## Symposium of the Comparative and International Education Society 12. March 2003 New Orleans

## Invitational Roundtable on Statistical Indicators for the Quality Assessment of Higher/Tertiary Education Institutions – the Methodologies of Ranking and League Tables

# CHE / stern-Ranking

# [Folie 1]

Ladies and Gentlemen,

Quality Assessment has become a frequently used keyword in the ongoing discussion on the necessary reforms of Higher/Tertiary Education Institutions. The necessity for quality assessment becomes all the more evident when we consider

- 1<sup>st</sup> that competition among universities has significantly increased in Germany, both on a national and an international scale and
- 2<sup>nd</sup> that diversification in universities has created an incredibly rich and varied offer of courses, programmes and diplomas, both at a national and an international scale.

Today, throughout Europe and the world, we find a number of different kinds of university rankings with different methodologies, scopes and target groups and – I am sorry to say so – of different quality!

In order to satisfy the variety of needs and expectations, rankings imperatively must be based on a scientifically founded methodology. Validity and reliability of data are indispensable for serious and honest rankings that merit to be published and consulted. That's why I am particularly happy to have been invited to this roundtable to present you, what we did.

In my presentation I will first briefly present the institution I come from, that is the CHE (Centre for Higher Education Development), and our mission. I will then proceed to describing our ranking of German universities in its uniqueness for the German context by pointing out 1<sup>st</sup> the *basic methodological principles*, 2<sup>nd</sup> some *facts* (i.e. the ranked subjects), and 3<sup>th</sup> the *effects* we have been able to observe up to now.

### [Folie 2]

Let me start with the CHE: The Center for Higher Education Development was founded in May 1994 by the German Rectors' Conference and the Bertelsmann Foundation. The Center's purpose is to initiate and to assist reform in Germany's institutions of Higher Education. The CHE defines itself as a "think tank" and consulting group for Higher Education. As a non-profit institution, the CHE formulates nonpartisan political objectives, develops integrated concepts, and explores through pilot projects existing options for future development in close cooperation with academic and government institutions.

**[klick]** Creating transparency about German universities by means of a ranking was one of the major founding tasks of the CHE. The first ranking was published in 1998, **[klick]** since 1999 we publish it in cooperation with the big German magazine "stern". The "Hochschulranking" is unique in Germany – and as a Unesco Conference last year showed - it seems to be unique worldwide in terms of scope, approach and methodology. This is the case for the following reasons, among others:

principles **[Folie 3]**The methodological underlying our ranking correspond to the former Stanford-President, Gerhard Caspar's critique of U.S. rankings: He stated that [klick] rankings of entire institutions as a whole could not be justified since a university comprising many disciplines and programmes is far too complex and varied to be considered and ranked as a unity. In addition to that, students study specific subjects and do not study at a university as such and are hence interested in information on specific subjects. **[klick]** For this reason, we only rank single subjects or subject areas, as e.g. physics or law. This means that we only compare physics at University A to physics at university B, but we do not compare university A as a whole to university B as a whole. This in turn means that one university can be ranked higher than another in one subject but can be far worse off in another subject. We believe that this principle takes into account the variety we encounter at our universities and which in most cases do not form a coherent picture. So - The 'subject' is the unity we rank. [klick] Caspar also asserted that it was wrong to mix different aspects of performances as for example research- and teaching-indicators, which makes it impossible to aggregate data on research and data on teaching into an overall score. All evidence shows that there is neither a theoretical nor an empirical basis for weighting single indicators to an overall score. **[klick]** That is why we opted for a multidimensional ranking. We collect a great number of indicators which we rank separately one from an other in order to give a realistic and differentiated impression of programs and courses. **[klick]** The last requirement to meet in Caspar's eyes was the fact that the data is never precise enough to establish clear and unambiguous ranking positions that correspond to distinctions that can be observed in reality. Single league table positions have the danger that minimal differences in the numerical value of an indicator are misinterpreted as differences in performance or quality. *[klick]* We thus chose not to make league tables but to classify universities according to what Casper called the "Michelin-principle": We form groups. The best are part of the top group, the worst are part of the bottom group and the rest is considered to be intermediate. This does, however, not mean that we do not calculate indicators precisely, but in order to avoid misunderstandings and in order to stay scientifically honest we do not publish single table positions. In all our publications, within one group universities are ordered alphabetically.

### [Folie 4]

The results of all our rankings and all the data that we have analysed are completely free accessible for everybody in the internet. We are going to translate the site into English in April this year in order to reach the foreign students that would like to come to Germany for their university studies (www.university-ranking.de).

### [Folie 5]

[klick] The results of our ranking are published in at least three different ways: [klick] A regular issue of the magazine "stern", usually in April, dedicates its title-story to the publication of the new rankings. Beside some general information on the programme and the ranked subjects, the article presents selected results of the ranking in a more aggregate way. [klick] This regular edition of the stern is accompanied by a special issue, called "stern special", which contains the so-called "hitlists", i.e. ranking results for five selected and telling indicators. [klick] Finally the ranking-website (www.dashochschulranking.de) provides the entire available data, which can be selected according to various means of access.

# [Folie 6]

Underlying our approach is a so called decision model with 9 categories, as.....

# [Folie 7]

Each category is represented by a lot of indicators with different perspectives by different data sources and **[Folie 8]** facts as well as jugdements.

## [Folie 9]

At least we run a quality assurance policy with the data by plausibility checks and having a strong publication policy to publish better no data than bad ones.

## [Internet].

In the internet version there are different research strategies. The most important and most frequently used is by subjects.

You first choose a specific subject. Then you have several possibilities of entering the data: *First*, there is what we call "overview ranking" with five selected indicators. *Second,* you can make your "personal ranking" which allows to select and weight up to five out of some 30 indicators individually and interactive.

Another way is to start search by a town or a university. Choosing a town, you get information on the town (e.g. local rents) and you see which universities are there. Selecting a university you find some basic information on the university, e.g. the number of students, and a list of subjects included in the ranking

So far for the concept and the realisation of the ranking. But what effects and impact does it have?

**[Folie 10]** First of all I will show you the page impressions during the last year.

**[Folie 11]** The effects of our ranking on students behaviour which we have been able to measure with a separate study are quite considerable: According to survey data, about one third of the students use rankings for orientation, which is quite a lot in the German context, where we still find the myth that all universities are equal and where rankings were for a long time not accepted in the scientific community. Our ranking helped to make people become aware of the differences in the quality of teaching and research. The proportion of students using the ranking varies across different subjects: **[klick]** from about 50% in engineering to only 19 % in literature. **[klick]** Generally it can be said that it is particularly the achievement-oriented students who make use of the ranking.

### [Folie 12]

**[klick]** A good example of effects can be shown for psychology, which was first included in our ranking in 2001: In the year after the number of applications at the recommended universities increased notably while they remained stable in the whole: **[klick]** the rise was about 19 % for the universities that had been recommended for the "researcher"-type of student and **[klick]** about 13 % for the "straight ones" who want to study rapidly and efficiently with adequate monitoring.

### [Folie 13]

**[klick]** On the institutional level **[klick]** we observe that universities and departments take the ranking as a starting-point for the analysis of their strengths and weaknesses. In this context we offer more detailed analysis of the student survey for single departments. **[klick]** Parallel, we know the ranking has been used as a stimulous for reforms and reorganisations in many faculties.

# [Folie 14]

What are the perspectives for the next future? We will widen the ranking to other European Countries. Austrian universities decided to join the CHE-Ranking. We started this year with chemistry and mathematics. In Switzerland, an initiative called SwissUP, is using our methodology. We agreed upon combining our datas.

Ladies and Gentlemen, this was a fast overview of the concept and the effects of the ranking that the CHE and the magazine "stern" publish in Germany and which is – as I think - unique in its conception, its degree of differentiation and the amount of data compiled.

Thank you very much for your attention.