical issues for the 1990s', *JSBM,* vol. 28, no. 3, pp 9-18

Hurford, C. (1987), 'Childcare since 1983: Priorities and achievements', *Australian Journal of Early Childhood,* vol 12, pp 3-8, June

Larritt, P. (1987), 'Childcare expectations, comparisons and ideals: Lady gowrie parents talk about needs and children's services,' *Australian Journal of Early Childhood,* vol 12, pp. 21-26, September

Lawler, E.E. and Hall, D T. (1970), 'Relationship of job characteristics to job involvement, satisfaction and intrinsic motivation', *Journal of Applied Psychology,* vol. 54, pp 305-312

Lawler, E.E. and Porter, L W (1967), 'Antecedent attitudes of effective managerial performance', *Organisational Behaviour and Human Performance,* vol. 2, pp. 122-124

Lee, R and Wilbur, E.R (1985), 'Age, education, job tenure, salary, job characteristics and job satisfaction A multivariate analysis', *Human Relations*, vol. 38, pp 781-791
Locke, E. A (1976), 'The nature and causes of job satisfaction' in Dunnette, M D. (Ed), *Handbook of Industrial and Organizational Psychology*, Rand McNally, Chicago
MacLean, S. and Lazarus, G. (1985), 'Questionnaire survey on childcare needs', *ACOA*
McEvoy, G M (1984), 'Small business personnel practice', *Journal of Small Business Management*, vol 22, no 4, pp 1-8
Murray, S (1986), 'Quality of long day child care in australia,' *Unpublished Report to the Minister for Community Services*, Watson, ACT: Australian early childhood asscn, National association for the education of young children position statement on developmentally appropriate practice in early childhood programs serving children from birth through age eight , *Australian Journal of Early Childhood*, vol. 12, no 2, pp 36-41, June
O'Brien, G.E and Dowling, P (1981), 'Age and job satisfaction', *Australian Psychologist*, vol 16, no 1, pp 49-61
Porter, L W.,and Lawler, E E (1968), *Managerial attitudes and performance*, Homewood, Ill., Dorsey Press
Schwab D P. and Cummings, L.L. (1970), 'Theories of performance and satisfaction: A Review', *Industrial Relations*, vol 10, no 4, pp 408-410
Shore, L McF and Martin, H.J. (1989), 'Job satisfaction and organisational commitment in relation to work performance and turnover intention, *Human Relations*, vol 42, no 7, pp 625-638, July
Slocum, J W. (1970), 'Performance and satisfaction: An analysis', *Industrial Relations*, vol. 10, no 4, pp 431-436
Smith, R (1977), 'Coping with the personnel function in small firms work and people', vol. 3, no. 3/ 4, pp 17-19
Steinberg, R. (1982), 'Sex differences in personality traits of Shapiro, female and male master of business administration students, *Journal of Applied Psychology*, vol. 67, no. 3, pp 306-310
Stills, L.V. (1985), 'The marginal executive: Australian women managers Nepean', *CAE Working Papers Series*, Paper no. 1, July
Selvarajah, C.T. and Petzell, S B. (1989), 'Women in management swinbourne institute of technology faculty of business staff', Papers no 46
Stonehouse, A W. (1987), 'Working together with children', *Australian Journal of Early Childhood*, vol 12, pp 3-9, February
Sweeny, T. (1987), 'Management models of children's services: A review', *Australian Journal of Early Childhood*, vol 12, no 2, pp 22- 27, June
Wanous, J P and Lawler, E.E (1972), 'Measurement and meaning of job satisfaction', *Journal of Applied Psychology*, vol 6, pp. 95-105

47 Self-directed learning for enterprise education and training

Michael J. Christie

Abstract

This paper examines the importance of an education model for small enterprise education and training based on self-directed learning. The education model examined is that developed by Knowles. The arguments contained in this paper on this model are significant given the importance of small enterprise education, and training to national economies. The research area - namely, the application of education programme development models, has been neglected by small enterprise educators and researchers.

A framework of the Knowles education model is developed for use by small enterprise in this paper. The framework is then reviewed in terms of the literature on small enterprise education and training. The literature identifies problems of small enterprise education, and training and the Knowles education model is put forward as a means of solutions alternative method to these problems

The paper concludes with a framework for developing further teaching methods, and researching small enterprise education and recommends that the Knowlesan model be used by policy markers, teachers and trainers for improving the learning process and achieving more effective outcomes

Introduction

The purpose of this paper is to determine an education model for small enterprise educational training participants Knowles' education model is selected for examination for use in the small enterprise The paper argues strongly that Knowles' educational model would provide a number of solutions to the problems encountered in small enterprise education and training Knowles model would also provide method of evaluating education and training programmes. Finally, the model of Knowles provides a framework for documenting the education process

Training consists of different schools or combinations of these. The schools are:

(1) Behaviorally based,
(2) Humanistic,
(3) Conservative, and
(4) Socialistic (Brundage, 1980, Elias and Merriam, 1980).

This paper will examine the humanistic approach to education and training and its appropriateness to the small enterprise sector. The definition of humanist training includes both adult control over the learning process with the teacher being the facilitator (Elias and Merriam, 1980, pp 131-135). The humanist school was selected due to its emphasis on the adult learner and its use of self-directed learning enterprise. It is the author's view that the humanist school best suits the needs of small enterprise owner/manager The small enterprise requires individuals who are highly self-directed (Hornaday and About, 1971, McClelland, 1961, McMullan and Long, 1987). The assumption of this paper is that an andragogical[1] education model will provide more effective means to improve economic contribution of the small enterprise sector.

This paper argues the effective andragogical education may well be the means of producing more efficient and effective small enterprise owner/managers.

Present problems and issues

Research on small enterprise education is relatively weak in the area of education programme development models most desired by small enterprise. Previous studies have not concentrated on the education programme development methodology. Instead they have included questions on the type of presenters, timing of programmes, physical facilities, accreditation and the marketing of programmes (Bailey, 1980, Meredith, 1984, Williams, 1985).

Small enterprise education and training evaluation is still in the early stages of development Researchers like Romano (1988), and Curran and Stanworth (1989) have identified the lack of research in educational models for small enterprise Little research has been carried out beyond this point

Research into small enterprise education and training is of two types The first are descriptives studies that identify problems with small enterprise education and training (Curran and Stanworth, 1989, Gibb, 1987, McMullan and Long, 1987). The second are evaluative studies: These evaluative studies to date have either been input or output. (Bailey, 1980, Meredith, 1984, Williams, 1985) The more recent evaluative studies (McMullan, 1988, Wyckham, 1989) have examined the success rates of small enterprise start-ups after an education or training programme Small enterprise education and training evaluation is lacking an education model that deals not only with input and output issues, but also the process of learning

Definitions

These comprise small enterprise, education, training, adult learning, education programme and development (process model).

Small enterprise

The definition of a small enterprise has both qualitative and quantitative components The Wiltshire Committee (1973, p. 7) used the following qualitative definition: 'A business in which one or two persons are required to make all the critical management decisions: finance, accounting, personnel, purchasing, processing or servicing, marketing, selling, without the aid of internal specialists and with specific knowledge in one or two functional areas'.

The small enterprise owner/manager is a person who makes all major management decisions in a small enterprise and has equity capital at risk in the enterprise (Perry, 1985, p. 24).

Quantitative definitions of 'small enterprise' vary between countries and by industry sectors. In Australia the quantitative definition of small enterprise for the manufacturing industries is fewer than 100 employees, while non-manufacturing sectors are fewer than 20 employees (Reynolds, Savage and Williams, 1989, p 3) In a study by Williams (1987, p. 63) the average size of new small firms in Australia was 4 5 people, with 2.1 as owner/managers.

Education

Education is defined by Hoyle (1973, p 231) as: 'the process by which human beings (alone in groups, or in institutional settings) seek to improve themselves or their society by increasing their skills, their knowledge, or their sensitiveness. Any process by which individuals, groups, or institutions try to help human beings improve in these ways'.

Education for the individual is a process of improvement. Education usually has broader goals than training (Knowles, 1980, Meredith, 1984, Nadler, 1970).

Training

Training is part of education, usually towards specific objectives (Glaser, 1962) Nadler (1970, p. 40) defined training as 'those activities which are designed to improve performance'. The activities are normally defined to relate to a particular work activity. Small enterprise management is not one single work activity but a combination of interacting work activities

Adult learning

Adult learning is viewed as transforming (modifying, relearning, updating, replacing) knowledge, skills, strategies, and values through experience (Brundage, 1980, Cropley, 1977, Hart, 1975, Knowles, 1986, Mezirow, 1978) For small enterprise education and training participants this means that learning is a constant life event Small enterprise education and training is a constant life event from starting the enterprise to improving, expanding and exiting the enterprise

Education programme development (or process model)

Education programme development (or process model) consists of an organized sequence of events which usually includes such elements as needs assessment, programme design, implementation, evaluation and redesign (Boyle, 1981 and Knowles, 1980) Education programme development provides an integrated educational model The integration of educational programme development is brought about by the connection between the different component parts such as evaluation and redesign Figure 47.1 below is of a model of education programme development based on Knowles education model[2] (Knowles, 1980).

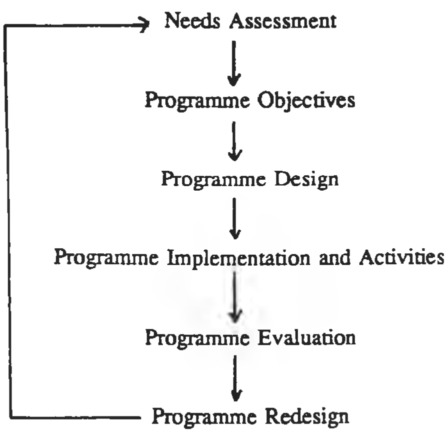

Figure 47.1 Model of education programme development

Figure 47.1 outlines the steps in education programme development and how the steps are integrated The steps are: assessing the needs of participants in the programme; defining the objectives of the programme, design of the programme; then implementing the programme with its activities; finally the evaluation of the programme and the re-design. The re-design step then links back to the needs assessment, thus completing the integration of the model All of these steps are jointly decided between teacher or facilitator and the learner or participant

The definitions described provide a framework for developing a model of education in small enterprise The next section will examine Knowles' education model within small enterprise.

Knowles education and programme development model as applied to small enterprise

Knowles (1980, p 117) states that traditional education consists of the teacher or trainer or curriculum committee deciding in advance what knowledge or skills need to be taught (Gibb, 1987 and Meredith, 1986). These are then organized into logical units, selecting the most efficient means for transmitting the content (lectures, readings, laboratory exercises, films, tapes, etc), and then developed into a plan for presenting these content units This is known as the content model

The theory developed by Knowles consists of the teacher (or facilitator or consultant or change agent) preparing a set of procedures for involving the learners This process, for small enterprise consists of:

1) establishing a climate conducive to learning,
2) creating a mechanism for mutual planning,
3) diagnosing the needs for learning,
4) formulating programme objectives (which is content) that will satisfy needs,
5) designing a pattern of learning experiences.
6) conducting these learning experiences with suitable techniques and materials,
7) evaluating the learning outcomes, and
8) re-diagnosing learning needs to redesign the education or training programme

This model is also known as the 'process model'.

The difference between the two models is that content is concerned with transmitting information, and skills. The process model is concerned with providing procedures, and resources for helping learners acquire information and skills. The process model unlike the content model, requires the individual learner to make major decisions on the process and direction of learning

From this process model a small enterprise education model based on Knowles can be developed A suggested model follows in figure 47.2.

Design Elements of the 'Process Model'	Process Activities For Small Enterprise Learners
1. Climate	Mutuality, respect, collaboration, informal between educator and small enterprise participants
2. Planning	Mechanism for mutual planning between educator and small enterprise participants
3 Diagnosis of needs	Mutual self-diagnosis between educator and small enterprise participants
4. Formulation of Objectives	Mutual negotiations between the educator and small enterprise participants
5. Design	Sequenced in terms of readiness to learn to learn and ability to solve problems
6. Activities	Experimental techniques, inquiry
7. Evaluation	Mutual re-diagnosis of needs and mutual measurement of the above
8 Redesign	Mutually carried out between the educator and small enterprise participants

Figure 47.2 Design elements of Knowles' Education Model for Small Enterprise (Adapted from Knowles, 1980, p.116)

The details of figure 47.2 consist of the design elements of the process model and the process activities for small enterprise education and training programmes. The first process in small enterprise education or training situation is to establish the 'climate' where a mutual process of learning can occur between the educator and small enterprise participants. This climate consists of mutuality, respect, collaboration and is informal between the facilitator and learners Once the climate is established where such mutual exchange can occur, the following steps occur. First is establishment of mechanisms for mutual 'planning' between educator and participants The following step is the diagnosis an of needs that may be derived from personal needs, small enterprise problems, and previous experience. The next step is for the educator and participant to formulate the programme 'objectives' This is then followed by 'design' and 'activities' The design step is a series of activities sequenced in terms of readiness to learn and problems. Activities use experimental techniques and inquiry. After the activities have been conducted, educator and participant can evaluate and re-design the programme All of these steps are based on a mutual exchange between the small enterprise educator and participant

The process model provides for the small enterprise participants to work with the educator The content model for small enterprise participants has the educator decide in advance what knowledge or skills are needed to be taught. The following section on education, training and evaluation identify problems that can be possibly overcome by the process model.

Problems within small enterprise education and using Knowles as model

Knowles' model as has been explained, is a systematic approach to the mutual development of education programmes by educators and participants working together. The problems that have been identified in the literature review of small enterprise education and training are discussed below. Knowles' model is used to explain solutions for the problems presently encountered in small enterprise education and training

Lack of methodological direction in small enterprise education and training was identified in research by Clark (1986); Curry and Brown (1978), Hribar (1979); Lynas and Ormond (1986) and Romano (1988). The researchers investigated whether there are appropriate education and training programmes in the field of small enterprise education In addition, those studies point to a lack of education and training evaluation and underdevelopment of research on learning strategies for small enterprise. Romano (1988) found that there was little methodological coherence across the different research areas of small enterprise education, training and evaluation. Romano (1988, p. 139) explained the lack of methodological coherence in the terms of there being 'no articulated theory pertaining to small enterprise education and training'. Romano (1988, p 140) believes this lack of an articulated education theory to be due to the 'preoccupation of offering the correct information but neglect to report the success of the recommended information.' Knowles education model provides a framework for the educator and participants to develop, deliver and evaluate the education programme jointly.

The Knowlesan education model provides an articulated education theory. The model meets the needs of participants by mutual development of the education or training programme between the educator and participants. Further the model evaluates and re-designs the education programme. The Knowlesan education model provides a methodology that may overcome many of the problems in small enterprise education and training The role of the Knowles' education model in providing possible solutions to such problems in small enterprise is now discussed.

The Knowlesan education model provides a systematic, co-operative and integrated learning process between the teacher and learner The model may be a possible solution to the problems identified in the literature. Some of the problems identified in the literature review on small enterprise education and training are:

1)the targeting of appropriate educators and teaching material with participants (Bailey, 1980, Curran and Stanworth, 1989, Gibb, 1987, Louckes, 1988, Meredith, 1984, Williams, 1984), and
2)the educator's assumptions about the needs of participants (Gibb, 1987);
3)teaching focuses on functional skills rather than management competencies (Gibb, 1987);
4)training programmes are needed to be industry specific and motivation oriented (Louckes, 1986, Meredith, 1987a and b, Patel, 1986);
5)cultural values and traits (Meredith, 1986) are not necessarily taken into account with training programmes,

This paper argues that the above problems can be more effectively dealt with by mutual negotiation between the educator and the participants The mutual negotiation is carried out on the needs assessment, training objectives, design implementation of activities, evaluation and re-design of the education programme

Within education institutions there is a gap of resources and qualified educators to small enterprise needs (Meredith, 1984) Knowles' model may be a method to reduce this gap between educator and small enterprise. In Knowles' model learning becomes a greater responsibility of the participants, with educators being facilitators rather than teacher directed. This greater responsibility on the participants to learn increases the role of independent learning and problem solving.

Gibb (1987) argued that education institutions eroded the creativity of small enterprise owner/managers Knowles (1980) argued that the creativity of participants was enhanced by self-directed learning such as found in the Knowlesan education model

There is little research on course content, learning strategies and performance of participants (Curran and Stanworth, 1989). The Knowlesan model has the components of course content, learning strategies and performance of participants that can be linked to research.

Industry specific training programmes (Louckes, 1986, Meredith, 1986, and Patel, 1986) using the Knowlesan education model would provide a number of benefits These benefits are that the programme would be specific to the problems of the participants, rather than general business problems. Additionally the Knowlesan model allows for participants to control the training programme with the educator.

Programme development and assumptions about the learners needs often occurs before a programme commences (Meredith, 1986, Gibb, 1987, Patel, 1986). In contrast, the major part of programme development within Knowles education model occurs during the operation of a programme - that is between educator and participants.

Opportunities exist in small enterprise education for the application of Knowles' education model, especially in distance education; continuing education, trainer/adviser programmes; entrepreneurial training, small enterprise awareness; and small enterprise self-employment programmes (Curran and Stanworth, 1989). Needs of learners are met more effectively when they have control and are self-directed. The Knowles' model achieves this through the participants' control of the learning Curran and Stanworth (1989) went further to recommend that delivery of education programmes be carried out by non-formal education institutions. The Knowlesan model provides a method for formal and non-formal education institutions to deliver effective programmes (Knowles, 1980, p 26).

In conclusion, the Knowlesan model provides a method of further developing small enterprise education and training One of the major advantages of Knowles' education model is that it provides a systematic method for education programme development The other advantage is that Knowles' model allows the small enterprise owner/ manager and educator to have mutual control over the learning

Conclusion and recommendation

This paper has dealt with findings of the humanistic adult learning model of Knowles as applied to small enterprise education and training Knowles' model offers to small enterprise education and training the theory and methods of education programme development. Programme development based on the Knowlesan model has two important demands The first demand is that the process of needs assessment, programme objectives, design, implementation, activities, evaluation and re-design is met in programme development The second is that control of the process is mutually agreed between the trainer and small business owners.

This paper on small enterprise education and training identified a number of problems that can be solved by Knowles' model The benefit of the Knowlesan education model for small enterprise is that it provides systematic steps for programme development. The Knowlesan model also provides for standardisation of the learning process and therefore allows for more accurate measurement of outcomes.

The recommendation of this paper is that policy makers, educators and trainers adopt an education programme development model. Education programme development like the Knowlesan model provides a methodology for improving on the learning process and achieving more effective outcomes.

Notes

[1] Andragogical is defined as the learning of adults (Knowles, 1980, p 49).

[2] This is also known as the Knowlesan andragogical education model. For this paper the term used will be Knowles' education model or process model.

References

Bailey, J. (1980), *Small Business Education and Training in Australia*, Australian Government Publishing Service, Canberra

Boyle, P.G. (1981), *Planning Better Programs*, McGraw-Hill, New York

Brundage, F. (1980), *Adult Learning Principles and Their Application to Program Planning*, Ministry of Education, Ontario

Clark, R.E. (1986), 'Towards a National Policy for Small Business Education and Training', *Management Forum*, vol. 12, no. 2, p 54

Cropley, A. (1977), *Lifelong Education: A psychological analysis*, Publication of the UNESCO Institute of Education, Pergamon Press, Toronto

Curran, J. and Stanworth, J. (1989), 'Education and Training for Enterprise: Some Problems of Classification, Evaluation, Policy and Research', *International Small Business Journal*, vol 7, no. 2

Curran, J., and Stanworth, J. (1987), 'Training for Enterprise: Approaches to Small Business Education', *Business Education*, vol. 8, no 1

Curry, D. and Brown, K (1978), 'Decision Theory: Its Value in the Small Business', *American Journal of Small Business*, vol. 2, no 4, p 33

Elias, J., and Merrian, S. (1980), *Philosophical Foundations of Adult Education*, R Kreger, Huntington, New York

Gibb, A.A. (1987), 'Training Owners and Managers of Small Firms' in Neck, P and Nelson, A. (eds), *Small Enterprise Development: Policies and Programmes*, International Labour Office, Geneva, pp 71-92

Glaser, R (ed.) (1962), *Training, Research and Education*, University of Pittsburgh Press, Pittsburgh

Hart, L (1975), *How the Brain Works: A new understanding of human learning, emotion, and thinking*, Basic Books, New York

Hornaday, J , and About, J. (1971), 'Characteristics of Successful Entrepreneurs', *Personnel Psychology*, vol. 24, pp 141-53

Hoyle, C. (1973), *The Design of Education*, Jossey-Bass Publishers, San Francisco

Hribar, A (1979), *Evaluation of Training Needs and Attitudes of Small Business Owner/Managers*, Dissertation Paper for Master of Economics, University of New England, Armidale Campus

Knowles, M S (1986), *The Adult Learner: A Neglected Species*, 3rd edition, Gulf Publishing, Houston, Texas

Knowles, M S. (1980), *The Modern Practice of Adult Education: Andragogy versus Pedagogy*, (Revised Edition), Follet, Chicago, Illinois

Louckes, K E (1988), *Training Entrepreneurs for Small Business Creation, Lessons from Experience*, International Labour Office, Geneva

Louckes, K.E (1986), 'Training Entrepreneurs for Business Creation: Lessons from Selected Experience', in Nelson, R E (Ed), *Entrepreneurship and Self-Employment Training*, Asian Development Bank and International Labour Organization, Manila

Lynas, M G , and Ormond, K D. (1986), 'Small Business Management Development. The need for acceptable Learning Strategies', *Management Forum*, vol 12, no 3, p 125

McClelland, P. (1961), *The Achieving Society*, Van Norstrand, Princeton, N.J.

McMullan, W.E., and Long, W A (1987), 'Entrepreneurship Education in the Nineties', *Journal of Business Venturing*, vol 2, pp 261-275

McMullan, W.E. (1988), 'The Economics of Entrepreneurship Education', *Journal of Small Business and Entrepreneurship*, vol 6, no 1, p. 8

Meredith, G G (1987a), 'Small Business Development from Policy Framework to Program Implementation', *32nd World Conference of the International Council for Small Business*, Vancouver, p 44

Meredith, G G. (1987b), 'Management Services for Small Enterprises', in Neck, P A. and Nelson, R E. (eds), *Small Enterprise Development Policies and Programmes*, International Labour Office, Geneva

Meredith, G G. (1986), 'Introducing Self-Employment Programs into Existing Training and Educational Institutions' in Nelson, R E. (Ed), *Entrepreneurship and Self-Employment Training*, Asian Development Bank and International Labour Organization, Manila

Meredith, G.G. (1984), *Small Business Management Education and Training for Australia*, Canberra, Commonwealth Tertiary Education Commission

Mezirow, J (1978), *Education for Perspective Transformation: Women's re-entry programs in community settings*, Columbia University, Teachers College, Centre of Adult Education, New York

Nadler (1970), *Developing Human Resources*, Gulf Publishing Co., Houston

Patel, V.G. (1986), 'Developing Indigenous Entrepreneurship: The Gujarat Model', in Neck, D A and Nelson, R E. (eds), *Small Enterprise Development: Policies and Programmes*, International Labour Office, Geneva

Perry, C. (1985), *Relationships Between Small Business Growth and Personal Characteristics of Owner-Managers*, PhD, University of New England, Armidale, Australia

Reynolds, W , Savage, W and Williams, A (1989), *Your Own Business - A Practical Guide to Success*, Nelson, Melbourne

Romano, C A (1988), 'Small Business Research: It's Methodological Direction', *Management Forum*, vol 14, no 3

Williams, A J (1985), *Small Business Assistance, Policy Issues*, Australian Government Publishing Service, Canberra, pp 20-32

Williams, A.J (1984), 'Small Business Management Training Research and Counselling: Proposals for Action', *National Training Council*, Australian Government Publishing Service

Williams, A.J. (1987), *The Characteristics and Performance of Small Business in Australia (1983 to 1985): A Study of the Characteristics of Small Australian Business Ventures and their Owners, Managers and a Longitudinal Investigation of their Economic Performance*, Monograph, University of Newcastle

Wiltshire, F.M. (1973), *Report of the Committee on Small Business*, Chairman F M Wiltshire, Parliamentary Paper, no. 82

Wycham, R.G (1989), 'Assessing the Impact of Entrepreneurial Education: Canada and Latin America', *Journal of Small Business and Entrepreneurship*, vol 6, no 4

Part F

Asia

48 The incident method - An alternative way of studying entrepreneurial behaviour

Theresa Lau

Abstract

There have been very few instruments developed specifically for research in entrepreneurship (Wortman, 1987). In this paper, the three most common approaches to study entrepreneur are viewed and examined Firstly, the study on effects of entrepreneur from the economist's point of view. Secondly, the psychological and sociological approach of which the personality and/or demographic data of entrepreneurs are analyzed Thirdly, the study of entrepreneurship by looking at how entrepreneurs act. It is argued in the paper that the 'how' method is more appropriate and meaningful for managerial research since it focuses on the understanding of actual managerial practices and it can provide guidance and training for the would-be entrepreneurs

Incident question method is presented in the paper as an alternative approach to study the behaviour of entrepreneur The validation of incident questions are explained Thirty-five executive MBA students were used in developing and establishing the test-retest reliability of the incident questions Twelve middle/senior managers who are planning to start up their businesses are also included in the validation process

Introduction

With reference to the existing literature, it is always difficult, though not impossible, to make a clear distinction between entrepreneurial firms and small business ventures. Carland, Hoy, Boulton & Carland, for example, tried to use the logic of Schumpeter, 1934, Glueck, 1980 and Vesper, 1980, to conceptually distinguish the two groups in terms of the principal characteristics: innovative behaviour and strategic management practices (Carland, et al, 1984) And, based on the same definition, they examined the characteristics of 77 small business owners and found that the two groups, i.e. entrepreneurs and small business owners, as identified by a panel of experts, were statistically distinct in innovative behaviour as well as cognitive styles (Carland, et al, 1988). In another study, Begley & Boyd suggested to use founders to represent entrepreneurs as distinguished from non-founders, who are the chief executive officers of the small business firms, because they found the two groups are different in their personal and firm characteristics (Begley & Boyd, 1987). In fact, the way that we define the two groups of people differently are attributed to the different approaches we use in examining the characteristics of entrepreneurs. In other words, small business owner/managers might also be entrepreneurial if they display all the characteristics of a typical entrepreneur. Similarly, organizational managers might be regarded as entrepreneurial if the same set of characteristics are found One example of such definition could be referred to Pinchot's concept of intrapreneur - 'those who take hands-on responsibility for creating innovation of any kind within an organization' (Pinchot, 1985). Pinchot did express explicitly that 'creating innovation' is the main characteristics of entrepreneur and the only difference between intrapreneur and entrepreneur in general is whether this specific individual is within or outside the organization. In general, all past research studies seem to suggest that in order to identify entrepreneurs from non-entrepreneurs we should examine the characteristics of an individual to see whether they are consistent with the common set of characteristics as revealed and confirmed by various research findings in the study of entrepreneurs. However, a review of literature does not provide us a clear and conclusive remarks on what those common characteristics are At least, there are three most common theoretical and methodological approaches used in researching the characteristics of entrepreneurs. Firstly, the trait approach, building on the earlier psychological work on entrepreneurs by McClelland and his associates, focuses on personal disposition of individuals and the personality theory underlying individual behaviour, which could then be identified as entrepreneurial or non-entrepreneurial (McClelland, 1961). Secondly, the demographic approach attempts to use demographic information to arrive at the profile of a typical entrepreneur so that comparison could be made with reference to individual's personal characteristics such as birth order, role models, age, education level, work habits, etc. Examples of this approach can be found from Hisrich, 1986, Brockhaus, 1982. Thirdly, Robinson, et al review critically both approaches and suggest the attitude theory as an alternative to the study of entrepreneurship (Robinson, et al, 1991). They argue conceptually and theoretically that attitude is a better approach to the study of entrepreneurship than either personality or demographics, because of its closeness to behaviour-specific, rather than characteristic-specific They then develop Entrepreneurial Attitude Orientation (EAO) scale and test the predictive value with owners of new businesses and white collar non-management personnel and confirm its reliability to be within acceptable standards Attitude approach is of no doubt more close to represent the behaviour of entrepreneurs and therefore a better alternative to predicting entrepreneurship However, in identifying entrepreneurship within the organization, i.e intrapreneurship, the more desirable approach is to examine directly and analyze how the managers behave The major constraint of such approach is its practicability when it is implemented. As a consequence, an alternative is to use real incidents to simulate the behavioural environment so that managers could respond specifically to that environment The results of these responses are then analyzed with reference to the entrepreneurial attributes that are found common in research findings This paper is therefore written to present both the theoretical framework and the empirical evidence of how the incident method is developed and tested to study entrepreneurship in general and intrapreneurship in specific

Problems with trait and demographic approaches

As indicated in many studies, both trait and demographic approaches attempt to identify, measure and analyze either personality characteristics or personal characteristics of individuals so as to determine the latent entrepreneurial spirit of any specific individual and to distinguish entrepreneurs from others, e.g. small business owner/managers The pioneering work of McClelland and his associates on the study of entrepreneurs' need for achievement (nAch) and the subsequent effort of many other researchers in exploring the psychological characteristics of entrepreneurs, e g. locus of control, risk taking, problem-solving style, innovation, etc. provide a very strong support on predicting entrepreneurship by measuring the traits as described and prescribed (See Brockhaus, 1975, Brockhaus and Horwitz, 1986, Collins and Moore, 1970, Hornaday and Aboud, 1971, Sexton and Bowman, 1985). However, a number of fundamental problems with this approach have been identified by Robinson, et al, 1991 All these problems are related to (i) conceptual deficiency when applying psychology in entrepreneurship research, (ii) inappropriate application of traditional psychology to current interactive model of human behaviour; (iii) lack of convergent validity because different instruments are used to measure the same concept.

Demographic approach to the study of entrepreneurship is based on the assumption that people with similar backgrounds possess similar underlying stable characteristics and, as a result, it is possible to predict entrepreneurship in unknown population if some demographic characteristics are found common among them. Past research of this type have been focusing on the study of such variables as family background, previous working experience before start-up, socio-economic status, age, education level, birth order, etc (See Brockhaus, 1982, Hisrich, 1986, Hisrich, 1988, Gasse, 1985, Sexton & Auken, 1982). The problems of using demographic variables to predict entrepreneurship are many In the critical review of this approach, Robinson et al have pointed out three major deficiencies (Robinson, et al, 1991). First, this approach is limited to its static nature. Entrepreneurs react to a specific circumstance, not a given set of demographic characteristics Second, demographic characteristics are used as surrogates for personality characteristics when entrepreneurship is explained and analyzed And as a result, it is subject to the same criticism of the personality approach. Third, it does not stand up to previously established criteria for the evaluation of social science research and theory There are conflicting results in predicting entrepreneurship by means of birth order, education level, or parental heritage (Bowen & Hisrich, 1986, Deivasenapathy, 1986, Hisrich, 1990).

The two traditional approaches for studying entrepreneurship have come to a limit that they might not be able to explain and predict entrepreneurial behaviour satisfactorily and, to a certain extent, they could not be applicable to the dynamic nature of entrepreneurship development In addition, we could not assume the situation with which the entrepreneurs interact frequently are held to be stable As a consequence, a more behavioural orientation approach, which could overcome the deficiencies of the above two approaches and incorporate the idea of interaction and reaction of entrepreneur to specific situations, should be suggested as an alternative to enhance our understanding on entrepreneurship

Behavioural approach - attitude theory/incident method

Building on the attitude theory from the discipline of social psychology Robinson, et al developed the EAO attitude scale (Entrepreneurial Attitude Orientation) as an alternative way to predict entrepreneurship (Robinson, et al, 1991). They argued conceptually and theoretically that attitude approach is more close to the measurement of entrepreneurial behaviour because attitudes are less stable than personality traits and they will change both across time and across situations through interactive processes with the environment. Moreover, based on empirical studies by Ajzen, and Ajzen and Madden, Robinson et al argued further that attitude instruments tend to account for more of the variance in a particular set of behaviour than do personality disposition or trait-based instruments (Ajzen, 1982, Ajzen & Maden, 1986) The EAO attitude scales are then empirically tested in Robinson's study and its reliability is found within acceptable standards

The attitude approach does offer a better alternative for the study of entrepreneurship However, once we ask the basic question of who the entrepreneurs are and how they are distinguished from other individuals, we are still tempted to answer by indicating their personal qualities and profile, while attitude approach will only provide an indirect inference on the behaviour of entrepreneurs To really understand the entrepreneurial behaviour require a more direct examination on the activities undertaken by entrepreneurs In other words, to quote from Gartner, we 'should focus on what the entrepreneur does and not who the entrepreneur is' (Gartner, 1988). The pioneering work of Mintzberg's study on managerial behaviour might be one of the possible methods of studying entrepreneurship, especially entrepreneurship within the organization, i.e. intrapreneurship (Gartner, 1988, Mintzberg, 1973) Gartner even proposed to replace the word entrepreneur for manager, and entrepreneurial for managerial so that Mintzberg's research statement in the study of managerial work could be followed in the study of entrepreneurship (Gartner, 1988) In fact, it is strongly believed that not only the conceptual framework but also the methodological approach in the study of managerial work could be valid in the study of entrepreneurship since it is the direct measurement of entrepreneurial behaviour, rather than inferring entrepreneurial behaviour from traits, demographic data and attitudes towards some hypothetical statements.

A review of literature in the methods of studying managerial work suggest that there are two main approaches being actively pursued by researchers: (i) direct observation (Guest, Walker and Turner, 1959, O'Neill and Kubany, 1959, Randomsky, 1967, Mintzberg, 1973) and (ii) diary method (Carlson, 1951, Dubin and Spraym 1964, Horne and Lupton, 1965, Steward, 1967). Direct observation requires a trained researcher to go along with entrepreneurs, or CEOs in the case of Mintzberg's study, and record all the detailed activities done in a period of time in accordance with what the researcher observes Based on these observed records, analyses could then be conducted as to identify the real behaviour of the entrepreneurs or managers. Diary method reduces the burden of the researcher by shifting the responsibility of recording daily managerial activities to the managers and as such, its reliability would depend heavily on how honest and frank the managers are in filling the diary records and how complete and accurate it would be in writing the diary. However, diary method could generate more information from larger number of respondent (managers), as the research instrument, i.e. the diary record forms, could be standardized and it would therefore be more cost effective

Both observation and diary methods are in fact the two major strategies in assessing the overt behaviour of individuals and therefore are the better approach than trait, demographic and attitude approaches in the study of entrepreneurial behaviour. Moreover, they could basically be categorized under the case study research method (See Kazdin, 1982) In the review of case study research methods, Yin indicated that case study research method is preferred when (i) the type of research questions to be addressed is more of 'how' and 'why'; (ii) it does not require control over behavioural events; (iii) it focuses on contemporary events (Yin,1984). In view of the fact that studying entrepreneurial behaviour requires close examination of the actual behaviour of individual entrepreneurs, on which the researcher should not have any control and should be varied from individual to individual, the case study research method is therefore considered to be a more desirable approach with regard to those conditions. However, using observation and diary methods as the data collection means might not be cost effective if a large number of entrepreneurs, either within or outside the organizations, are required to be covered in the study. In addition, it is more difficult to maintain consistency for analysis when data relating to entrepreneurial behaviour are collected case by case through observation and diary We therefore propose an alternative - incident method, which combines the advantages of survey method and case study method in studying entrepreneurial behaviour According to the classifications of the type of case methods in the area of training and learning situation, incident is close to decision case, which is defined by Simmons as the case 'requires the learner to analyze a situation, exercise judgement and make suggestions as to what to do in the circumstances described' (Simmons, 1975) In contrast to a case, Chimezie and Osigweh said 'an incident is short, precisely written and contains a lesser number of complex issues' (Chimezie and Osigweh, 1989). Similarly, Tixier and Berridge classified this method under different name in the management training area and called it the consultancy method, 'in which very realistic and topical material can be presented to students as a means of simulating 'sharp-end' situations and inculcating suitable attitudes and beliefs, often of a deterministic nature' (Tixier and Berridge, 1985). Based on the concept of decision case and/or consultancy method used in the area of management training and development, we develop a number of incidents through actual company consultancy experience. All the incidents are written with reference to entrepreneur attributes with theoretical basis and empirically tested evidences. The behavioural responses of entrepreneurs for each incident are then analyzed to see the degree of entrepreneurship that the respondents display The detailed description of the development of this method is presented in the following sections

Development of behavioural incidents

In order to predict entrepreneurship from its behavioural pattern, we try to identify some common entrepreneur attributes with reference to past research studies. As a result, fifteen attributes are listed as the bases in developing the incidents. For example, in reviewing the entrepreneurial behaviour in large organization, Reilly and DiAngelo emphasize on the attributes of adaptive-orientation, future orientation and modification of standard operating procedure as they are vital to the success in the organization's continuing development (Reilly and DiAngelo,1987). Innovation and risk taking are two significant attributes most often mentioned in research studies that are found to be common among entrepreneurs (See Schumpeter, 1934, McClelland, 1986). Donaldson uses case study to support that both the attributes of autonomy and innovation are important to entrepreneurs (Donaldson, 1985). Smith and Miner do support the difference between entrepreneurs and managers in terms of personal innovation, and apart from that, they also find difference in terms of feedback of results, and self achievement (Smith and Miner, 1984) The findings of Sexton and Bowman confirm that risk, autonomy and change are the characteristics for entrepreneurs but conformity is found to be negatively related to entrepreneurship (Sexton and Bowman, 1986). In Begley and Boyd's study, business founders are differed from non-founders in N-Ach, risk and ambiguity tolerance (Begley and Boyd, 1987) In other words, entrepreneurs are more flexible and would not like to conform to formality These characteristics are also confirmed by Schere's study that in terms of complexity and novelty, entrepreneurs are found lower in score than managers (Schere, 1982) It is believed that entrepreneurs tend not to prefer complexed systems and formal structure. In addition, they are more independent, and preferring support (Hornaday and Aboud, 1971). Another major attribute that distinguishes entrepreneurs from other individuals is the behaviour of detecting opportunities. Stevenson and Jarillo make the proposition very clear that 'firms which make a conscious effort to lessen negative consequences of failure when opportunity is pursued will exhibit a higher degree of entrepreneurial behaviour' (Stevenson and Jarillo, 1990). Behaviour that leads to the emergence of informal internal and external networks and that allow the allocation and sharing of resources so as to facilitate the development and exploitation of organization opportunities are also conceptually assumed to be the entrepreneurial behaviour. There are also a number of research studies in support of the importance of 'networks' for entrepreneurs (Birley, 1986 and 1989, Jarillo and Ricart, 1987). When comparing the 'locus of control' of entrepreneurs with non-entrepreneurs, Pandrey and Tewary find that entrepreneurs have more internal locus of control In summary, we identify fifteen attributes from the past studies and they are listed as follows:

(1) Innovation vs stabilization
(2) Informal structure vs. formal structure
(3) Reliance on informal methods (or self) vs formal system
(4) preferring changes vs status quo
(5) Using loose budgetary control vs. tight budgetary control
(6) Exploiting opportunities vs. reacting to problems
(7) Reliance on network vs. depending on given resources
(8) preferring no hierarchy vs hierarchy
(9) Working alone (independent working style) vs. with others
(10) More risk taking vs. risk aversion
(11) More concerned on immediate result vs long term result
(12) More integration vs. more specialization
(13) More informal control vs formal control
(14) More loose control vs. more tight control
(15) preferring flexibility in management vs. formal management technique

Based on the attributes, we collect company incidents which fall into the category of possible entrepreneurial behaviour within the organization through our consultancy experience All behavioural responses are real possible responses during discussion with companies staff when engaged in consultancy activities As a general rule in assessing behaviour, a response definition should be designed to meet three criteria: objectivity, clarity, and completeness (Hawkins and Dobes, 1977). Objectivity refers to observable characteristics of behaviour or environmental events, clarity means the definition should be so unambiguous that it could be read, repeated, and paraphrased by observers; completeness means that the boundary conditions of the definition must be delineated so that the responses are enumerated. All thirty incidents are developed and generated in such a way that the three criteria are met In order to make the analysis consistent, there are five possible behavioural responses to be chosen by respondents for each incident. The responses are arranged in random order and are used to measured the entrepreneurial attributes as described After the respondents complete the incident form, the choices are placed in the continuum scale of fifteen attributes so that a five point scale score could be calculated. For example, if the respondent chooses (A) as the behavioural response to an incident which is used to measure the attribute of 'innovation', in which (A) choice is placed in the middle point of five point scale, he will be scored three in this attribute. All the other behavioural responses for each incident are calculated in the same way. As a consequence, a total score of 150 would be given to an individual if his behavioural responses to thirty incidents are perfectly entrepreneurial. The degree of entrepreneurship would then be ranged from the value of 30 to 150. In the following sections, this method is tested with regard to its validity and reliability, using the sample of some executive MBA students and some middle to senior managers who are either in the process of setting up or planning to set up their businesses

Validation of behavioural incidents

Testing the validity of behavioural responses

Although the behavioural incidents were written with actual consultancy experience and developed on the basis of entrepreneurial attributes as reviewed in the previous section, and, in addition, all possible choice actions in response to the decision situations were also fully discussed with managers, an attempt is made to test its validity on how those choices are arranged in the five point attribute scale. To achieve this objective, twelve middle to senior managers who are planning to start up their business and in the process of setting up their business were identified to be our pilot test sample. Those people were chosen as representative of entrepreneurs group and were asked to express their opinion on the choice responses to each incident. The criteria of selecting this group is based on (i) they are widely recognized by their colleagues and associates to be entrepreneurial with regard to their managerial style, daily contacts, and innovative activities undertaken in the companies; (ii) they are about to set up their business and have definite plan to form the company of their own and according to the review of existing literature and those studies relating to organization life cycle, the small business founders tend to be more entrepreneurial than company managers and small business managers, especially at the company creation and formation stage (See Vesper, 1982, Gartner, 1988, Begley and Boyd, 1987, Flamholtz, 1986, Churchill, 1983, Chell and Haworth, 1988) All the selected managers and would-be business owners were given an opportunity to study carefully the incidents and they were then asked to rank the five behavioural choices on an open-ended attributes scale in accordance with their knowledge and experience on how those incidents should be handled and how entrepreneurial the behaviour would be classified with reference to the attributes scale if they are handled in the choices as given The relation of their mean rankings and our prescribed rankings were then analyzed The results from the Spearman's rank-order correlation test for each incident indicate an overall high consistency, i.e. our prescribed rankings on each behavioural response along the five point continuum attribute scale are highly related to the mean ranking by managers and would-be business owners. The detailed breakdown of Roh (Rank correlation coefficient) for each incident are summarized in table 48.1. It is apparent from the statistics that our ranking for seventeen incidents on the behavioural responses from more entrepreneurial to less entrepreneurial are pretty close to what the managers and would-be business owners perceive. The ranking of behavioural responses of 8 incidents are of medium significance. Only five incidents might require further modifications and certainly improvement could be made if there are follow up discussions with participating managers.

Table 48.1
Summary of Roh for 30 Incidents

Number of Incidents	Roh	Significance
17 incidents	0.9 - 1.0	High Significance
8 incidents	0 7-0 875	Medium Significance
5 incidents	< 0.7	Low Significance

Testing the validity of incidents

In order to test how valid the incidents are used to reveal entrepreneurial behaviour within the organization, firstly, we asked the executive MBA students , who hold the managerial positions in organizations of both public and private sector with at least five years experience, to complete the behavioural responses of thirty incidents in a controlled classroom environment so that their responses could be immediate as to reflect their possible behavioural pattern Since there is a very careful selection process when the students are admitted to the programme, it can be comfortably assumed that they have homogeneous background in terms of age, education, years of experience, relevance of managerial experience, etc As a result, the variable of personal background could have less impact on the behavioural responses. The score of each participating student was then calculated according to the five point attribute scale and the total score could be arrived at by adding up the sub-score of fifteen attributes, representing the entrepreneurial score of the student Secondly, they were also asked to complete a self-assessment form in terms of the fifteen five point attributes scale to see how they perceive themselves. The total self assessed score could also be calculated and used to compare with the score derived from the incident responses The t-test (with the t value at 1.185) shows that there is no significant difference at 0 1 confidence level between the scores of students generated from incident method and from selfassessed method When the breakdown of each attribute is analyzed, we find no difference between the two methods of behavioural assessment in nine attributes while the t-values of other six attributes measurement show that there is difference in using the two methods.Table 48 2 shows the t-values of each attributes

Table 48.2
The t-Test of Attribute Scores

Attributes	t-Value	Probability	Significance*
Formal Control	1.350	0.1857	no difference
Hierarchy	1 479	0.1481	no difference
Networking	1.435	0 1602	no difference
Management skills	2.751	0.0093	difference
Risk taking	2.975	0 0053	difference
Working style	-3.140	0.0034	difference
Integration	-3.008	0.0048	difference
Result-orientation	-0.724	0.4740	no difference
Degree of control	0.849	0 4016	no difference
Opportunistic	-0.311	0.7576	no difference
Formal Structure	2.739	0.0096	difference
Budget control	4.572	0.0001	difference
System conformity	0.000	-	no difference
Innovation	0.976	0.3360	no difference
Status Quo/Change	-2.182	0 0359	difference
Entrepreneurial Score (overall)	1 185	0.2440	no difference

(* Level of significance is 0.1)

With reference to the overall score of entrepreneurial behaviour, the test of incidents by means of comparing its validity against the respondents' self assessment method did confirm that they are within acceptable standards Since there is no reason to believe that students in the executive MBA class would conceal the answer to self-assessment method, nor to the behavioural responses to the incident method, we could comfortably assume that the incident method is a true measure of what it is supposed to be measured, i.e. validated by the self-assessment method. The score derived from the behavioural responses to the incidents could be a good indicator of the degree of entrepreneurship for those managers within the organizations On the other hand, self-assessment method is also a reliable method to be used to detect entrepreneurship of managers if the process is administered effectively. However, incident method is still preferable to self-assessment method because there is less chance to be contaminated by the respondents and their environment once it is used not in the case of students but in the case of practising managers within the companies.

Measuring entrepreneurship

After testing the validity of behavioural responses to the incidents and the validity of attributes used as bases for developing the incidents as well as behavioural responses in the first two stages, we try to measure whether the entrepreneurial behavioural score could be used to distinguish the more entrepreneurial managers (i.e intrapreneurs) from less entrepreneurial managers in the third stage The sample used is the same as it is used in the last two stages Executive MBA students are, in general sense, less entrepreneurial as judged by the researchers, compared with the second group of managers who are about to set up their business with innovative ideas A t-test is conducted to analyze the statistical significance between the entrepreneurial scores of two groups of people The t-value of -1.933 is calculated with the implication that they are significantly different at 0.1 level (critical value: 1 6814). It is therefore interesting to note from the results that behavioural responses to the incidents do achieve the purpose of distinguishing more entrepreneurial managers from less entrepreneurial managers.

Conclusion and limitations

Throughout the paper, the literature on the study of entrepreneurship is briefly reviewed and it is argued that behavioural approach is a better method to the study of entrepreneurship than traits and demographics Under the category of behavioural approach, incidents method is developed and presented as an alternative to attitude approach Thirty incidents were created from consultancy experience They are the records of direct observations and discussion with companies' managers and therefore represent quite well the possible behavioural pattern of managers Moreover, all the incidents were developed on the bases of entrepreneurial attributes which were identified from past research studies. The incidents were then validated with a sample of thirty-five executive MBA students, who hold the managerial position at the middle to senior level, by self assessment method and were within reasonable statistical significance The behavioural responses were also tested with a sample of twelve would-be business owners, who represent a group of people with a higher degree of entrepreneurship, and the results indicate a fairly high consistency because their rankings on the responses were in line with the pre-designed rankings along the five-point attribute scale. Finally, it is confirmed that the behavioural scores could be used to differentiate the more entrepreneurial group from less entrepreneurial group with acceptable standard of statistical significance

The incident methods to the study of entrepreneurship as reported in this paper is another step further to explore the possibility of using actual behaviour to detect the degree of entrepreneurship in contrast to the traditional approach of using traits and demographics, and it is also suggested as a further extension of the attitude theory This method, as indicated in the literature review and the preliminary tests, does rest on a solid conceptual and empirical basis. The advantages of using this approach are also obvious because of its direct relevance to managerial behaviour, which is open to change and subject to be influenced by training and development However, there are still improvements and modifications to be made to make the instruments more applicable to the study of entrepreneurship. First, the number of incidents should be increased to enhance its representation of entrepreneurial behaviour Second, analyses should be made to examine the possible relationship among entrepreneurial attributes as some of them might be overlapped and are measuring the same thing. At the exploratory stage, we could only identify as many attributes as possible and tried to develop incidents to match the attributes, but once more research data are generated, analysis could be conducted to examine the interrelationship of attributes and to improve their validity Thirdly, further research could be done to test the applicability of this instrument in different industries, for managers at different levels and different functions, and in different cultures

References

Ajzen, I. (1982), 'On Behaving in Accordance with One's Attitudes' in Zanna, M P., Higgins, E T & Herman, C P (Eds), *Consistency in Social Behaviour: The Ontario Symposium*, vol. 2, pp 3-15, Erlbaum, Hillsdale, N.J.

Ajzen, I and Madden, T J. (1986), 'Prediction of Goal-directed Behaviour: Attitudes, Intentions, and Perceived Behavioural Control', *Journal of Experimental Social Psychology*, 22, pp. 453-474

Begley, T M and Boyd, D P. (1987), 'A Comparison of Entrepreneurs and Managers of Small Business Firms', *Journal of Management*, vol 13, no. 1, pp. 99-108

Birley, S. (1986), 'The Role of Networks in the Entrepreneurial Process', *Journal of Business Venturing*, 1, Winter, pp 107-117

Birley, S (1989), 'Female Entrepreneurs: Are They Really Any Different?', *Journal of Small Business Management*, 27 (1), January, pp 32-37

Brockhaus, R.H (1975), 'I-E Locus of Control Scores As Predictors of Entrepreneurial Intentions', *Proceedings of the Academy of Management*, 35, pp. 433-435

Brockhaus, R H. (1982), 'The Psychology of the Entrepreneur' in Kent, C.A., Sexton, D L and Vesper, K H. (Eds), *Encyclopaedia of Entrepreneurship*, pp 39-71, Prentice Hall, Englewood Cliffs, N.J.

Brockhaus, R.H. and Horwitz, P S. (1986), 'The Psychology of the Entrepreneur' in Sexton, D L and Smilor, R.W. (Eds), *The Art and Science of Entrepreneurship*, pp. 25-48, Ballinger, Cambridge, MA.

Carland, J.W., Hoy, F, Boulton, W.R and Carland, J.A.C. (1984), 'Differentiating Entrepreneurs From Small Business Owners: A Conceptualization', *The Academy of Management Review*, 9 (2), pp. 354-359

Carland, J.W., Carland, J.A.C., Hoy, F and Boulton, W.R. (1988), 'Distinctions Between Entrepreneurial and Small Business Ventures', *International Journal of Management*, vol 6, no 1, March

Carlson, S. (1951), *Executive Behaviour: A Study of The Work Load And The Working Methods Of The Managing Directors*, Stromberg, Stockholm

Chell, E and Haworth, J.M. (1988), 'Entrepreneurship and Entrepreneurial Management: The Need for a Paradigm', *Graduate Management Research*, vol 4, Winter, pp 16-33

Chimezie, A B. and Osigweh, Yg (1989), 'Casing the Case Approach in Management Development', *Journal of Management Development*, vol 8, no 2, pp 41-57

Churchill, N C. (1983), 'Entrepreneurs and Their Enterprises A Stage Model' in Hornaday, J A., Timmons, J A and Vesper, K.H (Eds), *Frontiers of Entrepreneurship Research*, pp. 1-22, Babson Centre for Entrepreneurial Studies, Wellesley, Mass

Collins, O.F and Moore, D G (1970), *The Organization Maker*, Appleton-Century-Crofts, New York

Deivasenapathy, P (1986), 'Entrepreneurial Success: Influence of Certain Personal Variables', *Indian Journal of Social Work*, 46, pp 547-555

Donaldson, L. (1985), 'Entrepreneurship Applied to Middle Management: A Caution', *Journal of General Management*, vol. 10, no 4, Summer

Dubin, R and Spray, S L (1964), 'Executive Behaviour and Interaction', *Industrial Relations*, no 3

Gartner, W.B (1988), 'Who is an Entrepreneur? Is the Wrong Question', *American Journal of Small Business*, Spring, pp. 11-32

Gasse, Y. (1985), 'A Strategy for the Promotion and Identification of Potential Entrepreneurs at the Secondary School Level' in Hornaday, J A , Shils, B., Timmons, J.A. and

Vesper, K H (Eds), *Frontiers of Entrepreneurship Research*, pp 538-559, Babson College, Wellesley, MA

Flamholtz, E G. (1986), *How to Make the Transition from an Entrepreneurship to a Professionally Managed Firm*, Jossey-Bass, San Francisco

Glueck, W.F. (1980), *Business Policy and Strategic Management*, McGraw-Hill, New York

Guest, R.H., Walker, C.R and Turner, A N. (1959), *The Foreman on The Assembly Line*, Harvard University Press, Cambridge, Mass

Hawkins, R.P., and Dobes, R.W., (1977), 'Behavioural Definitions in Applied Behaviour Analysis: Explicit or Implicit' in Etzel, B.C., LeBlanc, J.M. and Baer, D M (Eds), *New Developments in Behavioural Research: Theory, Methods, and Applications. In Honour of Sidney W. Bijou*, Lawrence Erlbaum, Hillsdale, N.J.

Hisrich, R D. (1986), 'The Woman Entrepreneur: Characteristics, Skills, Problems and Prescriptions for Success' in Sexton, D L and Smilor, R W (Eds), *The Art and Science of Entrepreneurship*, pp. 61-81, Ballinger, Cambridge, MA

Hisrich, R D. (1988), 'The Entrepreneur in Northern Ireland: Characteristics, Problems, and Recommendations for the Future', *Journal of Small Business Management*, July, pp. 32-39

Hisrich, R D. (1990), 'Entrepreneurship/Intrapreneurship', *American Psychologist*, 45, pp 209-222

Sexton, D L. and Bowman, N B (1985), 'The Entrepreneur: A Capable Executive and More', *Journal of Business Venturing*, 1, pp 129-140

Sexton, D L and Bowman, N B (1986), 'Validation of a Personality Index: Comparison of Psychological Characteristics of Female Entrepreneurs, Managers, Entrepreneurial Students, and Business Students', *Frontiers of Entrepreneurial Research*, Babson Centre for Entrepreneurial Studies, Wellesley, MA.

Simmons, D D (1975), 'The Case Method in Management Training' in Taylor, B and Lippets, G (Eds), *Management Development and Training Handbook*, McGraw-Hill, Maidenhead, England

Smith, N R and Miner, J B (1984), 'Motivational Considerations in 'The Success of Technologically Innovative Entrepreneurs Extended Sample Findings', *Frontiers of Entrepreneurial Research*, Babson centre for Entrepreneurial Studies, Wellesley, MA

Stevenson, H H and Jarillo, J.C (1990), 'A Paradigm of Entrepreneurship Entrepreneurial Management', *Strategic Management Journal*, vol 11, pp 17-27

Steward, R (1967), 'The Use of Diaries to Study Managers' Jobs', *Journal of Management Studies*, vol 2, 2 May

Tixier, M and Berridge, J. (1985), 'Cultural Transfer in Case Study Usage' in Winterburn, N.R (Ed.), *Proceeding, 3rd International Conference on Case Method Research and Application*, Centre for Continuing Education, The City University, London, England

Vesper, K.H., (1980), *New Venture Strategies*, Prentice-Hall, Englewood Cliffs, N.J.

Vesper, K H (1982), 'Introduction and Summary of Entrepreneurship Research' in Kent, C.A., Sexton, D.L., Vesper, K.H. (Eds), *Encyclopaedia of Entrepreneurship*, Prentice-Hall, Englewood Cliffs, N.J

Wortman, M S. (1987), 'Entrepreneurship An Integrating Typology and Evaluation of the Empirical Research in the Field', *Journal of Management*, vol 13, no 2, pp 259-257

Yin, R K (1984), *Case Study Research: Design and Methods*, SAGE Publications, Inc

Hornaday, J A. and Aboud, J. (1971), 'Characteristics of Successful Entrepreneurs', *Personnel Psychology*, 24, pp 141-153

Horne, J H and Lupton, T. (1965), 'The Work Activities of Middle Managers', *Journal of Management Studies*, no 1

Jarillo Mossi, J.C and Ricart, J E. (1987), 'Sustaining Networks', *Interfaces*, 17, pp. 82-91
Kazdin, A E. (1982), *Single-Case Research Designs: Methods For Clinical and Applied Settings*, Oxford University Press
McClelland, D.C. (1961), *The Achieving Society*, Van Nostrand, New York
McClelland, D.C. (1986), 'Characteristics of Successful Entrepreneurs', *Journal of Creative Behaviour*, 21(3), pp 219-233
Mintzberg, H. (1973), *The Nature of Managerial Work*, Prentice-Hall, Englewood Cliffs, N.J.
O'Neil, H E. and Kubany, A.J. (1959), 'Observation Methodology and Supervisory Behaviour', *Personnel Psychology*, no. 12
Pinchot, G., III (1985), *Intrapreneuring*, Harper & Row, Publishers, New York
Randomsky, J. (1967), 'The Problem of Choosing a Problem', *Unpublished doctoral thesis*, M I T., Sloan School of Management, Cambridge, Mass.
Reilly, B.J and DiAngelo, J A (1987), 'Entrepreneurial Behaviour in Large Organizations', *SAM Advanced Management Journal*, Summer, pp 24-31
Robinson, P B., Stimpson, D.V., Huefner, J.C and Hunt, H K, (1991), 'An Attitude Approach to the Prediction of Entrepreneurship', *Entrepreneurship Theory and Practice*, Summer, pp 13-31
Schere, J.L. (1982), 'Tolerance of Ambiguity as a Discriminating Variable Between Entrepreneurs and Managers', *Proceedings, Academy of Management*
Schumpeter, J A. (1934), *The Theory of Economic Development*, Harvard University Press, Cambridge, Mass
Sexton, D L. and Auken, P V (1982), 'Characteristics of Successful and Unsuccessful Entrepreneurs', *Texas Business Review*, September-October, pp. 236-239

49 Entrepreneurship in Nepal - Some observations on entrepreneurial characteristics and other findings

Rudolf Guthier

Abstract

Altogether 239 entrepreneurs answered a pencil-and-paper instrument to assess Personal Entrepreneurial Characteristics (PECs) It can be categorically stated that the PECs scale is not an indicator allowing differentiation of successful from less successful entrepreneurs. NBC entrepreneurs, i.e., entrepreneurs trained by the New Business Creation method of entrepreneurship development scored higher than entrepreneurs of the control group This result seems to show that they know better the kind of answers expected of them.

In the context of a developing country the question about differentiating between successful and less successful start-up entrepreneurs seems not so relevant, as long as the latter can maintain their enterprise and thus earn a living for themselves, for family members and probably offer jobs to others. Both groups may need promotional support.

112 of the 151 entrepreneurs that started after NBC training between 1985 and 1991 reported that they make already a profit (despite adverse economic conditions). The present investment has grown by one category or more in the case of sixty-five of those entrepreneurs

NBC entrepreneurs are less long in business (average slightly more than four years) than control group entrepreneurs (average more than six years) They have a shorter track record and hence fewer loans from banks and other sources They also have a slightly better family background than the control group entrepreneurs They thus had been in a better position to mobilize family funds to finance the start-up of their venture

The result that only thirty-eight per cent of the NBC group started with loans from banks surprises very much The project worked under the assumption that it had done the utmost to link start-up entrepreneurs with the banks Bank staff sit in the selection panel,

they are presenting their bank and loan procedure during the training and finally they are represented during the presentation of the participants' business plans

As more than eighty-four per cent state they would like to have a loan in the future we may deduce that it is not the entrepreneurs unwillingness but rather obstacles established by the banks preventing potential clients from obtaining them

There seems to be a relationship with the IndCol score and the success of entrepreneurs Relatively more Internal entrepreneurs are shown to be successful. However there is a negative relationship between the IndCol scale and the PECs scale. But even if the IndCol scale were used for selection of future entrepreneurs some potentially successful founders might be excluded. Therefore also this instrument is not of much use in the setting of SBPP's activities

Certain entrepreneurial characteristics occur more often with some other characteristics depending on the entrepreneur's personality. It appears that a typology of entrepreneurs could thus be developed.

Introduction

The Small Business Promotion Project (SBPP), a joint project of HMG[1] of Nepal and the Federal Republic of Germany, developed and adapted an improved approach towards assistance in the creation of new enterprises. This approach is known as NBC (New Business Creation) method of entrepreneurship development. It is replicated internationally by the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH under the CEFE (Creation of Enterprises, Formation of Entrepreneurs) brand name.

The method was first applied at the end of 1984 to train future entrepreneurs in Pokhara. Since then thirty-four regular NBC training programmes have been conducted with 629 participants[2].

The author of this paper is a practician and not a researcher. He presents his findings with the intention of drawing the attention of researchers towards the importance of developing entrepreneurs and enterprises in developing countries and towards the wealth of data available that need interpretation These data give indications for the need of further research in the field

PECs self rating questionnaire as instrument to predict success

D P S. Bhawuk developed a set of questionnaires in Nepalese and applied it to a group of 151 entrepreneurs trained in regular NBC programmes and to a control group of 88 entrepreneurs having characteristics similar to the NBC group's. The control group entrepreneurs had been small business consultancy clients of SBPP, but they had never attended an NBC training His report is based on primary data collected from February to April 1991 in various semi-urban locations of Nepal[3]

The set of questionnaires contained a paper-pencil-test (PEC Scale) which had been originally developed by McBer and Company[4]. The PEC scale contains 70 behavioural statements which have to be answered with either:

always	=	5
usually	=	4
sometimes	=	3
rarely	=	2
never	=	1

Based on the answers, values for thirteen characteristics and a correction factor are calculated. The statements are contained in the appendix in their sequence The method of calculation of the characteristics and of applying the correction factor is also shown there

McBer states:

> 'The self rating questionnaire was developed to provide a self-assessment on the thirteen competencies identified as selection criteria A person notes the degree to which each of the statements is a self-description. There are five items reflecting each of the thirteen competencies (and five statements which provide a correction factor) Because of its vulnerability to faking, this instrument was intended for self-assessment in entrepreneurship training programs rather than for screening'.

As the test was here used with existing entrepreneurs its application was insofar different from McBer's application where the test was predominantly used with future entrepreneurs

Table 49.1 summarizes the findings, i.e., the sample mean score of the thirteen characteristics for both the NBC and the control group of entrepreneurs It shows that there is congruence in the ordering of the thirteen characteristics between the two samples The thirteen characteristics are listed from 1 to 13 in descending order of average sample score We see that in all competencies the NBC group scores higher The range of standard deviation of the 13 characteristics for the NBC group is 2 to 2 65 and that for the control group is 2.14 to 2 97

Based on the range of standard deviation in table 49 1, it can be stated that the NBC group seems to be slightly more homogeneous Also they achieve in all cases higher PECs scores. The difference is more than 5 in the following cases:

2	Information seeking
4	Commitment to work contract
5.	Persistence
6	Use of influence strategies
7.	Problem solving
12	Sees and Acts on Opportunities

These differences may be explained by the selection procedure; potential entrepreneurs have been selected showing these characteristics, or by the training itself. Which of the two explanations is correct must be left unanswered here. The differences in the scores of NBC group entrepreneurs and those of the control group require further analysis to make a statement on their significance. An attempt has been made below, more is to be found in the appendix.

Table 49.1
Personal entrepreneurship characteristics' sample mean score for NBC & Control groups

	SAMPLE MEAN SCORE	
CHARACTERISTICS	NBC GROUP	CONTROL GROUP
SAMPLE SIZE	151	88
1. EFFICIENCY ORIENTATION	20.25	19.91
2. INFORMATION SEEKING	20.08	19.39
3. CONCERN FOR HIGH QUALITY OF WORK	19.73	19.26
4. COMMITMENT TO WORK CONTRACT	19.28	18.53
5. PERSISTENCE	19.13	18.51
6. USE OF INFLUENCE STRATEGIES	18.79	17.91
7. PROBLEM SOLVING	18.07	17.38
8. SYSTEMATIC PLANNING	17.67	17.33
9. INITIATIVE	16.79	16.60
10. ASSERTIVENESS	16.58	16.42
11. SELF-CONFIDENCE	16.46	16.22
12. SEES & ACTS ON OPPORTUNITIES	16.26	15.57
13. PERSUASION	15.97	15.83

From table 49 1 Bhawuk concluded that 'Nepalese entrepreneurs are strongest in efficiency orientation, information seeking, concern for high quality of work, commitment to work contract, and persistence, in that order The Nepalese entrepreneurs seem to perceive themselves to be weak in persuasion, seeing and acting on opportunities, self confidence, assertiveness, initiative, and systematic planning'.

Successful and less successful entrepreneurs

A test was carried out to evaluate whether a relationship exists between the PECs scale and successful entrepreneurs. Entrepreneurs that confirm working profitably have been selected from both groups (table 49 2) A further selection was made selecting from the profitable group those whose investment has grown by one category in the case of initial investment groups 1 to 6 or contain other indications of growth (initial investment group 7 - see table 49.7) The so selected group of entrepreneurs has been termed successful (table 49 3) The remaining entrepreneurs have been termed less successful This group includes, in addition to weaker enterprises, recent start-ups and enterprises reporting profits (65) but no investment growth

It should be noted that having NBC graduates starting-up and operating for several years providing income to the entrepreneur, to their family and employees is already a success The study does also not enquire about further enterprises the entrepreneur may run

Table 49.2
Profitable enterprises

	CONTROL GROUP	NBC GROUP	BOTH
NO PROFIT	24	28	52
PROFIT	57	112	169
OTHER	7	11	18

Table 49.3
Successful enterprises - entrepreneurs reporting both profit and growth

	CONTROL GROUP	NBC GROUP	BOTH
PROFIT AND INVESTMENT INCREASED	37	67	104
TOTAL	88	151	239

From above tables we can learn that relatively more NBC entrepreneurs report profits (74.2 per cent) than those from the control group (64 8 per cent). When it comes to making profit and reporting growth then the difference is not as important (NBC 44 4 per cent - CG 42.0 per cent) maybe due to the fact that NBC entrepreneurs are not as long in business as those of the control group

Table 49.4 compares the PECs scores of entrepreneurs termed less successful of both the Groups with each other. Table 49.5 does the same with the successful ones.

Table 49.4
Entrepreneurial characteristics of less successful entrepreneurs

LESS SUCCESSFUL	CONTROL GROUP		NBC GROUP	
NUMBER OF RESPONDENTS	51		84	
	AVERAGE	STD	AVERAGE	STD
INITIATIVE	16.569	2.926	17.012	2.767
OPPORTUNITY SEEKING	15.471	2.913	16.762	2.142
PERSISTENCE	18.804	2.642	19.226	2.957
INFORMATION SEEKING	19.294	2.746	20.238	2.580
HIGH WORK QUALITY	19.392	2.319	19.845	2.378
WORK COMMITMENT	18.118	2.888	19.488	2.270
EFFICIENCY	19.608	2.434	20.393	2.405
SYSTEMATIC PLANNING	17.431	2.592	17.643	1.950
PROBLEM SOLVING	17.569	2.483	18.310	2.488
CONFIDENCE	15.941	2.675	16.738	2.842
ASSERTIVENESS	16.333	2.777	16.857	2.503
PERSUASION	15.882	2.541	16.262	2.426
INFLUENCE STRATEGIES	18.059	2.947	18.726	2.049
CORRECTION	17.353	2.400	17.179	1.760
OF ALL				
AVERAGE	17.575	1.765	18.269	1.414
MAX	21.490	1.893	22.060	1.714
MIN	13.176	2.229	13.905	2.091
STD	2.404	0.515	2.376	0.645

Table 49.5
Entrepreneurial characteristics of successful entrepreneurs

SUCCESSFUL	CONTROL GROUP		NBC GROUP	
NUMBER OF RESPONDENTS	37		67	
	AVERAGE	STD	AVERAGE	STD
INITIATIVE	16.649	3.786	16.507	2.944
OPPORTUNITY SEEKING	15.703	2.470	15.627	2.503
PERSISTENCE	18.108	2.649	19.015	2.295
INFORMATION SEEKING	19.514	3.176	19.881	3.262
HIGH WORK QUALITY	19.081	2.465	19.582	2.661
WORK COMMITMENT	19.108	2.128	19.030	2.521
EFFICIENCY	20.324	2.144	20.060	2.698
SYSTEMATIC PLANNING	17.189	1.915	17.701	3.129
PROBLEM SOLVING	17.108	2.480	17.761	2.993
CONFIDENCE	16.595	2.842	16.119	2.783
ASSERTIVENESS	16.541	2.909	16.239	2.792
PERSUASION	15.757	2.898	15.612	2.362
INFLUENCE STRATEGIES	17.703	2.415	18.701	2.522
CORRECTION	17.027	2.573	17.701	2.299
OF ALL				
AVERAGE	17.644	1.608	17.834	1.875
MAX	21.919	1.880	21.896	2.016
MIN	13.324	2.372	13.463	2.242
STD	2.494	0.627	2.465	0.678

Table 49.6
Entrepreneurial characteristics - Difference between successful and less successful entrepreneurs

DIFFERENCE SUCCESSFUL - LESS SUCCESSFUL ENTREPRENEURS				
	CONTROL GROUP		NBC GROUP	
NUMBER OF RESPONDENTS	88		151	
	AVERAGE	STD	AVERAGE	STD
INITIATIVE	0.080	0.861	-0.504	0.177
OPPORTUNITY SEEKING	0.232	-0.443	-1.135	0.361
PERSISTENCE	-0.696	0.006	-0.211	-0.662
INFORMATION SEEKING	0.219	0.430	-0.357	0.682
HIGH WORK QUALITY	-0.311	0.146	-0.263	0.283
WORK COMMITMENT	0.990	-0.760	-0.458	0.251
EFFICIENCY	0.716	-0.290	-0.333	0.293
SYSTEMATIC PLANNING	-0.242	-0.677	0.059	1.180
PROBLEM SOLVING	-0.461	-0.003	-0.548	0.505
CONFIDENCE	0.653	0.168	-0.619	-0.058
ASSERTIVENESS	0.207	0.132	-0.618	0.289
PERSUASION	-0.126	0.357	-0.650	-0.063
INFLUENCE STRATEGIES	-0.356	-0.532	-0.025	0.473
CORRECTION	-0.326	0.174	0.523	0.538
OF ALL				
AVERAGE	0.070	-0.157	-0.436	0.461
MAX	0.429	-0.013	-0.164	0.302
MIN	0.148	0.143	-0.442	0.151
STD	0.090	0.112	0.089	0.033

Table 49.6 gives a comparison between successful and less successful entrepreneurs of the control and the NBC group The figures contained in the table are the difference of PECs scores of successful and PECs scores of less successful entrepreneurs (table 49 5 - table 49 4). Negative figures in the table show that less successful entrepreneurs have

achieved higher average PECs scores than successful entrepreneurs. Positive figures show that successful entrepreneurs attained a higher average score.

Successful entrepreneurs of the control group achieve a slightly higher average score than less successful entrepreneurs. With the NBC group it is just inverse and that almost by 0.5 It therefore can be clearly stated that higher average PECs scores are not necessarily an indicator of success.

As the answers reflect social (and learned) desirability, stated and actual behaviour may not match. There is one other explanation based on the correction factor which is much higher for the NBC group (0.5). If the correction factor had not been used then the average score for the control group would have been higher and the difference less

In any case it can be categorically stated that the PECs scale is not an indicator allowing differentiation of successful from less successful entrepreneurs.

It must be recalled that above discussion is based on average scores and that actual entrepreneurs, successful and less successful, score much higher and much lower than the average scores discussed. Therefore only a band of PECs values for successful (and less successful) entrepreneurs could be applied to evaluate entrepreneurial qualification.

People that score outside the band may not be suitable to become entrepreneurs. But as some characteristics can be developed by training and experience even this statement may not be true.

Above finding is in line with statements contained in the final report of McBer and Company. They state about their experience in India:

> 'Neither the self rating questionnaire nor the business situations exercise differentiated the more successful entrepreneurs. On both of the instruments the two groups had virtually identical overall scores In view of the similar disappointing results with the pilot sample from Malawi, it seemed doubtful that these instruments would prove useful for selection. They may be yet of value in training programs where they can be used to help students or trainees to understand and recognize the competencies'

In a country like Nepal where many new enterprises are needed to employ a growing number of people entering the labour market every year many additional entrepreneurs have to start up Once they have created an enterprise, the enterprise may remain small or it may grow. In both cases it provides employment and income to the entrepreneur and to his/her family and other people Surely one would wish to promote rather the more successful than the average entrepreneur. In a country where the entrepreneurial orientation of the majority of the population is not yet developed it may be not wise to differentiate the future successful from the 'average' entrepreneur and not to promote the latter also

The necessary task is rather to awaken entrepreneurial motivation and to develop skills in a broad spectrum of the population and not only in those from traditional business communities but from all sectors, urban and rural, men and women.

The question in a developing country is: 'Who can start and run an enterprise?'. To differentiate between average entrepreneur and successful entrepreneur appears like an inappropriate obsession in the given context

Examination of the answering pattern

The comparison of the PECs above creates the (wrong) impression that there are no major differences between entrepreneurs trained by the NBC method and entrepreneurs which belong to the control group The characteristics of the two groups have been shown to be similar. Both groups are in the Nepalese context belonging to the 'modern' sector.

Responses given on the seventy items were as shown below (in per cent)

	NBC Group	Control Group	Both Groups
always	24.9	23.1	24.3
usually	36.9	37.4	37.1
sometimes	23.1	22.8	23.0
rarely	8.1	8.4	8.2
never	7.0	8.2	7.4

The response usually is most frequent for both groups Differences are unimportant for the responses usually, sometimes, and rarely. Response always is more often used by the NBC Group and response never more often by the control group. There is room for interpretation of these results This will be done in the appendix.

Investment pattern of NBC group and control group entrepreneurs

Quite a good number of the sampled Nepalese entrepreneurs started with an investment of less than Rs. 50,000 (NBC 47 per cent and control group 40 per cent - see table 49.7). The next category of initial investment is Rs. 51,000 to Rs 200,000 (NBC 36 per cent and control group 38 per cent) There had been relatively few that could invest more than Rs. 200,000 (NBC 16 per cent and control group 22 per cent)[5].

Table 49.7
Beginning investment

BEGINNING INVESTMENT (IN RS THOUSAND)	NBC GROUP		CONTROL GROUP	
	NO.	%	NO.	%
<10	20	13	7	8
11 - 25	24	16	16	18
26 - 50	27	18	12	14
51 - 100	32	21	20	23
101 - 200	23	15	13	15
201 - 300	5	3	10	11
>300	20	13	10	11

Table 49.8
Present investment

PRESENT INVESTMENT (IN RS THOUSAND)	NBC GROUP		CONTROL GROUP	
	NO.	%	NO.	%
<10	13	9	2	2
11 - 25	8	5	8	9
26 - 50	25	16	8	9
51 - 100	21	14	16	18
101 - 200	32	22	23	26
201 - 300	12	8	9	10
>300	36	22	22	25

The comparison of the table 49.7 with table 49.8 shows that present investment is at an average higher than initial investment The average annual inflation rate for the period preceding the study was close to 10 per cent annually. It certainly does not account for most of the increase The initial investment and the present investment of the entrepreneurs were grouped in categories 1 to 7 (lowest to highest). The table below shows the growth in investment by categories. Negative numbers indicate that the investment has decreased

Table 49 9
Growth of investment of NBC entrepreneurs by number of categories

GROWTH OF INVESTMENT BY NUMBER OF CATEGORIES										
GROWTH	-3	-2	-1	0	1	2	3	4	5	6
NUMBER	2	1	4	75	34	12	9	6	1	3
TOTAL	7			75	65					

65 of the 151 NBC entrepreneurs report that their investment has grown by at least one category. 75 entrepreneurs state that the investment category has remained the same, which should not surprise as the sample contains a good number of recent start-ups Only seven indicate that their investment is now less than at start-up In four cases one of the two investments was not given, so that no statement can be made It needs to be mentioned here that amongst those who report no growth of investment are also those in the highest category which is open ended and encompasses all investment above Rs 300,000

	Sample Size	Successful	in %
NBC Entrepreneurs	151	68	45
Control Group Entrepreneurs	88	37	42
Total	239	105	44

The total sample is 239 entrepreneurs, 151 entrepreneurs started after NBC training and 88 belong to an equivalent control group which did not receive start-up training Of the sample 105 are described to be successful; 134 are less successful.

Of the 239 entrepreneurs 108 have currently a loan (table 49 11) The percentage is higher for the control group than for NBC entrepreneurs It surprises in any case that only 40 per cent of NBC entrepreneurs work with credits from banks or other sources and 34 per cent (table 49.11) with loans from banks only.

If we come to those described as successful the picture changes not very much Only 44 per cent (table 49.11) of successful NBC entrepreneurs have loans from banks and other sources compared with 68 per cent of the successful control group entrepreneurs. Only 37 per cent (table 49 12) of successful NBC entrepreneurs but 51 per cent of successful control group entrepreneurs have currently loans from banks.

Could that be caused by the banks' inability to pick winners?

The fact that thirty-one per cent of the less successful NBC entrepreneurs have loans (table 49.12) might prove that this is the case. However, one should not forget that the sample of (so-called) less successful entrepreneurs contain those that just have started and may become ultimately also successful.

NBC entrepreneurs have less loans than control group entrepreneurs. Reasons for this might be:

1. NBC entrepreneurs come from less affluent background and have hence less access to credit
2. They are in business for a shorter duration of time and have hence less track record with banks.
3. Maybe they need less loan than the control group as they have more finance.

These cases will be considered.

Table 49.10 below shows that reason 1 is not valid. NBC entrepreneurs describe their economic condition in childhood as more favourable than control group members.

This statement is based on the answer to the item:

14. Parent's standard of living while you were growing up:
    Poor = 1, Lower-middle-class = 2, Middle-middle class = 3,
    Higher-middle-class = 4, Rich = 5

The values shown as 'Economic Condition' in table 49.10 are the averages of all answers expressed in figures

Bhawuk states:

> 'In the NBC group, 50 per cent of the entrepreneurs said that they came from a middle middle-class family while 38 per cent said that they came from lower middle-class In the same group, 9 per cent of the entrepreneurs said that they came from a poor family, while 3 per cent said that they came from upper-middle and rich class
> In the control group, 33 per cent of the entrepreneurs said that they came from a middle middle-class family while 47 per cent said that they came from lower middle-class. In the same group, 20 per cent of the entrepreneurs said that they came from a poor family, while nobody claimed to have come from upper middle- or rich-class. ...
> We can say that entrepreneurship is a middle-class or poor-class phenomenon in Nepal'.

Reason two seems to be most important and reason three seems to have some justification. NBC entrepreneurs are for less time in business than control group entrepreneurs and they perceived themselves of higher class origin than control group entrepreneurs. This might be a consequence of the selection process. Because of their slightly better family background they seem more often in a position to finance their venture from family funds without having recourse to loans from banks or other sources compared to control group entrepreneurs. The importance of joint family finance to small business start-ups seems to be a very interesting topic which has not yet been investigated in Nepal.

Table 49.10
Economic condition in childhood, years in business, and access to credit

No Loan Now		
	Economic Condition	Years in Business
CG (NO LOAN TO START)	2.26	5.07
NBC (NO LOAN TO START)	2.53	3.63
CG (LOAN TO START NOT FROM BANK)	1.50	6.50
NBC (LOAN TO START NOT FROM BANK)	2.20	5.80
CG (LOAN TO START FROM BANK)	2.27	5.55
NBC (LOAN TO START FROM BANK)	2.61	3.72
Loan Now		
	Economic Condition	Years in Business
CG (NO LOAN TO START)	2.00	6.38
NBC (NO LOAN TO START)	2.36	5.73
CG (LOAN TO START NOT FROM BANK)	1.75	5.13
NBC (LOAN TO START NOT FROM BANK)	2.44	4.44
CG (LOAN TO START FROM BANK)	2.13	7.13
NBC (LOAN TO START FROM BANK)	2.40	4.63

1 = poor; 2 = lower middle class; 3 = upper middle class; 4 = rich

Middle class (economic condition approx. 2.25 to 2.75) are obviously in a position to raise finance from their family to start and operate a new venture They are also the ones that may obtain finance from banks Below lower middle class and lower middle class have more difficulties in raising funds from banks They may have to raise funds from other sources. This is clearly to be seen in the case of the control group entrepreneurs

Table 49.11
Loans from banks and other sources

	Sample Size	Loan Now	Percentage
NBC Entrepreneurs	151	60	40%
Control Group Entrepreneurs	88	48	55%
Total	239	108	45%
	Successful	**Loan Now**	**Percentage**
NBC Entrepreneurs	68	30	44%
Control Group Entrepreneurs	37	25	68%
Total	105	55	52%
	Less Successful	**Loan Now**	**Percentage**
NBC Entrepreneurs	83	30	36%
Control Group Entrepreneurs	51	23	45%
Total	134	53	40%

Table 49.12
Loans from banks only

	Sample Size	Loan Now	Percentage
NBC Entrepreneurs	151	51	34%
Control Group Entrepreneurs	88	40	45%
Total	239	91	38%
	Successful	**Loan Now**	**Percentage**
NBC Entrepreneurs	68	25	37%
Control Group Entrepreneurs	37	19	51%
Total	105	44	42%
	Less Successful	**Loan Now**	**Percentage**
NBC Entrepreneurs	83	26	31%
Control Group Entrepreneurs	51	21	41%
Total	134	47	35%

Loans at start-up and Success

Table 49.13
Loans now and at start-up

	Sample Size	Loan Now	Loan To Start
NBC Entrepreneurs	151	51	72
Control Group Entrepreneurs	88	40	52
Total	239	91	124
	Successful	**Loan Now**	**Loan To Start**
NBC Entrepreneurs	68	25	33
Control Group Entrepreneurs	37	19	24
Total	105	44	57
	Less Successful	**Loan Now**	**Loan To Start**
NBC Entrepreneurs	83	26	39
Control Group Entrepreneurs	51	21	28
Total	134	47	67

58 (38 per cent) NBC entrepreneurs and 42 CG (48 per cent) entrepreneurs started with loans from banks. 14 NBC (9 per cent) entrepreneurs and 10 CG (11 per cent) entrepreneurs started with loans from other sources. Thus 79 NBC (52 per cent) and 36 CG (41 per cent) entrepreneurs started without any loan

Of those 105 that are currently described as successful 33 (49 per cent) NBC entrepreneurs and 24 CG (65 per cent) entrepreneurs had started with a loan In that number 9 successful NBC entrepreneurs (13 per cent) and 6 CG entrepreneurs (16 per cent) started with loans from sources other than banks Thus of the successful entrepreneurs 36 per cent of the NBC group and 49 per cent of CG have started with loans from banks and 51 per cent of the NBC group and 35 per cent of the CG with no loan at all

Success and Loans

	successful	presently loan	success + loan	success + no loan	no success + loan	no success + no loan
currently without loan						
CG NL	7	0	0	7	0	20
NBC NL	29	0	0	29	0	39
CG OS	0	0	0	0	0	2
NBC OS	4	0	0	4	0	1
CG LB	5	0	0	5	0	6
NBC LB	5	0	0	5	0	13
Sub-Total	50	0	0	50	0	81
currently with loan						
CG NL	6	8	6	0	2	0
NBC NL	6	11	6	0	5	0
CG OS	6	8	6	0	2	0
NBC OS	5	9	5	0	4	0
CG LB	13	32	13	0	19	0
NBC LB	19	40	19	0	21	0
Total	105	108	55	50	53	81

CG = Control Group; NL = No Loan (from Banks or Other Sources) to Start Up
OS = Other Sources than Banks for Loans for Start Up; LB = Loan from Bank to Start Up

Of the 105 successful entrepreneurs 14 that currently have no loan had a loan at start-up. Of the 55 successful entrepreneurs having a loan now 43 had also a loan at start-up. Again the question is why cannot banks pick winners?

The result is alarming. SBPP has representatives from banks involved in the selection of candidates and in the training itself. Banks are thought especially instrumental at the stage where candidates present their projects. Therefore it surprises that not more entrepreneurs start their businesses with loans from banks. From the statements above the conclusion may be drawn that loans from other sources are an alternative to bank loans - but not a very important one. There may be one exception which has not been investigated during Bhawuk's research: 'Which role plays financing within the joint family?'

Statements about entrepreneurs currently not having loans

The following statements are relative to entrepreneurs that currently have no loan:

50 of these entrepreneurs are shown as successful. Of them 29 NBC and 7 CG entrepreneurs started without any loan at all. 4 NBC entrepreneurs had loans from other sources and 5 NBC and 5 CG entrepreneurs had loans from banks.

The success of those who started out with a loan, have no loan now, and are classified as successful (NBC = 9; CG = 5) must be rated even higher than that of those still having a loan, as they have between launching the business and now settled their loans.

Loans in the future and problems with loans

Table 49.14 shows that 201 entrepreneurs want bank loans in the future. This is indicative of the need for finance of small entrepreneurs. 91 (87 per cent) of those currently having loans from banks and other sources (NBC 51; CG 40) would like to take loans from banks in the future. 110 (84 per cent) of those currently not having loans (131) would also like to have loans from banks in the future. There seems not to be a great difference and an indication that almost twice as many entrepreneurs would like to take loans than currently. It appears that even those that started without loan and also currently have no loan would like to access loans from banks. However there are hurdles to be overcome that merit further investigation.

Table 49.14
Loans in the future and problems with loans

	LOAN TO START	PROBLEMS	LOAN NOW	LOAN IN FUTURE
		All		
CG (NO LOAN TO START)	0	1	8	26
NBC (NO LOAN TO START)	0	0	11	72
CG (LOAN NOT FROM BANK)	9	8	8	10
NBC (LOAN NOT FROM BANK)	9	6	9	10
CG (LOAN FROM BANK)	31	20	32	43
NBC (LOAN FROM BANK)	40	29	40	50
All	124	65	108	201
		No Loan Now		
	LOAN TO START	PROBLEMS	LOAN NOW	LOAN IN FUTURE
CG (NO LOAN TO START)	0	0	0	19
NBC (NO LOAN TO START)	0	0	0	61
CG (LOAN NOT FROM BANK)	2	1	0	2
NBC (LOAN NOT FROM BANK)	5	3	0	5
CG (LOAN FROM BANK)	11	4	0	8
NBC (LOAN FROM BANK)	18	9	0	15
Having no Loan	36	17	0	110
		Loan Now		
	LOAN TO START	PROBLEMS	LOAN NOW	LOAN IN FUTURE
CG (NO LOAN TO START)	0	1	8	7
NBC (NO LOAN TO START)	0	0	11	11
CG (LOAN NOT FROM BANK)	8	8	8	8
NBC (LOAN NOT FROM BANK)	9	3	9	5
CG	31	16	32	25
NBC	40	20	40	35
Having Loan Now	88	48	108	91

Most of those reporting having had problems with the banks had them when starting up (about 50 per cent) Amongst the problems with the banks ranks the prevalent acceptance of additional payment to the banks' staff which had been variously reported in the past The problems seem to become less if the loan is taken after start-up

Internal - external score

Table 49 15
Relationship between PECs and the internal/external scale of successful entrepreneurs

NBC NO.	INT/EXT	PECS SCORE
12	E	18.846
15	E	18.615
22	I	20.385
26	I	19.615
36	I	15.846
39	I	17.692
40	I	17.000
41	I	19.077
43	I	17.231
52	I	18.154
56	I	19.077
58	I	19.077
59	I	18.462
63	I	18.308
64	E	21.462
68	I	16.846
71	I	18.923
72	I	16.923
80	I	18.692
82	I	17.692
87	I	18.615
90	E	18.538
94	I	18.154
121	I	18.154
122	I	18.846
131	I	18.923
139	I	18.154
141	I	18.615
145	E	17.846
149	I	19.692

NBC entrepreneurs 12, 15, 22, 26, 36, 39, 40, 41, 43, 52, 56, 58, 59, 63, 64, 68, 71, 72, 80, 82, 87, 90, 94, 121, 122, 131, 139, 141, 145, 149 are the most successful 5 of the 30 entrepreneurs listed above (table 49.15) are external (17 per cent), 25 of them are internal As 24.5 per cent of all the NBC entrepreneurs have been shown to be external, it may be stated that amongst the more successful entrepreneurs are less often externals This result is to be expected 3 of the NBC entrepreneurs above belong to the bottom 15 on the PECs score 10 are below average, 15 above average and 2 are amongst the top 15 as far as PECs scores are concerned

Entrepreneurs with the 15 highest and the 15 lowest scores on the PECs self rating questionnaire are shown below (table 49.16) with their Internal/External rating There is only one external amongst those with the lowest score and two amongst those with the highest score. If PECs were an instrument to predict entrepreneurial success then one would expect a low number of external amongst those scoring highest which is - as expected - the case Then also one would expect a relatively higher number of externals amongst those having low PECs scores - which is not the case 24.5 per cent of all NBC entrepreneurs have been shown to be external Here we find in both cases only about 10 per cent. There seems to be no correlation between PECs scores and internal/external rating

Table 49.16
Relationship between the internal/external scale and highest and lowest PECs scores

LAST 15		FIRST 15	
NBC NO.	INTERNAL/ EXTERNAL	NBC NO.	INTERNAL/ EXTERNAL
1	I	11	I
7	I	17	I
35	I	22	I
55	E	33	I
72	I	37	I
82	I	49	I
82	I	62	E
83	I	69	I
87	I	75	I
93	I	76	I
113	I	77	I
128	I	92	I
132	I	108	I
135	I	110	I
139	I	120	E

Table 49.17
Relationship between various PECs as found comparing PECs scored

	RELATIONSHIP					
	VERY CLOSE	CLOSE	MEDIUM	DISTANT	VERY DISTANT	REMARKS
1	2,10,11	12	8,9	3,5,6,13	4,7	
2	12	1,10,11	8,9	3,6,13	4,5,7	
3	13	5,6,9	1,2,4,7,8, 10,11	-	-	GROUP 2
4	5	3,6,7,13	8,9	1,2,10,11, 12	-	GROUP 3
5	6	3,4,7,13	1,8,9	2,10,11, 12	-	GROUP 3
6	3,13	4,5,7,9	1,8,10,11	2,12	-	GROUP 2
7	4,5	3,6	8,9,13	1,2,10,11, 12	-	GROUP 3
8	-	1,9,10, 11	2,3,5,6,12, 13	4,7	-	
9	8	1,13	2,3,4,5,6,7, 10,11,12	-	-	
10	2,12	1,11	8,9	3,6,13	4,5,7	GROUP 1
11	2,10,12	1	8,9	3,5,6,13	4,7	GROUP 1
12	-	2,10,11	1,8	9,13	3,4,5,6,7	GROUP 1
13	-	3,8,9	1,2,4,5,7, 10,11,12	-	-	GROUP 2

The numbers above are the entrepreneurial characteristics that result from the completed PECs test:

1. = Initiative
2. = Sees and Acts on Opportunity
3. = Persistence
4. = Information Seeking
5. = Concern for High Quality of Work
6. = Commitment to Work Contract
7. = Efficiency Orientation
8. = Systematic Planning
9. = Problem Solving
10. = Self-Confidence
11 = Assertiveness
12. = Persuasion
13 = Use of Influence Strategies

The table above suggests that within a group of entrepreneurs sub-groups (types) exist Such sub-groups have a tendency to score certain characteristics more uniformly and are thus distinguished from other groups

The table would allow more interpretations than those given here and could be a point of departure and topic for further research It suggests that there is not the entrepreneurial character as such It seems there are various combinations of characteristics leading to entrepreneurial behaviour maybe depending on environmental factors Such types could be, e g., the arduous worker and the agile entrepreneur.

It is interesting to note that the characteristics 3, 4, 5, 6, 7, 13 - persistence, information seeking, high work quality, high commitment to work contract, efficiency, influence - are closely related to each other and account for the highest score. They occupy the first six places in the table 49.1.

1, 2, 10, 11 and 12 score lowest and are listed in the last five places of table 49.1 They seem to be closely linked - initiative, opportunity, self-confidence, assertiveness, persuasion. There are specific linkages between 1 and 8 - initiative with systematic planning

4, 5 and 7 (information seeking, concern for high quality of work, efficiency orientation) are distant from 1, 2, 10, 11 and 12 (initiative, sees and acts on opportunity, self-confidence, assertiveness and persuasion).

3 (persistence) is distant from 12 (persuasion) so as to convey the opinion that you need either of the two characteristics/skills

6 (commitment to work contract) is distant from 2, 10, 12 (seeks and acts on opportunity, self-confidence and persuasion).

8, 9 and 13 is another linkage - systematic planning, problem solving, influence strategy.

Notes

[1] HMG = His Majesty's Government

[2] From 1986 up to 14 October 1991, 35 other New Business Creation (NBC) workshops had been conducted for a variety of clients that are not considered here.

[3] Biographical and psycho graphical profile of Nepal entrepreneurs: A study on entrepreneurship in Nepal by D P S Bhawuk and Arjun K. Udas, International Training Institute, published by Small Business Promotion Project, Kathmandu, November 1991

[4] The identification and assessment of competencies and other personal characteristics of entrepreneurs in developing countries. Final report. Project No. 936-5314 Entrepreneurship and small business development. Contract No. DAN-5314-C-00-3065-00. Submitted to the United States Agency for International Development, Washington, D C 20523 By Richard S Mansfield, David McClelland, Lyle M. Spencer Jr. and Jose Santiago of McBer and Company, 137 Newbury Street, Boston, Massachusetts 02116. April 1987

[5] Exchange Rate 1991: US $ 1.- = 36 NRs, DM 1 = Rs 20 The exchange rates were lower at the time of the start-up of most of the enterprises The NRs 50,000 - quoted represent approximately an investment of US $ 1,500 to 3,000.

Appendix

Entrepreneurship characteristics statements

1. I look for things that need to be done.

2. I like challenges and new opportunities

3 When faced with a difficult job, I spend a lot of time trying to find out a solution

4 When starting a new job or project, I gather a great deal of information.

5. It bothers me when things are not done very well.

6. I give much effort to my work.

7. I find my ways to do things faster.

8. I plan a large project by breaking it down into smaller tasks

9 I think of unusual solutions to problems

10. I feel confident that I will succeed at whatever I try to do

11 I tell others when they have not performed as expected

12. I get others to support my recommendations

13. I develop strategies to influence others

14 No matter who I am with, I am a good listener

15. I do things that need to be done before being asked to by others

16. I prefer activities that I know well and with which I am comfortable

17 I try several times to get people to do what I would like them to do.

18 I seek the advice of people who know a lot about the problems or tasks I am working on

19 It is important to me to do a high quality of job.

20. I work long hours and make personal sacrifices to complete jobs on time

21. I am not good at using my time well

22. I think about the advantages and disadvantages of different ways of accomplishing things

23 I think of many new ideas

24 I change my mind if others disagree with me.

25 If I am angry or upset with someone, I tell that person.

26. I convince others of my ideas

27 I do not spend much time thinking about how to influence others

28 I feel resentful when I do not get my own way.

29. I do things before it is clear that they must be done.

30 I notice opportunities to do new things.

31. When something gets in the way of what I am trying to do, I keep on trying to accomplish what I want.

32 I take action without seeking information

33. My own work is better than that of other people I work with

34 I do whatever it takes to complete a job

35. It bothers me when my time is wasted.

36. I try to think of all the problems I may encounter and plan what to do if each problem occurs.

37. Once I have selected an approach to solving a problem, I do not change that approach

38 When trying something difficult or challenging, I feel confident that I will succeed

39 It is difficult for me to order people to do things.

40 I get others to see how I will be able to accomplish what I set out to do.

41 I get important people to help me accomplish my goals

42 In the past, I have had failures

43. I take action before it is clear that I must

44 I try things that are very new and different from what I have done before.

45. When faced with a major difficulty, I quickly go on to other things

46 When working on a project for someone, I ask many questions to be sure I

understand what the person wants

47. When something I have been working on is satisfactory I do not spend extra time trying to make it better

48 When working on a project for someone, I make a special effort to make sure that person is satisfied with my work

49 I find ways to do things for less cost.

50. I deal with problems as they arise, rather than spend time trying to anticipate them.

51 I think of many ways to solve problems

52 I do things that are risky.

53. When I disagree with others, I let them know

54. I am very persuasive with others

55. In order to reach my goals, I think of solutions that benefit everyone involved in a problem

56. There have been occasions when I took advantage of someone.

57. I wait for direction from others before taking action

58. I take advantage of opportunities that arise.

59. I try several ways to overcome things that get in the way of reaching my goals

60. I go to several different sources to get information to help with tasks or projects

61. I want the company I own to be the best of its type

62. I do not let my work interfere with my family or personal life.

63. I get the most I can out of the money I have to accomplish a project or task

64 I take a logical and systematic approach to activities.

65. If one approach to a problem does not work, I think of another approach

66 I stick with my decisions even if others disagree strongly with me

67. I tell people what they have to do even if they do not want to do it.

68 I cannot get people who have strong opinions or ideas to change their minds

69. I get to know people who may be able to help me reach my goals

70. When I do not know something, I do not mind admitting it.

The thirteen characteristics are calculated as follows:

Statements	Competency
1 + 15 + 29 + 43 - 57 + 6	= Initiative
2 - 16 + 30 + 44 + 58 + 6	= Sees and Acts on Opportunity
3 + 17 + 31 - 45 + 59 + 6	= Persistence
4 + 18 - 32 + 46 + 60 + 6	= Information Seeking
5 + 19 + 33 - 47 + 61 + 6	= Concern for High Quality of Work
6 + 20 + 34 + 48 - 62 + 6	= Commitment to Work Contract
7 - 21 + 35 + 49 + 63 + 6	= Efficiency Orientation
8 + 22 + 36 - 50 + 64 + 6	= Systematic Planning
9 + 23 - 37 + 51 + 65 + 6	= Problem Solving
10 - 24 + 38 + 52 + 66 + 6	= Self-Confidence
11 + 25 - 39 + 52 + 67 + 6	= Assertiveness
12 + 26 + 40 + 53 - 68 + 6	= Persuasion
13 - 27 + 41 + 54 + 69 + 6	= Use of Influence Strategies
14 - 28 - 42 - 56 + 70 + 18	= Correction Factor

Corrected characteristics score = individual characteristics score - correction

The correction ranges from 0 to 7 based on the following. If the correction factor score is:

24 or 25 subtract 7 from each competency score
22 or 23 subtract 5 from each competency score
20 or 21 subtract 3 from each competency score
19 or less subtract 0 from each competency score
PEC score = Sum of corrected characteristics scores.

Response interpretations for both groups

It is not really possible to give interpretations for the responses given to the statements. The following listing rather gives an insight on the value system (or on the perception of the desirability of those values) of the two groups of entrepreneurs Interpretations seem possible only in comparison with responses of other groups of people

The following overview shows the most frequent responses to the statements together with the average values to the responses (always = 5 to never = 1)

Average above 4.5

No.	Statement	Average
61	always	4 766
6	always	4 615
19	always	4.569
70	always	4.540

Average above 4.0

No.	Statement	Average
49	always	4 410
7	always	4.377
69	usually	4.322
63	always	4.310
1	always	4.259
31	usually	4.251
51	usually	4.222
4	usually	4.197
48	usually	4.197
15	usually	4.163
16	usually	4.159
18	usually	4.151
65	always	4.151
41	usually	4.142
64	always	4.134
22	usually	4.113
10	usually	4.100
59	usually	4.092
55	usually	4.084
2	usually	4 067
23	usually	4 038
36	usually	4 038

Average above 3.5

No.	Statement	Average
60	usually	3 941
50	usually	3.937
40	usually	3 929
34	usually	3.921
35	always	3.916
26	usually	3 795
20	usually	3 766

3	usually	3.757
8	usually	3.741
13	usually	3.732
58	usually	3.728
11	usually	3.715
44	usually	3.703
38	usually	3.690
5	sometimes	3.665
46	usually	3.644
53	usually	3.628
14	usually	3.510

Average above 3.0

No.	Statement	Average
37	usually	3.473
67	sometimes	3.444
9	sometimes	3.418
66	sometimes	3.372
54	usually	3.335
27	usually	3.318
68	sometimes	3.247
25	sometimes	3.234
17	sometimes	3.213
30	sometimes	3.209
33	usually	3.155
42	sometimes	3.075

Average above 2.5

No.	Statement	Average
39	sometimes	2.954
24	sometimes	2.950
62	usually	2.946
29	usually	2.883
56	sometimes	2.849
28	sometimes	2.787
57	sometimes	2.787
43	never	2.745
52	sometimes	2.703
12	sometimes	2 653

Average above 1.0

No.	Statement	Average
21	sometimes	2.347
47	never	2.054
45	never	1.866
32	never	1.565

Always was answered for the following statements in the percentage given.

Statement No	Respondents
61	82 %
70	70 %
6	67 %
19	66 %
49	56 %
7	50 %
63	47 %

Usually was given as response in majority or near majority for following statements:

Statement No.	Respondents
26	63 %
40	60 %
10	58 %
55	57 %
38	56 %
15	55 %
31	53 %
48	53 %
22	53 %
37	53 %
34	52 %
50	51 %
60	51 %
69	50 %
4	50 %
64	50 %
46	50 %
2	50 %
36	49 %
59	49 %
58	48 %
65	48 %
44	48 %
13	47 %
53	47 %
23	47 %
41	47 %

Sometimes was given as response in majority or near majority for following statements:

Statement No	Respondents
56	60 %
42	50 %
12	47 %

No statement had a majority of 'sometimes' responses.

Never was given as response in majority or near majority for following statements:

Statement No	Respondents
32	67 %
45	54 %
47	51 %

Above findings can be compared with the frequency of responses in percent of the total sample. Frequency of less than 47 per cent are not represented.

Items that were most often answered with always are.

61 I want the company I own to be the best of its type. (79 per cent)
70. When I do not know something, I do not mind admitting it (70 per cent)
6. I give much effort to my work (64 per cent)
19 It is important to me to do a high quality of job. (63 per cent)
49. I find ways to do things for less cost (54 per cent)
7. I find my ways to do things faster (48 per cent)
1. I look for things that need to be done (44 per cent)

The items below are answered almost equally with almost (a) and usually (u), 35 is also equally answered with sometimes (s) as well

69. I get to know people who may be able to help me reach my goals. (a 45 per cent, u 44 per cent)
16. I prefer activities that I know well and with which I am comfortable (a 41 per cent, u 41 per cent)
35. It bothers me when my time is wasted (a 33 per cent, u 32 per cent, s 31 per cent)

Always is rarely used for the following items:

45 When faced with a major difficulty, I quickly go on to other things.
56 There have been occasions when I took advantage of someone
12 I get others to support my recommendations.
21 I am not good at using my time well
32. I take action without seeking information.

Some of the items above are negative items, therefore the statement is not surprising The answer to 12 which is not a negative item shows a facet of Nepalese entrepreneurs which needs further reflection

The answer usually is most frequent for the following items:

26 I convince others of my ideas (61 per cent)
40 I get others to see how I will be able to accomplish what I set out to do. (57 per cent)
10 I feel confident that I will succeed at whatever I try to do (56 per cent)
55 In order to reach my goals, I think of solutions that benefit everyone involved in a problem (54 per cent)

38 When trying something difficult or challenging, I feel confident that I will succeed (54 per cent)
15. I do things that need to be done before being asked to by others (53 per cent)
31. When something gets in the way of what I am trying to do, I keep on trying to accomplish what I want (51 per cent)
48 When working on a project for someone, I make a special effort to make sure that person is satisfied with my work. (51 per cent)
22 I think about the advantages and disadvantages of different ways of accomplishing things (51 per cent)
37. Once I have selected an approach to solving a problem, I do not change that approach (51 per cent)
34. I do whatever it takes to complete a job (50 per cent)

Usually is still the most frequent answer for the following items:

60. I go to several different sources to get information to help with tasks or projects
50 I deal with problems as they arise, rather than spend time trying to anticipate them
69 I get to know people who may be able to help me reach my goals.
59. I try several ways to overcome things that get in the way of reaching my goals.
64. I take a logical and systematic approach to activities.
46. When working on a project for someone, I ask many questions to be sure I understand what the person wants
4. When starting a new job or project, I gather a great deal of information.
2. I like challenges and new opportunities
36. I try to think of all the problems I may encounter and plan what to do if each problem occurs
59. I try several ways to overcome things that get in the way of reaching my goals
58. I take advantage of opportunities that arise.
44. I try things that are very new and different from what I have done before.
65. If one approach to a problem does not work, I think of another approach
53. When I disagree with others, I let them know
13. I develop strategies to influence others.
23 I think of many new ideas
41. I get important people to help me accomplish my goals.
18. I seek the advice of people who know a lot about the problems or tasks I am working on.
54. I am very persuasive with others.
51. I think of many ways to solve problems.
8. I plan a large project by breaking it down into smaller tasks.
3. When faced with a difficult job, I spend a lot of time trying to find out a solution.
20. I work long hours and make personal sacrifices to complete jobs on time
11 I tell others when they have not performed as expected
27. I do not spend much time thinking about how to influence others.
33. My own work is better than that of other people I work with.
14 No matter who I am with, I am a good listener
29. I do things before it is aware that they must be done
43 I take action before it is clear that I must
62. I do not let my work interfere with my family or personal life

Only items 45 and 32 had few usually answers. They are negative items. Sometimes is preferred as answer in more than 50 per cent of the items for:

56. There have been occasions when I took advantage of someone

It is the most frequent answer for the following items:

42. In the past, I have had failures.
12 I get others to support my recommendations
39. It is difficult for me to order people to do things.
28. I feel resentful when I do not get my own way.
5. It bothers me when things are not done very well.
68 I cannot get people who have strong opinions or ideas to change their minds
25 If I am angry or upset with someone, I tell that person
24. I change my mind if others disagree with me.
52. I do things that are risky.
57 I wait for direction from others before taking action.
30 I notice opportunities to do new things
66 I stick with my decisions even if others disagree strongly with me
17 I try several times to get people to do what I would like them to do.
21 I am not good at using my time well.
9. I think of unusual solutions to problems.

The following items are rarely answered with sometimes:

69. I get to know people who may be able to help me reach my goals
19. It is important to me to do a high quality of job
61 I want the company I own to be the best of its type
6. I give much effort to my work.

Rarely is never the most frequent answer. The highest percentage of this answer is 28 per cent for the following item:

21. I am not good at using my time well

Item 62 is insofar remarkable that all answer possibilities receive similar percentages

62. I do not let my work interfere with my family or personal life.

The variety of answers to this question shows the ambiguity of the family situation of the Nepalese entrepreneurs. This should receive further attention.
Rarely is rarely an answer in the following items:

40 I get others to see how I will be able to accomplish what I set out to do
8 I plan a large project by breaking it down into smaller tasks
26 I convince others of my ideas
59 I try several ways to overcome things that get in the way of reaching my goals
20 I work long hours and make personal sacrifices to complete jobs on time
10 I feel confident that I will succeed at whatever I try to do.
11 I tell others when they have not performed as expected

35. It bothers me when my time is wasted
60. I go to several different sources to get information to help with tasks or projects
55. In order to reach my goals, I think of solutions that benefit everyone involved in a problem
36. I try to think of all the problems I may encounter and plan what to do if each problem occurs
58. I take advantage of opportunities that arise.
31. When something gets in the way of what I am trying to do, I keep on trying to accomplish what I want
64. I take a logical and systematic approach to activities.
63. I get the most I can out of the money I have to accomplish a project or task
16. I prefer activities that I know well and with which I am comfortable
23. I think of many new ideas
41. I get important people to help me accomplish my goals
22. I think about the advantages and disadvantages of different ways of accomplishing things
4. When starting a new job or project, I gather a great deal of information
50. I deal with problems as they arise, rather than spend time trying to anticipate them
48. When working on a project for someone, I make a special effort to make sure that person is satisfied with my work.
2. I like challenges and new opportunities.
65. If one approach to a problem does not work, I think of another approach
51. I think of many ways to solve problems
69. I get to know people who may be able to help me reach my goals
49. I find ways to do things for less cost.
18. I seek the advice of people who know a lot about the problems or tasks I am working on
70. When I do not know something, I do not mind admitting it.
7. I find my ways to do things faster
1 I look for things that need to be done.
15 I do things that need to be done before being asked to by others.

Rarely is never answered with 6, 19, 61:

6. I give much effort to my work.
19. It is important to me to do a high quality of job
61. I want the company I own to be the best of its type

Never is answered most frequently (more than 50 per cent) for items 32 and 45 and then for 47 (49 per cent) and 43 (28 per cent).

32. I take action without seeking information
45. When faced with a major difficulty, I quickly go on to other things
47. When something I have been working on is satisfactory I do not spend extra time trying to make it better.
43. I take action before it is clear that I must

Items 32, 45, and 47 are negative. Only the high number of never answers to item 43 surprises It may hint at conservative attitudes among some of the entrepreneurs

Never is seldom given for items 67, 8, 50, 42, 5, 20, 53, 46, 30, 54, 58, 44, 13, 38, 16, 60, 11, 34, 48, 70, 3, 40, 64, 15, 4, 35, 26, 18, 10, 69, and not at all for 36, 2, 1, 51, 55, 49, 63, 31, 19, 23, 41, 65, 22, 59, 7, 6, 61. The items 39, 5, 57, 33, 43, 62, and 50 have two maxima They merit further scrutiny.

The items below are answered almost equally with always (a) and usually (u); 35 is also equally answered with sometimes (s) as well.

69. I get to know people who may be able to help me reach my goals (a 45 per cent, u 44 per cent)
16 I prefer activities that I know well and with which I am comfortable (a 41 per cent, u 41 per cent)
35. It bothers me when my time is wasted. (a 33 per cent, u 32 per cent, s 31 per cent)

Always is rarely used for the following items:

45. When faced with a major difficulty, I quickly go on to other things.
56. There have been occasions when I took advantage of someone.
12 I get others to support my recommendations
21. I am not good at using my time well.
32 I take action without seeking information.

Some of the items are negative items, therefore the statement is not surprising. The answer to 12 which is not a negative item shows a facet of Nepalese entrepreneurs which needs further reflection.

Never is seldom given for items 67, 8, 50, 42, 5, 20, 53, 46, 30, 54, 58, 44, 13, 38, 16, 60, 11, 34, 48, 70, 3, 40, 64, 15, 4, 35, 26, 18, 10, 69, and not at all for 36, 2, 1, 51, 55, 49, 63, 31, 19, 23, 41, 65, 22, 59, 7, 6, 61.

The items 39, 5, 57, 33, 43, 62, and 50 have two maxima They merit scrutiny

Item-wise comparison of the two groups

The differences in the PECs score between NBC group and CG do not appear very important. At the level of the items, differences appear and are quite characteristic Here the NBC group of entrepreneurs and the control group are different and from their different responses - it seems - conclusions can be drawn Compare in the appendix: Differences between NBC group and control group.

Each response corresponds to a value from 1 = never to 5 = always (see above). For each statement the average value for the NBC group and the control group has been calculated The difference of the values for the NBC group and the control group are contained in the table and expressed as percentage of the values of the NBC group.

Negative values show that the control group has give higher values to the statements Positive figures indicate that the NBC group has given higher values to the statements

The control group gave considerably higher values to the statements 62, 42, 47, 19, 66, 28, 40 and 11. The NBC group gave higher values to statements 58, 17, 52, 9, 33, 56, 13, 59, 23, 60, 15, 18, 41, 12, 36, 57, 45, 2, 35, 30, 69, 4, 29, 3.

The control group has given 24 times higher values than the NBC group, the NBC has given 46 times higher values

The differences are more than expected and may be due to either selection or training of the NBC group of entrepreneurs. Therefore they need detailed analysis 62, 42, 47, 28 where the control group scores higher are negative items so that theoretically they should be answered with lower score to arrive at higher PECs value. In addition 42, 28 are reducing the correction factor

Therefore the statements where the control group scores importantly higher in real terms are 19, 66, 40 and 11. To this should be added the negative statements to which the NBC group gave higher values. 56, 57 and 45.

The NBC group values the are the negative values 62, 42, 47, 28 and 58, 17, 52, 9, 33, 13, 59, 23, 60, 15, 18, 41, 12, 36, 2, 35, 30, 69, 4, 29, 3.

If we compare the statements in which the control group values are higher with the statements where the NBC group gets higher values then certain differences between the group should become visible

Discussion of responses to statements

Items 19 and 62 are much less often answered with always by the NBC group and items 2, 18, 55, 23, 58, 35 much more often when compared with the control group.

19. It is important to me to do a high quality of job.
62. I do not let my work interfere with my family or personal life.

The slightly higher tendency of the control group to answer always on item 19 may mean that they are somewhat more concerned about the quality of their work than the NBC group

Item 62 is a highly controversial negative item. Its wording in English and in its Nepalese translation are confusing Somebody who wants the family to be separated from his/her work may be tempted to answer either always or never. The NBC group answers in any case less frequently always or usually and more frequently with sometimes, rarely or never compared with the control group.

In Nepal the value of the family is still much higher than in the west and often the family relationship is also closely interwoven with the business. Because of the possible confusion and of the different social structure all kinds of responses for this items may have been received.

2. I like challenges and new opportunities.
18. I seek the advice of people who know a lot about the problems or tasks I am working on.
55. In order to reach my goals, I think of solutions that benefit everyone involved in a problem.
23. I think of many new ideas.
58. I take advantage of opportunities that arise.
35. It bothers me when my time is wasted.

Above items to which NBC group entrepreneurs answered more often with always than the control group could be a consequence of their training. They project an image of themselves of being more open, innovative and co-operative. The answers given to item 58 show a much higher preparedness to use opportunities of the NBC group always and usually (18 per cent) than the control group. Item 35 is discussed below

Usually is much less often used by the NBC group with items 62, 35, 55, 27, 37, 70, 39 and much more with 13, 36, 59 when compared with the control group.

35. It bothers me when my time is wasted
55. In order to reach my goals, I think of solutions that benefit everyone involved in a problem
27. I do not spend much time thinking about how to influence others
37. Once I have selected an approach to solving a problem, I do not change that approach.
36 I try to think of all the problems I may encounter and plan what to do if each problem occurs.

Item 62 has been discussed above For item 35 the NBC group is more often sometimes bothered and less often usually than the control group One could think they are somewhat less bothered with time constraints

Item 55 draws considerably more always and therefore less usually from the NBC group than from the control group. It seems an indication of a more co-operative disposition of the NBC group which is also shown in the answers to some other items.

Item 27 is again a negative item and the answers may be confused Influencing is necessary for success. So one also should spend some time on this. The NBC group answers much more often with sometimes, rarely or never Item 37 might mean that the NBC group entrepreneurs are more likely to change their approach (see below) Item 70, 39, 13, 59 are discussed below. The answers given by the NBC group in the case of item 36 fall much more often in the category of always and usually than those of the control group It appears that NBC entrepreneurs are more problem conscientious and appreciate the value of planning.

Items 36, 59, 15 are much less often answered with sometimes by the NBC group and items 12, 68, 37, 45, 70 much more often when compared with the control group.

59. I try several ways to overcome things that get in the way of reaching my goals.
15 I do things that need to be done before being asked to by others.
12 I get others to support my recommendations
68 I cannot get people who have strong opinions or ideas to change their minds.
37. Once I have selected an approach to solving a problem, I do not change that approach.
45 When faced with a major difficulty, I quickly go on to other things.
70 When I do not know something, I do not mind admitting it

Item 36 has been discussed above Item 59 is less often answered this way because it is more often answered with always and usually. It seems to be an indication of flexibility on the part of the NBC group entrepreneurs. The same statement can be made for item 15 showing intent of being autonomous

Item 12 is discussed below. Item 68 is a negative item which is open to misinterpretation NBC group seem to believe they can change sometimes the minds of people with strong opinions more often than the control group.

In item 37 NBC group answers more often with sometimes and less often with usually showing thereby that they are somewhat more flexible than the control group. Item 45 is negative but closely related with item 37 NBC group answers less often never and more often sometimes than the control group Again an indication for more flexibility. Though they seem to have a little bit more difficulties in admitting not knowing something.

Rarely is much less often used by the NBC group with items 13 and 9 and much more with 62, 42, 39 when compared with the control group

13. I develop strategies to influence others.
9. I think of unusual solutions to problems
62. I do not let my work interfere with my family or personal life
42. In the past, I have had failures
39. It is difficult for me to order people to do things

The reaction to item 13 shows the NBC group entrepreneurs intent on influencing others to a much higher extent then the control group They also say more often that they go for unusual solutions

As said earlier item 62 is controversial Therefore no clear statement can be made. NBC trainees report less failures than the control group Therefore they can answer rarely more often then the others. NBC group reports somewhat less problems to order people to do things.

Never is much less often used by the NBC group, especially in items 12, 52, and 33 there are considerable differences

12. I get others to support my recommendations.
52. I do things that are risky.
33. My own work is better than that of other people I work with.

NBC graduates either seem to appreciate the need for the support of others or are really more dependent on others; they answer less often never and more often sometimes They seem to have a tendency of taking on more risks, the other answers to this items show this. And they seem to be much more confident about their quality of work

Question technique

Bhawuk stated in his report:

The response of the entrepreneurs to items 8 and 9 of IndCol scale and 21, 27, 37, 47, 62, and 68 of PEC scale were checked at the end individually by either of the researcher to confirm that the entrepreneurs understood the items correctly. These items are negatively worded and it was found that some of them had problems understanding them However, no explanation was offered for any item by the researchers and the entrepreneurs were encouraged to read the item again and interpret it the way they wanted.

An exception was made for item number 62 of PEC scale and the following scenario was given to clarify the item:

> 'Imagine it is after work hours, say 5.00 p m in the evening. You are ready to close down for the day A customer walks in and has some important business with you He would take about an hour You have planned to go out with your wife this evening, say for a cinema Would you ask the customer to come back tomorrow or cancel the programme with your wife?' In case of item 62 of PEC scale, therefore, it could be said that the response was to this scenario which clothes the idea contained in the item in behavioural terms.'

'The PEC scale has 70 items and respondents are required to express their agreement or disagreement with the items on a five point scale: always to never. The seventy items are grouped into fourteen factors of five items each. Thirteen of these are called entrepreneurial characteristics and the fourteenth factor is used as a correction factor to cover for social desirability element which comes into play while subjects are responding to the items The characteristics are: efficiency orientation, information seeking, concern for high quality of work, commitment to work contract, persistence, use of influence strategies, problem solving, systematic planning, initiative, assertiveness, self-confidence, seeing and acting on opportunities, and persuasion.'

Statements about entrepreneurs currently not having loans

The following statements are relative to entrepreneurs that currently have no loan:

To start their businesses, 5 entrepreneurs of the NBC group and 2 of the CG took a loan from sources other than banks, 18 (12 per cent) NBC group entrepreneurs and 11 (13 per cent) CG entrepreneurs had then loans from banks 4 of the NBC group (nos 23, 87, 121, 141), had a loan from sources other than banks when starting They are now classified as successful One (no 136) is classified as less successful.

5 NBC group entrepreneurs had a loan from the bank and are now classified as successful (nos. 12, 42, 55, 91, 93); 13 had a loan and are now classified as less successful (nos. 1, 5, 6, 9, 26, 27, 33, 44, 48, 79, 95, 100, 105) In this context we should not forget that some are still starters

Comparing the results, it may be possible to state that sources of finance other than banks seem to be in a better position to identify projects with potential than banks

The success of those who started out with a loan, have no loan now, and are classified as successful (NBC = 9, CG = 5) must be rated even higher than that of those still having a loan, as they have between launching the business and now settled their loans

11 CG entrepreneurs had a loan from the bank for launching their enterprises and 5 are shown as successful (nos. 17, 24, 26, 34, 65), 6 of them are less successful (38, 39, 53, 54, 56, 64)

Part G

Closing

50 Content of entrepreneurship courses versus needs of entrepreneurs - Record of Thursday breakout session

Karl H. Vesper

Article

This session centered around the question of how entrepreneurship education differs from business education in general and how the answer depends Who the students are makes a difference, as do the purposes they have for education An employee taking time out to start a part-time venture may want specific information about how to fill out forms, whereas a full time university student may be more interested to learn what the career options associated with entrepreneurship are and what it is like to pursue them Starting a business raises different difficulties than running one after it is already going

Conventional business courses, such as accounting, finance, marketing, operations and human relations, include information of utility to entrepreneurs but sometimes give insufficient attention to aspects of special interest to entrepreneurs How to protect ideas, for instance, may in part be covered by business law courses covering patents, but those courses usually are elective and they also usually do not include the perspective of an entrepreneur who may not be able to afford large legal expenses Protective strategies such as maintaining secrecy or simply moving ahead on additional new ideas before competitors can copy them are usually not even mentioned, let alone developed in detail in law courses. Thus that task is left for entrepreneurship courses.

Dealing with failure in a venture is similarly left to courses that specialize in ventures Some instructors find it helpful to bring as visitors to entrepreneurship classes some people who have failed in their ventures[1] This can give students some feeling of what it is like to fail, both as information helpful in deciding whether to venture and as inspiration to avoid such failure if they do venture

Ethics also is a topic worthy of special attention in entrepreneurship courses both because the subject is worth more treatment in the curriculum and entrepreneurs face some types of ethical problems unique to them

Motivation and a proclivity to take action as opposed to doing staff work that simply produces studies is another need of entrepreneurship that school should pay attention to Social norms and the culture from which an entrepreneur comes may, however, impose importantly different initial conditions on this task A Black South African, for instance, who has been taught that he or she is incapable of many things may benefit from training to counteract that, whereas a German who may have been socially taught that entrepreneurship, although within the individual's capability is, nevertheless, not really as respectable a form of work as employment in a big company may benefit from a different kind of 'reprogramming' Social norms, educational policies and welfare arrangements of the person's country may all be important influence to consider.

What should be taught in connection with the notion of risk is open to question. It can be seen that there are different kinds of risks an entrepreneur may face and different ways of dealing with it. But what an entrepreneurship course should teach about it is not clear so far

How an entrepreneur should deal with dependence on others is another issue. Some may be 'starters' only and others capable of going from inventor to 'starter' to 'runner' of a company Students bent upon entrepreneurship should perhaps be acquainted with such notions as the 'mad inventor syndrome' which is characteristic of a person who has a good idea but cannot let go of it enough even to let it be transformed in to a business success.

Entrepreneurship should be viewed as beginning well before someone starts a venture. What they do and learn prior to start-up can bear importantly upon their ability to carry out the venture. Prior contacts and prior knowledge should both be seen as part of the 'expeditionary equipment'

An entrepreneurship course can importantly contribute time for students to explore and learn, as opposed to being directively taught. It is both possible and effective to teach with an approach which simply puts students on their own to pursue ventures and take the learning that comes to them in that process. The minimum constraints for such a teaching approach include the following

A The course must have a specified beginning and ending date
B Students must be required to complete a project.
C They must be required to communicate the results of that project
  These results will likely include written and/or oral presentations, but other forms such as prototypes or actual business operations may also be suitable.
D There has to be a grade or certification of acceptable completion

Other than those four elements nothing else is necessarily required in an entrepreneurship course Most instructors, however, choose to add further elements, such as lectures, texts, cases, visitors, and interactions with the instructor at intermediate as well as end points of the term Competition among teams on the project has by some instructors been found to be an effective stimulant to the course and to learning

Entrepreneurship education can be viewed as concerned with learning special ways of thinking, as opposed to acquisition of particular types of knowledge. Creative thinking is one type Acquisition of experience, including that of failure, can help add these qualities

It remains for each instructor to figure out what combination of instructional elements are suitable for different students, different points in venture development, and different cultures For students it may even be important to 'unlearn' some things they have been taught before[2]. Achieving the acquisition of a formal degree may not be an appropriate indicator of success Making money may also not be the most helpful goal A more appropriate injunction for the student may be to 'enjoy what you are doing and the money will come'.

Notes

[1] Incidentally, it was noted that failure rates may vary considerably from one country to another In Sweden and the US the rate appears to be about ten per cent per year In the UK it was reported that eighty per cent fail in five years. In South Africa the figure given was eighteen per cent in ten years Checking this out and explaining it might be a worthwhile research study.

[2] The 'illusion that you can plan' was said to be one of these

Appendix

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"E L I D A":

E ntrepreneurship
Li terature
Da tabase

References to more than 9,000 Publications:

*** Entrepreneurship**
*** Business Start-up**
*** New Ventures Creation**
*** Small Business**
*** Innovation**
*** Venture Capital**

Foerderkreis Gruendungs-Forschung, e.V.,
c/o Prof. Dr. Heinz Klandt, Universitaet Dortmund,
D-44221 Dortmund, Germany

Entrepreneurship Literature Database "ELIDA"

To improve the infrastructure for research and education opportunities in the field of entrepreneurship and business start-ups, the **FGF** ("Foerderkreis Gruendungs-Forschung" what means "Centre for Research-support in Entrepreneurship and Business Start-up"), a not for profit organization, has built up a literature database (references) on that specific subject.

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  - *Genetic Approach in Management;*
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  - *Title (and Short Title)*
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    - *two 'and' linked authors*
  - b) by all words in **title**
    - *single word*
    - *two 'and' linked words*
    - *two 'or' linked words*
    - *up to two 'and' and to two 'or' linked words simultaneously*
  - c) by **publishing date**
    - *period can be defined (e.g. from 1986 - 1988)*
  - d) by **key words**
    - single word
    - two 'and' linked words
    - two 'or' linked words
    - up to two 'and' linked words simultaneously
* Possible data output formats:
  - *reference list format*
  - *index-card format*
* Possible output media:
  - *paper*
  - *floppy disk (5 1/4 " or 3 1/2 ")*
    - *as a dbase file (*.dbf)*
    - *as an ASCII file (*.asc) (for further wordprocessing)*

Cooperation with other institutions (European and overseas) engaged in the field of entrepreneurship is wanted.

* Example A (output format: "List")

KEYWORDS: BUSINESS and PLAN in field "TITEL"

Demmler, L. Frank
/Business Plan/
The Business Plan
The Enterprise Corporation of Pittsburgh, 1984
1984

Dible, Donald H. (Hrsg.)
/Plan and Finance/
How to Plan and Finance a Growing Business
Entrepreneur Press, Fairfield, CA., 1980
1980

Gevirtz, Don
/Entrepreneur's Manifesto/
Business Plan for America: An Entrepreneur's Manifesto
Putnam's, N.Y., 1984
1984

Haslett, Brian; Smollen, Leonard F.
/Business Plan/
Preparing a Business Plan
in: Pratt, Stanley; Morris, Jane K. (Hrsg.), "Guide to Venture Capital Sources", Venture Economics Inc., Wellesley, MA., 1970
1970

* Example B (output format: "Card")

1865

Szyperski, Norbert

/Unternehmensentwicklung/
Kritische Punkte der Unternehmensentwicklung

in: ZfbF: Zeitschrift für betriebswirtschaftliche Forschung, 27(1975), S. 366-383
1975

Standort: FGF

FGF Entrepreneurship-Research Monographien

Band 1:

Bohlender, Claudia; Klandt, Heinz

Entrepreneurship im Europäischen Binnenmarkt: Gründungs-Forschung und Ausbildung in Spanien.

Köln, 1989 (90 pages; 38.50 DM) - in German -

Band 2:

Weihe, Hermann J.; Klenger, Franz; Plaschka, Gerhard; Reich, Frank-Rainer

Unternehmerausbildung - Ausbildung zum Entrepreneur. Eine Studie zur Situation der Aus- und Weiterbildung von Unternehmensgründern.

Köln-Dortmund, 1991 (320 pages; 59.00 DM) - in German -

Band 3:

Klandt, Heinz (editor)

Entrepreneurship and Business Development.

Aldershot (UK), et al., 1993 (about 350 pages; £ 39.50)

(co-operatively published with Avebury Publishers) -in English -

Band 4:

Klandt, Heinz

"EVa" - Das Computer-Planspiel für Unternehmer und solche, die es werden wollen.

Köln-Dortmund, 1993 (64 pages; 25.00 DM) - in German -

Band 5:

Klandt, Heinz; Müller-Böling, Detlef (editors)

$IntEnt_{92}$: Internationalizing Entrepreneurship Education and Training. Proceedings of the $IntEnt_{92}$ Conference, Dortmund June 23-26, 1992.

Köln-Dortmund, 1993 (570 pages; 75.00 DM) - in English -

This volume represents different views from five continents on entrepreneurship education and training: 50 contributions by authors from North America, Western and Eastern Europe, Africa, Australia and Asia are included.

A broad bench of experiences and reflections by academics and practical experts engaged in teaching entrepreneurship are shown; first perspectives and steps to an empirically based and more systematic approach to research on the educational needs of entrepreneurs, adapted teaching methods, supportive organisational structures, and the measurement of efficiency of courses and programmes are described.

Key contributions are given by senior researchers like Robert H. Brockhaus, Bengt Johannisson, Asko Miettinen, Robert D. Hisrich and Karl H. Vesper.

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