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Introduction to the CHE University Ranking System

Conference on benchmarking

Organized by University of Aarhus

Sandbjerg, Denmark

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Ladies and Gentlemen,

At first let me thank to invite me to present the CHE-University Ranking.

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 as most of you know – 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.

I will first briefly present the institution I come from, because this is part of the – from my point of view – success-story. I will then proceed to describe our ranking of – meanwhile - Austrian, German and Swiss universities in its uniqueness by pointing out 1st the *basic methodological principles* and 2nd some *facts* and how it works on the internet.

Let me start with the CHE: The Centre for Higher Education Development was founded in May 1994 by the German Rectors' Conference and the Bertelsmann Foundation. The Centre'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 non-partisan political objectives, develops integrated concepts, and explores through pilot projects existing options for future development in close cooperation with academic and government institutions. It is important that the Centre is part of the university system and highly connected with the German Rectors Conference but also has a highly independent status.

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, since 1999 we published it in cooperation with the big German magazine "stern" and since last year with the well-known weekly newspaper DIE ZEIT. The CHE-HochschulRanking seems to be unique worldwide in terms of scope, approach and methodology –and as Francois Tavernas stated in a report for the EUA may be probably the best model in the world.

„The system used by CHE to evaluate universities is probably the best model available today in the world of higher education.“

Prof. Dr. Francois Tavenas
Rector Emeritus of Université Laval (Quebec)
Founding Rector of Université de Luxembourg
Quality Assurance: A Reference System for Indicators and Evaluation
Procedures, Brüssel April 2004

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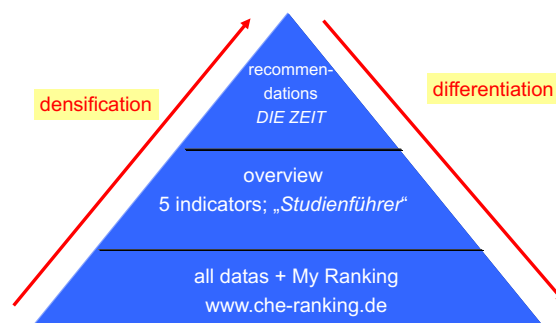
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Communication

Before presenting the unique selling points of our ranking, let me add some remarks on the communication strategy, we have with our media-partner DIE ZEIT. In a contract it is stated that CHE is responsible for methodology, selection of indicators, selection of the subjects and so on that means all content work is made by us and cannot be influenced by DIE ZEIT. DIE ZEIT is only the distributor of the information we are responsible for. This is important because of the possible dichotomy of economic interest and methodological interest. They are thus divided in our case.

The results of our ranking are published in at least three different ways: A regular issue of the DIE ZEIT, usually in April/May, dedicates its cover story to the publication of the new ranking. Beside some general information on the programme and the ranked subjects, the article presents selected results of the ranking in a more aggregated way. This regular edition of DIE ZEIT is accompanied by a special issue, called “Studienführer”, which contains the so-called “Ranking kompakt”, i.e. ranking results for five selected and telling indicators. Finally the ranking-website (www.che-ranking.de) provides all available data, which can be selected according to various means of access.

Communication



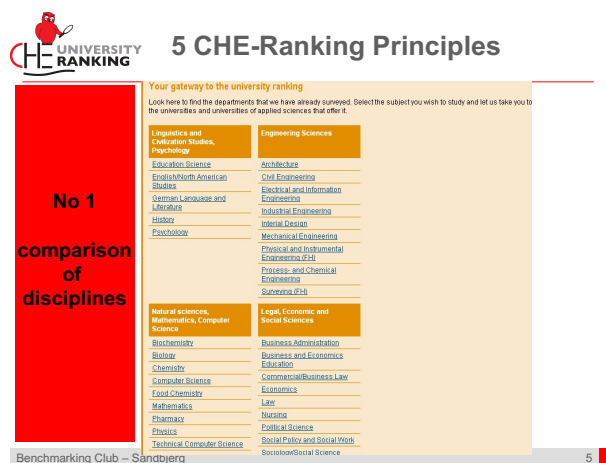
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Our aim is to serve for an informative, fair and valid ranking. So we developed, what I will call CHE-methodological principles, that distinguish CHE-Ranking from many other ranking approaches:

Principle No 1: Comparison of disciplines, not Universities

The main target group of rankings are school leavers respectively university freshmen. They decide for a specific subject or programme at a university, rather than for a university as such. Therefore the ranking does not rank whole universities, but strictly refers to single subjects. This approach is supported by the theoretical argument that universities comprising many disciplines and programmes are far too complex to be ranked as a unit. In addition empirical evidence suggests that there are great differences in performance between different subjects within a university. A university may be ranked high in physics and at the same time ranked very low in literature. The information, that this university is ranked in the middle, which inevitably will be the result of ranking the whole university, would not have any relevance to a freshman in physics. For this reason, we only rank single subjects or subject areas, as you can see on the screenshot from the English version of the internet. 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. 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.



CHE UNIVERSITY RANKING
Your gateway to the university ranking

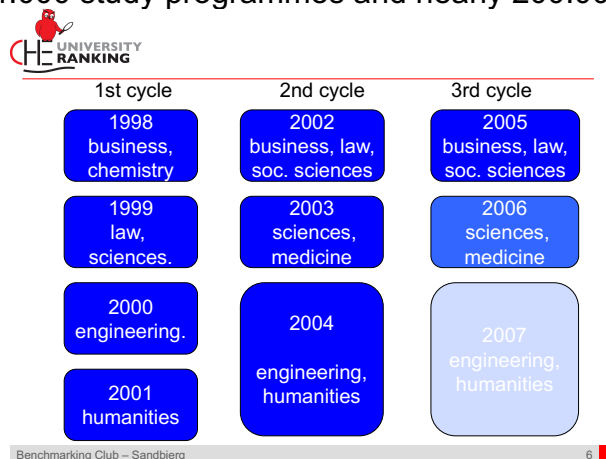
Look here to find the departments that we have already surveyed. Select the subject you wish to study and let us take you to the universities and universities of applied sciences that offer it.

No 1 comparison of disciplines

Logistics and Civilization Studies, Engineering	Engineering Sciences
Education Science	Architecture
English/North American Studies	Civil Engineering
German Language and Literature	Electrical and Information Engineering
History	Industrial Engineering
Psychology	Internal Design
	Mechanical Engineering
	Physical and Instrumental Engineering (PI)
	Process- and Chemical Engineering
	Surveying (Ld)
Natural sciences, Mathematics, Computer Science	Legal, Economic and Social Sciences
Biochemistry	Business Administration
Biology	Business and Economics Education
Chemistry	Commercial/Business Law
Computer Science	Economics
Food Chemistry	Law
Mathematics	Nutrition
Pharmacy	Political Science
Physics	Social Policy and Social Work
Technical Computer Science	Sociology/Social Science

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We started in 1998 with Economics, Business Management and Chemistry. Every year after other disciplines followed. Since 2002 we organized a three-year-cycle, and thus economics and business management have been ranked a third time this year. Just now we are analysing sciences and medicine for the third time. In total, all three years, we are updating 35 disciplines for more than 75 % of all students in 260 universities, more than 4.000 study programmes and nearly 200.000 single datas.



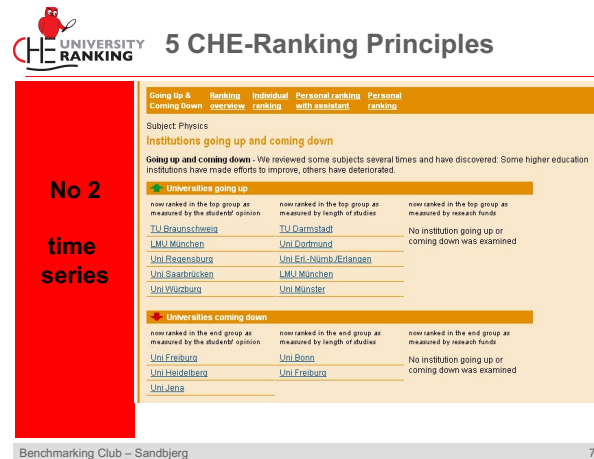
CHE UNIVERSITY RANKING

1st cycle	2nd cycle	3rd cycle
1998 business, chemistry	2002 business, law, soc. sciences	2005 business, law, soc. sciences
1999 law, sciences.	2003 sciences, medicine	2006 sciences, medicine
2000 engineering.	2004 engineering, humanities	2007 engineering, humanities
2001 humanities		

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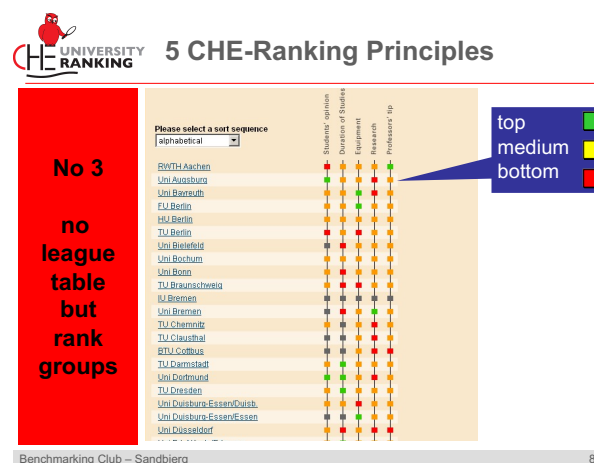
Principle No 2: Time series

That means, following the same methodology every year there are institutions going up and others coming down, as can be seen from the screenshot for physics.



Principle No 3 : No league table but rank groups

Most rankings order universities in league tables with individual rank positions. This approach suggests that each difference in the numeric value of an indicator marks a difference within the entities ranked. This inevitably involves the danger to misinterpret small differences in the numeric value of an indicator in terms of differences in performance or in quality. For example in the 2001 edition of the U.S. News & World Report ranking of national universities the difference between the rank 13 and rank 22 is only 6 on a 100 point scale. In many cases, data are not precise enough to establish clear cut and unambiguous table positions in a reliable way. Or, to put it in statistical terms, such a procedure ignores the existence of standard errors. Instead the CHE-ranking orders universities in three groups: The best universities are ranked into the top group with the colour green, the worst into the bottom group with red colour and the rest is considered to be intermediate with the colour yellow attached, which can be seen in the screenshot for five selected indicators. Grey points signify: no data. In all our publications, within one group universities are ordered alphabetically.



Principle No 4: No overall score, but multidimensional ranking

Moreover even within a single subject, the CHE-ranking does not calculate an overall value out of single (weighted) indicators. According to many research surveys, there is neither a theoretical nor an empirical basis for such weighting procedures. With regard to the orientation towards the students as our main target group as well as the labour market we have to consider the heterogeneity of decision preferences within the target group. Some students are looking for a university with high research activities (as measured e.g. by research grants, publications etc.) while other students may look for a university with close contacts between students and teachers, good mentoring and short duration of study. Calculating an overall score is to patronise the target group.

Calculating an overall score furthermore ignores the fact that also within a single subject area, universities have different profiles and specific strengths and weaknesses -as I showed you in the last screenshot- that will be overlooked by an overall score. That is why we opted for a multidimensional ranking: We collect a great number of indicators which we rank separately one from another in order to give a realistic and differentiated impression of programs and courses. Thus we leave the decision about the relevance of an indicator to the user's individual preference. The internet with its interactive features offered us new opportunities for individual choices: In the CHE-ranking users can make their own personal ranking by choosing and weighting indicators by their own. We call it "My Ranking".

The screenshot displays the '5 CHE-Ranking Principles' interface. On the left, a red box contains the text: 'No 4 no overall score but multi-dimensional ranking'. The main area is titled '1. Step: Personal indicators' and includes a sub-instruction: 'Please select up to five criteria from those available for the subject. Here is an (F) for facts and a (S) for students' opinion.' The interface lists various criteria under different categories, each with a checkbox and a radio button for selection. The categories and their items are: Academic studies and teaching (E-Learning (S), Contact between students (S), Contact students-teachers (S), Courses offered (S), Specialist studies consultancy (S), Study organisation (S), Practice Support (S), Counselling (S)), Job market and career orientation (Employment market related Programmes (S)), Overall opinion students and professors (Overall assessment (S), Research Reputation, Professors' tip), Research (many doctorates (F), much third party funding (F)), Result of study (short duration of studies (F)), Study location and higher education institution (lots of higher education sport (F), low rent (F), small college location (F), Higher education sport (S)), and Equipment (PC-equipment (S), Media equipment (S), Workstations (S), Rooms (S), Library (S)).

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And by the way: The results of all our rankings and all the data that we have analysed are accessible completely free of charge for everybody in the internet.

Principle No 5: International

CHE-Ranking started national and is now internationalizing, in 2005 with Austria and Switzerland. The reasons are clear: In the context of the Bologna-process, student mobility within Europe is growing and will probably grow further within the next years. Accordingly information for students about programs in an international perspective will become more important.

No 5
inter-
national

