

CHE-Ranking Methodology and Presentation

Prof. Dr. Detlef Müller-Böling
Gero Federkeil
CHE Center for Higher Education
Development
Germany

Hoger onderwijs ranking in Europees perspectief,
het CHE-systeem
CHEPS-seminar, 2 december 2005, Amersfoort

**Initiated by German Rectors' Conference
early 90s**

Founding task for CHE

„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

**No 1
comparison
of
disciplines**

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.

Linguistics and Civilization Studies, Psychology

[Education Science](#)

[English/North American Studies](#)

[German Language and Literature](#)

[History](#)

[Psychology](#)

Engineering Sciences

[Architecture](#)

[Civil Engineering](#)

[Electrical and Information Engineering](#)

[Industrial Engineering](#)

[Interior Design](#)

[Mechanical Engineering](#)

[Physical and Instrumental Engineering \(FH\)](#)

[Process- and Chemical Engineering](#)

[Surveying \(FH\)](#)

Natural sciences, Mathematics, Computer Science

[Biochemistry](#)

[Biology](#)

[Chemistry](#)

[Computer Science](#)

[Food Chemistry](#)

[Mathematics](#)

[Pharmacy](#)

[Physics](#)

[Technical Computer Science](#)

Legal, Economic and Social Sciences

[Business Administration](#)

[Business and Economics Education](#)

[Commercial/Business Law](#)

[Economics](#)

[Law](#)

[Nursing](#)

[Political Science](#)

[Social Policy and Social Work](#)

[Sociology/Social Science](#)

1st cycle

3rd cycle

100

2005

< 260 universities

< 4.000 degree programs

< 200.000 single data

2001
humanities

humanities

engineering,
humanities

**No 2
time
series**

[Going Up & Coming Down](#) [Ranking overview](#) [Individual ranking](#) [Personal ranking with assistant](#) [Personal ranking](#)

Subject: Physics

Institutions going up and coming down

Going up and coming down - We reviewed some subjects several times and have discovered: Some higher education institutions have made efforts to improve, others have deteriorated.

↑ Universities going up

now ranked in the top group as measured by the students' opinion

[TU Braunschweig](#)

[LMU München](#)

[Uni Regensburg](#)

[Uni Saarbrücken](#)

[Uni Würzburg](#)

now ranked in the top group as measured by length of studies

[TU Darmstadt](#)

[Uni Dortmund](#)

[Uni Erl.-Nürnb./Erlangen](#)

[LMU München](#)

[Uni Münster](#)

now ranked in the top group as measured by reseach funds

No institution going up or coming down was examined

↓ Universities coming down

now ranked in the end group as measured by the students' opinion

[Uni Freiburg](#)

[Uni Heidelberg](#)

[Uni Jena](#)

now ranked in the end group as measured by length of studies

[Uni Bonn](#)

[Uni Freiburg](#)

now ranked in the end group as measured by reseach funds

No institution going up or coming down was examined

5 CHE-Ranking Principles

top 
 medium 
 bottom 

no
 league
 table
 but
 rank
 groups

Please select a sort sequence

alphabetical

	Students' opinion	Duration of Studies	Equipment	Research	Professors' tip
RWTH Aachen	red	orange	orange	orange	green
Uni Augsburg	green	orange	orange	red	orange
Uni Bayreuth	orange	orange	green	red	orange
FU Berlin	orange	orange	green	orange	orange
HU Berlin	orange	orange	orange	orange	orange
TU Berlin	red	orange	red	orange	orange
Uni Bielefeld	grey	red	orange	orange	orange
Uni Bochum	orange	orange	orange	orange	orange
Uni Bonn	orange	red	orange	orange	orange
TU Braunschweig	orange	red	red	orange	orange
IU Bremen	grey	grey	grey	grey	grey
Uni Bremen	grey	red	orange	green	orange
TU Chemnitz	orange	grey	orange	red	orange
TU Clausthal	grey	grey	orange	red	orange
BTU Cottbus	grey	grey	orange	red	red
TU Darmstadt	orange	green	orange	orange	orange
Uni Dortmund	green	green	orange	red	orange
TU Dresden	orange	green	orange	orange	orange
Uni Duisburg-Essen/Duisb.	orange	orange	red	orange	orange
Uni Duisburg-Essen/Esse	grey	grey	green	orange	orange
Uni Düsseldorf	orange	red	orange	red	red

5 CHE-Ranking Principles

**No 4
no overall
score
but
multi-
dimensional
ranking**

1. Step: Personal indicators 2. 3. 4.

Please select up to **five** criteria from those available for the subject. Here is an (F) for facts and a (S) for students' opinion.

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)

Equipment

- PC-equipment (S)
- Media equipment (S)
- Workstations (S)
- Rooms (S)
- Library (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

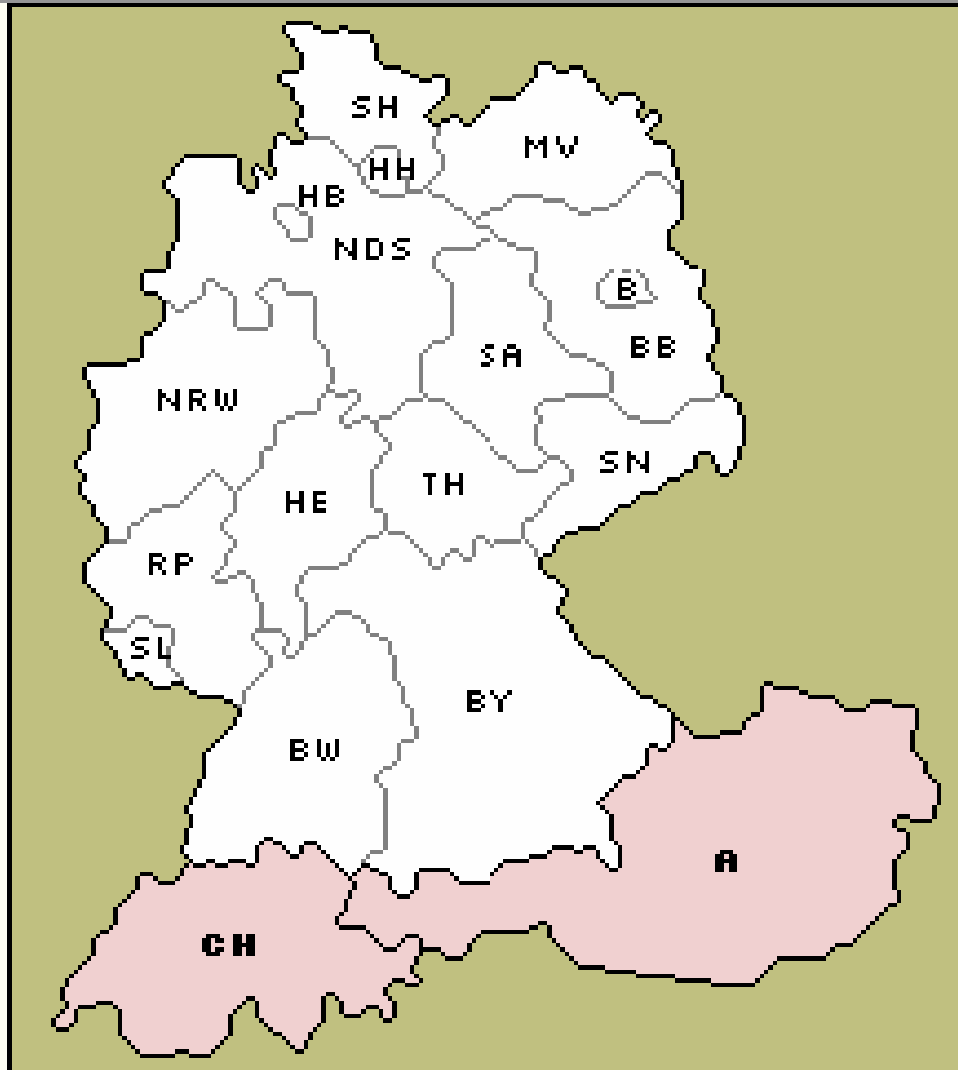
- short duration of studies (F)

Study location and higher education institution

- lots of higher education sport (F)
- low rent (F)
- small college location (F)
- Higher education sport (S)

5 CHE-Ranking Principles

No 5
inter-
national



Principles

High acceptance

**Taking into account specific
Characteristics of HE System**

first step: Switzerland and Austria

**2002/03: start with pilot project Austria:
mathematics, chemistry - unpublished**

**2003/04: project Austria – published results:
electrical engineering, English studies**

**2004/05: wSwitzerland & Austria: law, business
studies, economics, sociology , political sciences**

first step: Switzerland and Austria

perspective: other European countries

following principles:

- **discipline by discipline**
- **multidimensional**
- **rank groups**

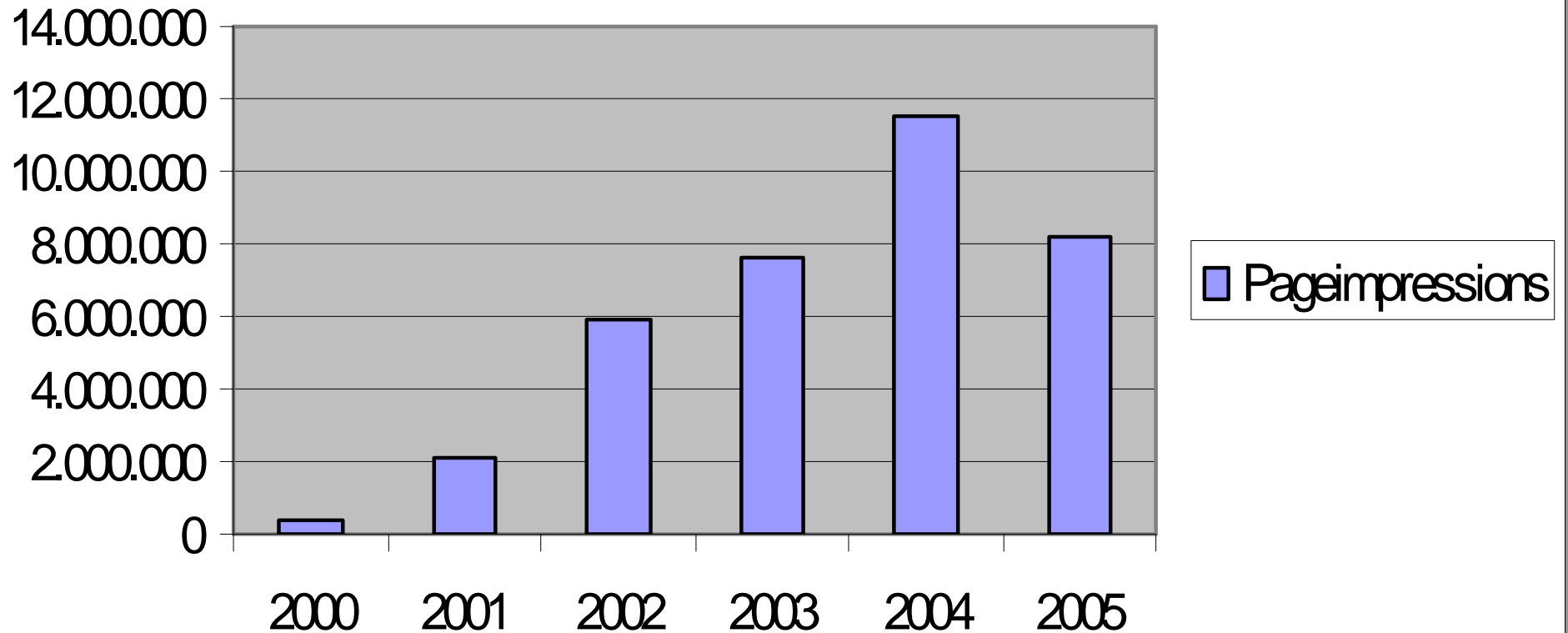
densification

recommen-
dations
DIE ZEIT

differentiation

overview
5 indicators; „*Studienführer*“

all datas + My Ranking
www.che-ranking.de

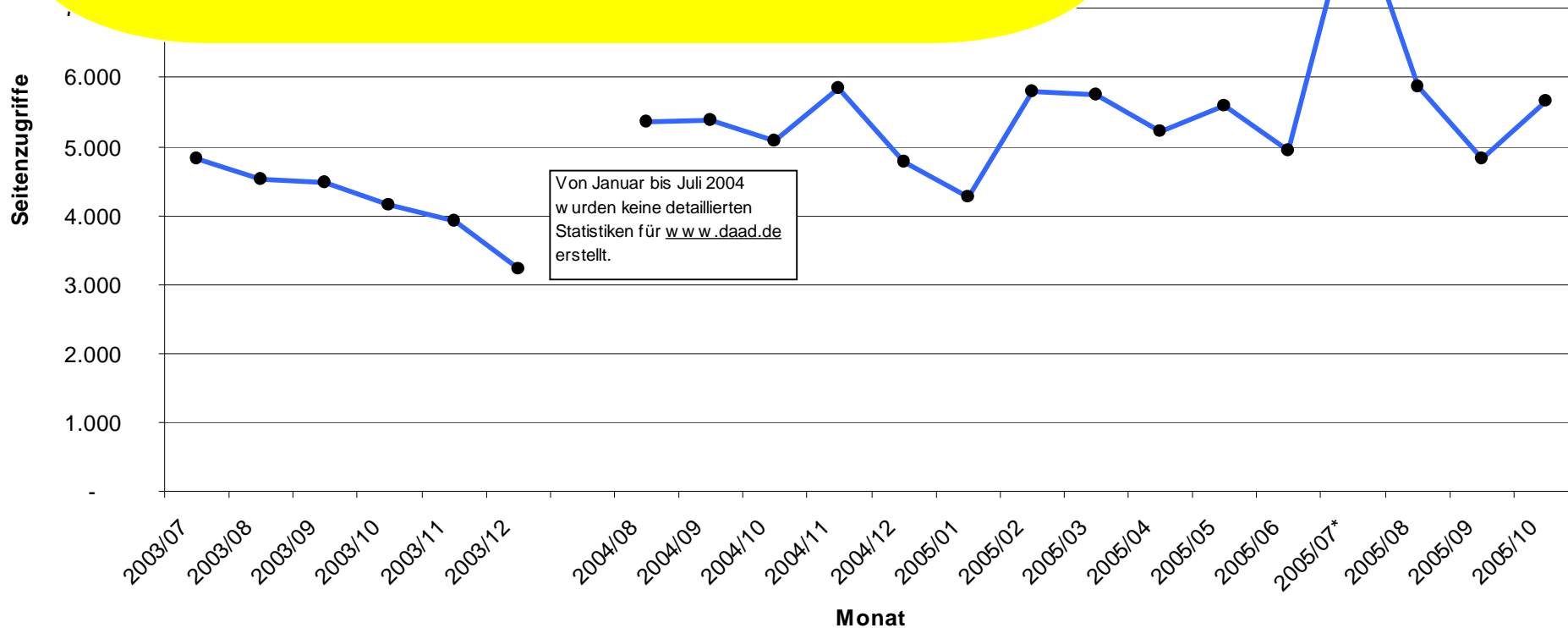


DAAD-Mail September 2005:

„Im August hatten wir 5.879 Seitenzugriffe pro Tag auf das Ranking, dies sind ca. 15% unserer gesamten Zugriffe im Bereich ‚Info für Ausländer‘, ein sehr guter Wert! Im August war das Ranking sogar beliebter als die DAAD-Stipendiendatenbank.“

s per day

www.ch.e.de



First year students 2004/05

63 % use rankings for information

48 % say rankings are useful information

50 % know CHE-Ranking

First year students

good ranking results are important in choosing a university

28 % in humanities

29 % in econ., soc. sciences

38 % in engineering

39 % in sciences

42 % in law & medicine

Psychology, Medicine

growing numbers of applications at universities with good ranking results

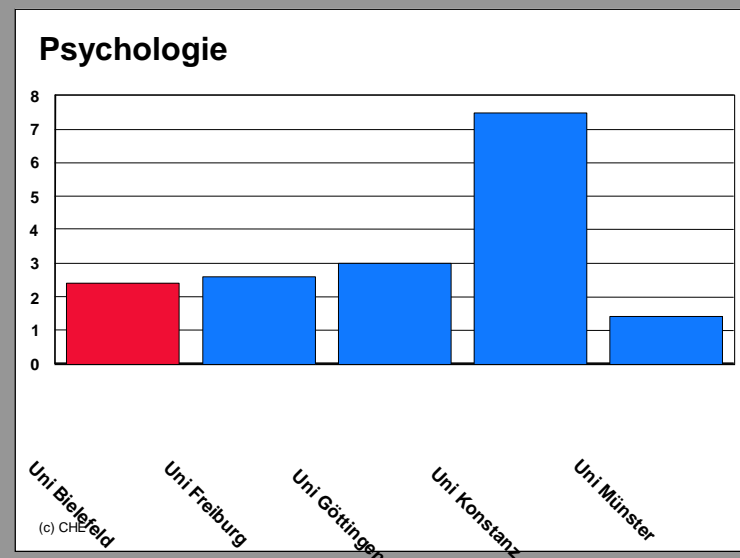
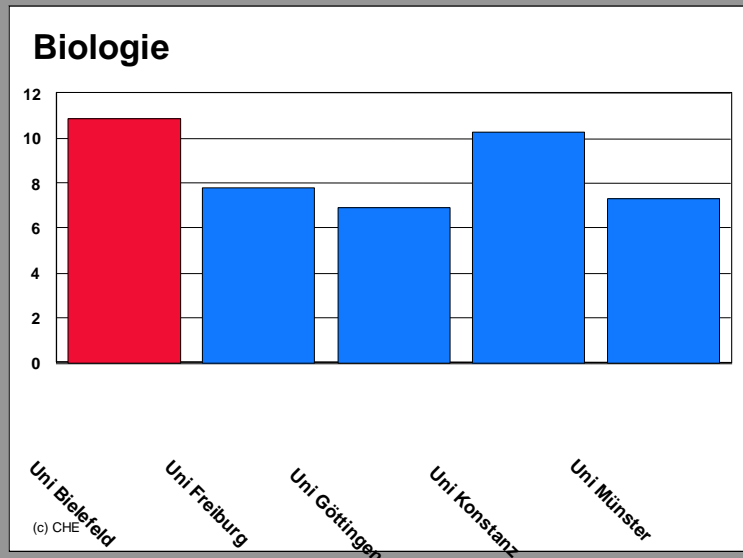
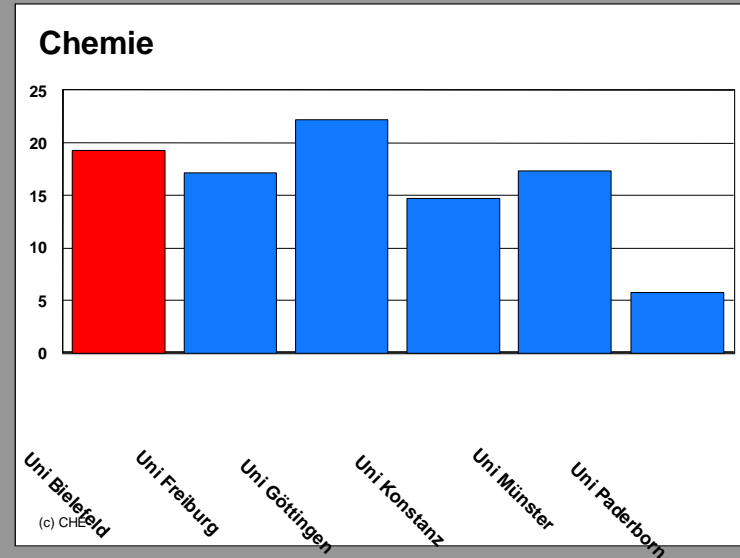
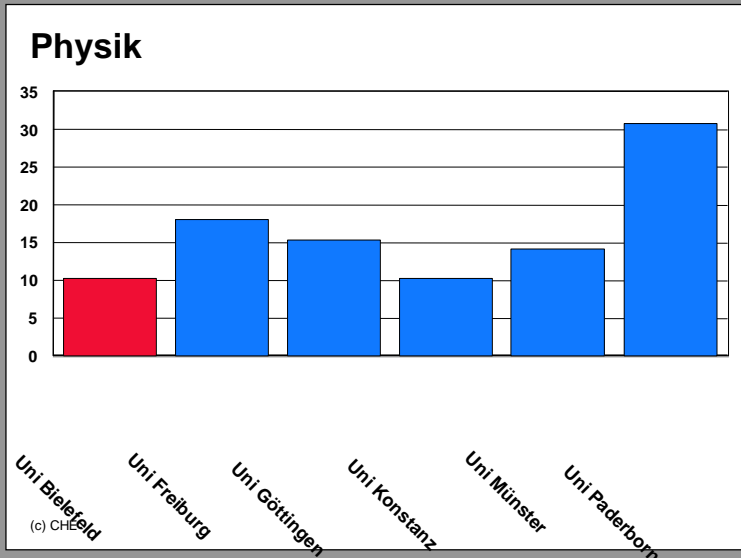
higher impact of good than of bad results

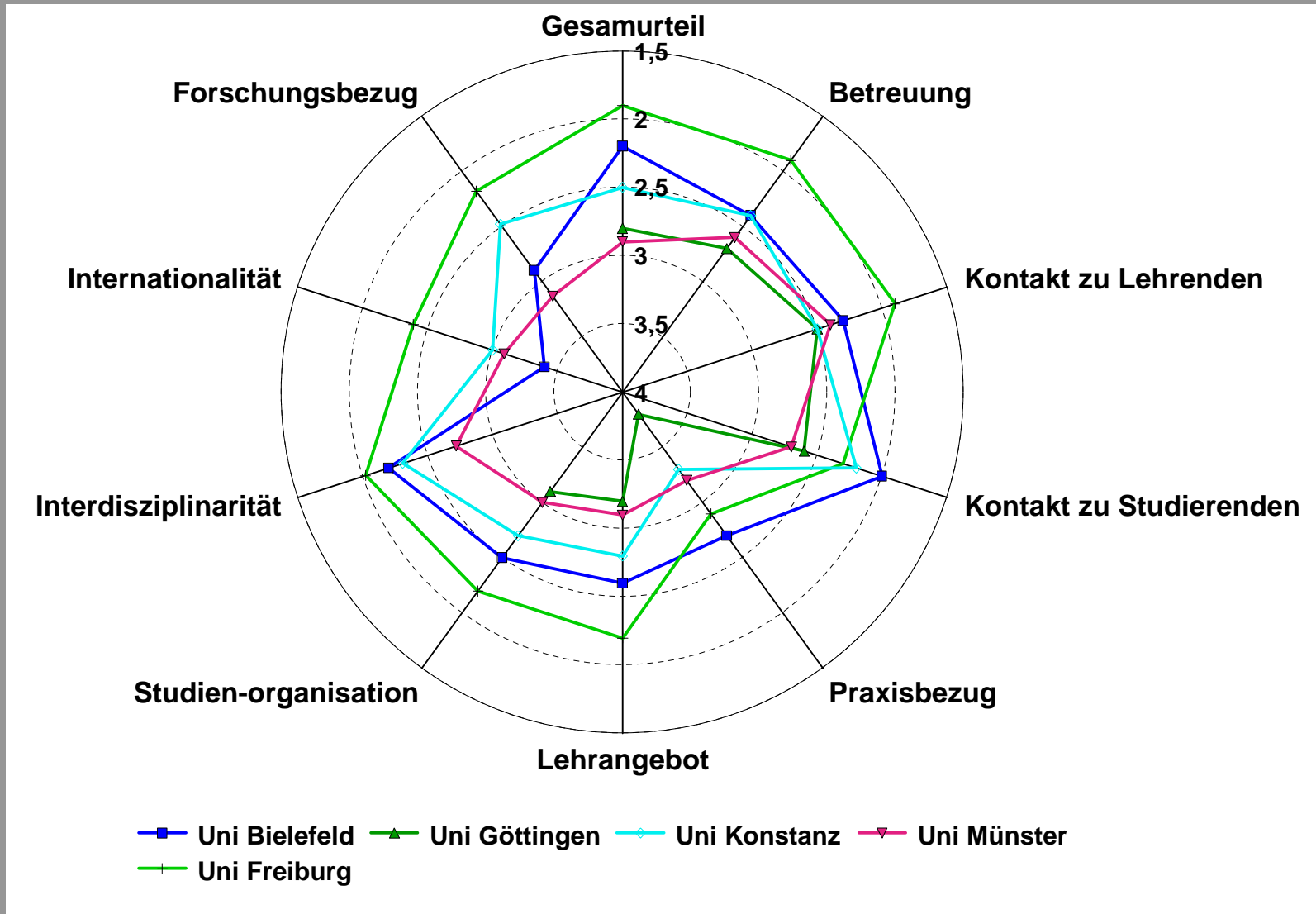
Universities

Analysis of strengths/weaknesses

Examples of reforms/ reorganisations

- Comparison self-image/profil with ranking data
- Benchmarking with 5 competing universities
- facts (e.g. about research, student evaluations)





Universities (DAAD-Survey 2005)

increasing nationwide student applicants

increasing number of first-year students

increasing third-party funds

good arguments in the internal discussion
about resources (<http://www.gate-germany.de/6.3.9.7.html>)

DAAD Survey 2005

at international level good rankings are important for the cooperation with external universities

DAAD will intensify the use of the CHE-Ranking in its marketing activities

Staff Manager / Recruiter / Headhunter

**Choice of universities for personnel
recruitment**

Classification of applicant certificates



aus: UniMagazin 7/2005: Erfolgreiche Suche nach den Besten? – oder wie beurteilen Personaler Hochschulrankings

„Während der Mittelstand sie offenbar eher zögerlich angeht, scheinen größere Konzerne sie häufiger als mögliche Entscheidungshilfe in die Personalauswahl einzubeziehen.“ (UniMagazin 7/2005).

„Überdurchschnittlich viele Bewerber kommen von Universitäten mit wissenschaftlicher Ausbildung auf hohem Niveau und internationaler Vernetzung. Insofern bestätigen die Ergebnisse von Rankings immer wieder unsere Recruiting-Praxis“
(Jost Schürmann, Boston Consulting Group“)

Indicators

city, university	students	study outcome
internatio- nalisation	teaching	ressources
research	labour market, employability	overall assessment (students, professors)

Each component comprises several indicators..., 35 in sum

... from different data sources...

research

< publications /citations
(bibliometric analysis)

< research grants
(faculties/departments)

< research reputation
(professors survey)

... facts as well as judgements

teaching

< staff-students-ratio (fact)

< student assessment of contact
between students and professors

< student assessment of course
organisation

Different methods for

- a) facts and
- b) student judgements

a) facts

Method: quartile distribution,

i.e.: the best
the worst
and the intermediate

25% belong to **top group**
25 % belong to **bottom group**
50 % to **middle group**

b) Students' judgements:

taking into account

- the mean for a university
- the number of cases at a university and
- the homogeneity/diversity within a university

i.e. a university is ranked **top**, if
the confidence interval of a university is completely
better than the overall mean of a discipline

a university is ranked into the **bottom group**, if
the confidence interval of a university is completely
worse than the overall mean of a discipline

