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What have we Learned about and from Rankings?

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We should have ‘one of our universities listed in the top 100.’ (President of Lithuania)

‘We want to become one of the top ten universities in the world.’ (Kim Sung Chul, Korea Advanced Institute of Science and Technology or KAIST)

Our goal is ‘to be among the top 50 universities in the world in the next 20 years.’ (U of Western Australia)

‘We aim to be recognised as one of the UK's top 10 universities, and as one of the world's top 50 research-intensive universities’. (U Glasgow)

‘What do we need to achieve by 2013? Two universities ranked in the top 20 worldwide’. (Ireland)

‘The government wants a first class university for international prestige...’ (Japan)

‘Clemson will be one of the nation’s top-20 public universities’.

‘There's no reason why America can't have more than one No. 1 institution’ (David T. Blasingame, University of Washington)

Themes

1. Growing obsession with rankings
2. Do rankings measure what counts?
3. How rankings are reshaping higher education
4. Where do we go from here?

1. Growing obsession with rankings

Significance of Global Rankings

•If higher education is the engine of the economy, then the productivity, quality and status of higher education and university-based research becomes a vital indicator :

- Attempt to measure knowledge-producing and talent-catching attractiveness of HEIs;
- Appear to (re)order global knowledge by giving weight and prominence to particular disciplines/fields of investigation, and their outputs and impact;
- Provide a framework or lens through which the global economy and national (and supra-national) positioning can be understood;
- Gauge national competitiveness as expressed by number of HEIs in top 20, 50 or 100…

Indicator of Global Competitiveness?

Top 100	Times QS			SJT Ranking		
	2007	2008	2009	2007	2008	2009
US	37	37	32	53	54	55
Europe	35	36	38	34	34	32
Australia/New Zealand	9	8	9	2	3	3
Asia Pacific (incl. Israel)	13	14	16	7	5	6
Canada	6	5	4	4	4	4
Latin America/Africa	0	0	0	0	0	0
Switzerland	1	3	4	3	3	3
UK	19	17	18	11	11	11
France	2	2	2	4	3	3
Germany	3	3	4	6	6	5
Japan	4	4	6	5	4	5
China (incl. HK)	5	5	5	0	0	0
Ireland	1	1	2	0	0	0
Sweden	1	2	2	4	4	3
Singapore	2	2	2	0	0	0
Russia	0	0	0	1	1	1

Higher Education Context

- Students have become savvy participants, consumers and customers as the link between HE and career/salary grows;
- Performance assessment of scientific-scholarly research is increasingly important, especially for publicly funded research;
- Greater focus on outputs and performance as mechanism for financing higher education and to actively encourage differentiation;
- Public calls for greater accountability and scrutiny, pressure for value-for-money, and investor confidence – especially in the current global recession.

Rankings Today

- Rankings part of US academic system for 100 yrs, but today increasing popularity worldwide
  - 45+ countries have national rankings
  - 11 global rankings - and growing.
- 17,000 HEIs worldwide, but obsessing about less than 100.

Most Influential Rankings

- **Global**
  - Shanghai Jiao Tong Academic Ranking of World Universities (ARWU) (2003)
  - *THE* QS World University Rankings (2004)
  - Webometrics (2004)
  - Performance Ranking of Scientific Papers for Research Universities (Taiwan) (2007)
- **Regional**
  - AsiaWeek (2000)
  - CHE ExcellenceRanking Graduate Programmes (2007)
- **Single-country**
  - Das CHE-HochschulRanking (Germany) (1980s)
  - *US News and World Report* (US) (1980s)
  - *Sunday Times*, *Guardian* (UK)
  - *Asahi* Shimbun (Japan) (1994)
- **Business Schools**
  - Financial Times
  - Business Week
- **Graduate Schools**
  - *US News and World Report* Best Graduate Schools

Recent Additions

- Leiden Ranking (Centre for Science and Technology Studies [CWTS] (2008) (http://www.cwts.nl/ranking/LeidenRankingWebSite.html)
- World's Best Colleges and Universities (US News and World Report [US] (2008) (http://www.usnews.com/sections/education/worlds-best-colleges/index.html)
- Global University Rankings (RatER (Rating of Educational Resources) (2009) (http://www.globaluniversitiesranking.org/)
- SCImago Institutions Rankings (SIR): 2009 World Report http://www.scimagojr.com/index.php
- EU Multi-dimensional Global University Ranking (to be piloted 2010) (http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/1942&format=HTML&aged=0&language=EN&guiLanguage=en)
- QS World University Rankings (from 2010)
- THE Thomson Reuters (from 2010)

Breaking new ground?

EU Ranking

- Link between classification and ranking ;
- Multi-dimensional ranking ;
- Overcoming ills of other rankings?
  - Absence of agreed definitions and comparable/available data;
  - Measure what's available rather than what is important.
- Likely usage and impact:
  - Profiling and benchmarking;
  - Resource allocation;
  - Create European super-league;
  - Restructure European HE.

THE World University Rankings

- 200 globally significant research institutions;
- Combination of peer review, scholarly outputs, citation patterns, funding levels and faculty characteristics –opinion data collected by Ipsos MORI;
- Likely usage and impact:
  - Narrow definition of 'world class' and exacerbates competition;
  - Annual rankings benefits best - resourced universities;
  - Widen gap between elite and mass.

2. Do rankings measure what counts?

Problems with Rankings

- No such thing as an objective ranking – because:
  - The evidence is never self-evident
  - Measurements are rarely direct but consist of proxies,
  - Choice of indicators and weightings reflect value-judgements or priorities of rankers.
- Rankings do not measure what people think they measure:
  - Each system measures different things – and are not directly comparable;
  - Measure what is easy and predictable;
  - Concentrate on past performance rather than potential;
  - Emphasis on quantification as proxy for quality.

SJT ARWU	■ Quality of Education	10%
	■ Quality of Faculty	
	No. Nobel Prize/Field Medal	20%
	No. HiCi Researchers	20%
	■ Research Output	
	No. Articles in Nature/Science	20%
	No. Articles in Citation Index	20%
	■ Size of Institution	10%
Times QS	■ Peer Appraisal	40%
	■ Graduate Employability	10%
	■ Teaching Quality/SSR	20%
	■ International Students	5%
	■ International Faculty	5%
	■ Research Quality/Citations per Faculty	20%
Taiwan	■ Research Productivity	
	No. Articles in last 11 years	10%
	No. Articles in current year	10%
	■ Research Impact	
	No. Citations in last 11 years	10%
	No. Citations in last 2 years	10%
	Avr. no Citations in last 11 years	10%
	■ Research Excellence	
	HiCi index of last 2 years	20%
	No. HiCi Papers, last 10 years	10%
	No. Articles in High-Impact Journals in Current Year	10%
	No. of Subject Fields where University Demonstrates Excellence	10%

Another Way to Measure Quality

	Overall Rank	Peer Review 40%	Employer 10%	Citations 20%	Student/ Faculty 20%	Int'l Faculty 5%	Int'l Students 5%
Cambridge	2	1	1	42	20	30	40
MIT	9	6	10	5	59	351	44
Cal Tech.	10	23	142	1	66	1	69
UCL	4	22	5	68	15	41	32
Heidelberg	57	52	256	176	94	188	111
LSE	67	54	4	443	220	13	1
NUS	30	19	38	92	329	14	15
Rice	100	193	283	49	67	298	160
DIT	326	493	202	577	53	450	357

Don’t measure what you think

- Bibliometrics:
  - Main beneficiaries are physical, life and medical sciences because these disciplines publish frequently with multiple authors.
  - Assumption that journal quality is a proxy for article quality.
- Citations:
  - Journal impact factors are inadequate measures of research performance:
  - Reputational or halo factor implies that certain authors are more likely to be quoted than others;
- Reputation is susceptible to bias, self-perpetuating quality and gaming
  - ‘Overestimation may be related to good performance in the past, whereas underestimation may be a problem for new institutions without long traditions’ (Federkeil, 2009, 30)

Do Rankings Measure Quality?

- Each ranking system uses different indicators with different weightings – hence each has a different concept of quality;
- Different ranking systems 'provide consistent data for some institutions and inconsistent ones for others' (Usher and Medow, 2009, p13);
- Emphasis on research distorts and undermines other aspects of higher education: teaching and learning, engagement, knowledge exchange and technology transfer;
- Rankings measure the benefits of age, size and money. They benefit large institutions and countries which have more researchers and hence more output.
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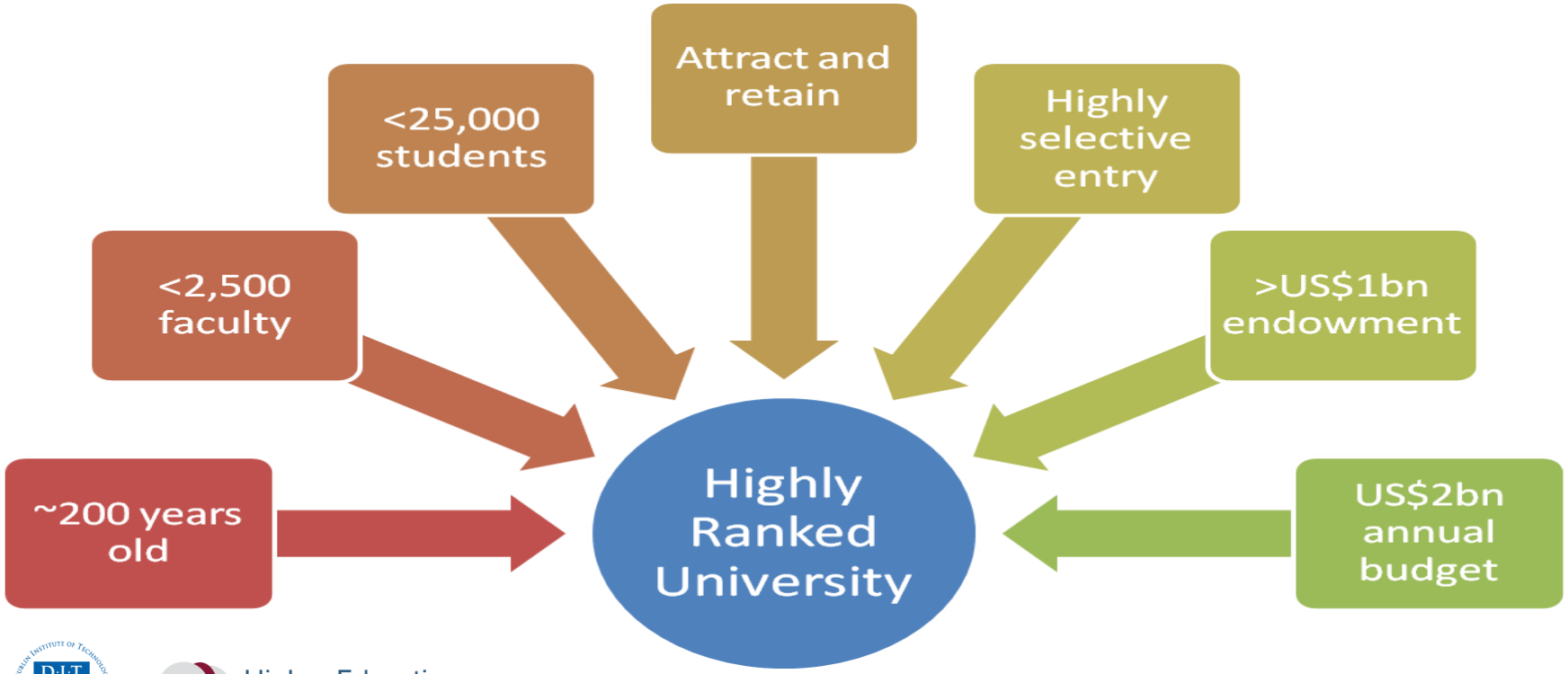
What Global Rankings telling Us

Because age and size matters, there is a super-league of large, well-endowed, comprehensive universities, usually with medical schools and in English-language countries.



3. How rankings are reshaping higher education

Changes within HE

- . 2002 Association of Governing Boards study
  - 51% university presidents had attempted to improve their rankings;
  - 50% used rankings as internal benchmarks;
  - 35% announced the results in press releases or on the web.
  - 4% established a task force or committee to address rankings,
  - 20% ignored them (Levin, 2002, 12, 14-15).
- 2006 International survey
  - 63% HE leaders took strategic, organisational, managerial or academic action;
  - 50% use rankings for publicity press releases, official presentations, and on web;
  - 50% monitor performance of peer institutions worldwide;
  - 40% considered an HEI's rank prior to entering into discussion with them;
  - 8% took no action.

Examples of How HE is responding (1)

- Focus on institutional performance and benchmarking;
- Emphasis on strategic positioning
  - Strategic planning
  - Priority setting
  - ‘Modernisation agenda’
- Professionalization of institutional services
  - Institutional research
  - Recruitment
  - Marketing and branding
- Performance management
  - Targets and resource allocation
  - Academic contracts tied to outcomes

	Specific Actions	Weightings
Research	• Relatively develop/promote bio-sciences rather than arts, humanities & social sciences • Allocate additional faculty to internationally ranked departments • Reward publications in highly-cited journals • Publish in English-language journals • Set individual targets for faculty and departments	SJT = 40% Times = 20% Taiwan = 70%
Organisation	• Merge with another institution, or bring together discipline-complementary departments • Incorporate autonomous institutes into host HEI • Establish Centres-of-Excellence & Graduate Schools • Develop/expand English-language facilities, international student facilities, laboratories	SJT = 40% Times = 20%
Curriculum	• Harmonise with EU/US models • Discontinue programmes/activities which negatively affect performance • Grow postgraduate activity in preference to undergraduate • Favour science disciplines • Positively affect student/staff ratio (SSR)	SJT = 10% Times = 20%
Students	• Target high-achieving students, esp. PhD • Offer attractive merit scholarships and other benefits • Increase selectivity index	Times = 15%
Faculty	• Head-hunt international high-achieving/HiCi scholars • Create new contract/tenure arrangements • Set market-based or performance/merit based salaries • Reward high-achievers • Identify weak performers • Enable best researchers to concentrate on research/relieve them of teaching	SJT = 40% Times = 25% Taiwan = 30%
Academic Services	• Professionalise Admissions, Marketing and Public Relations • Ensure common brand used on all publications • Advertise in high-focus journals, e.g. *Science* and *Nature*	Times = 40%

Impact on Students

Evidence is ambiguous, but clearer pattern for international postgraduates:

- 40% US students use newsmagazine rankings, and 11% said rankings were important factor in choice (Mcdonagh et al 1997, 1998);
- 61% UK students referred to rankings before making choice, and 70% considered they were important/very important (Roberts, 2007, 20) ;
- 92% int'l students considered UK rankings important/very important to inform choice (Roberts, 2007, 5, 18-20);
- 60% prospective German students 'know rankings and use rankings as one source of information among others' (Federkeil, 2007);
- 1/3 international students in Sweden used rankings as source of information;
- 1/3 Australian respondents used rankings; 75% influenced (James et al, 1999).

Impact on Social Selectivity

- Above-average students make choices based non-financial factors, e.g. reputation (Spies, 1973, 1978).
- Full-pay students likely to attend higher ranked college (even by a few places) but grant-aided students less responsive.
- US Universities increasing recruitment of high SAT scorers to influence student/selectivity metric;
    - Even in national admissions systems, HEIs 'manipulate' supply and demand to affect selectivity index.
- In binary systems, evidence suggests students migrating out of 'lower status' institutions.

Impact on Employers

- Employers have implicit rankings based on own experience which is self-perpetuating
    - 'Systematic' approach by large/int'l businesses rather than SME.
- US accounts claim law firms regularly use *USNWR* rankings to 'determine the threshold for interviews' (Espeland and Sauder, 2007, 19).
- UK study shows employers favour graduates from more highly ranked HEIs
    - 25% of graduate recruiters interviewed 'cited league tables as their main source of information about quality and standards' (University of Sussex, 2006, 87, 80, also 87-92).
- Boeing to Rank Colleges by Measuring Graduates' Job Success
    - To show which colleges have produced workers it considers most valuable because it wants 'more than just subjective information' and 'facts and data' (Chronicle of HE, 19 September 2008).

Impact on Academic/Industry Partners

- Academic Partnerships:
  - 40% respondents said rankings integral to decision-making about international collaboration, academic programmes, research or student exchanges
  - 57% thought rankings influencing willingness of other HEIs to partner with them.
  - 34% respondents said rankings influencing willingness of other HEIs to support their institution's membership of academic or professional organisations.
- Almost all universities chosen for Deutsche Telekom professorial chairs used rankings as evidence of research performance (Spiewak, 2005) .
- Boeing will use performance data to influence 'choice of partners for academic research and...decisions about which colleges it will ask to share in the $100-million' Boeing spends course work and supplemental training for employees. (Chronicle of HE, 19 September 2008).

Impact on Government

- Re-structuring of HE system and prioritisation of some universities:
  - France, Germany, Russia, Spain, China, Korea – among many others – have launched initiatives to create 'world class' universities;
  - Danish government aims to have 'at least' 1 university in Euro top 2020;
  - Finland establishing new Aalto University as 'world class' university.
- Macedonia Law on HE (2008) automatically recognises top 500 Times QS, SJT or USN&WR;
- Dutch immigration law (2008) targets 'foreigners that are relatively young and received their Bachelor, Master or PhD degree...from a university...in the top 150' of SJT/Times QS;
- Singapore Foreign Specialist Institute criteria for collaboration.

Rankings and the (re)Construction of Knowledge

- Focus on classical definition of knowledge and scientific achievement:
  - Over-reliance on research that is easily measured;
  - Over-emphasis on bio-sciences, with limited accuracy for social science, and no humanities and arts;
  - Emphasis on quantification as proxy for quality.
- Focus on traditional outputs, e.g. peer-publication & citations:
  - Narrowly define s 'impact' as that which occurs only between academics;
  - Ignores/undermines engagement, knowledge exchange, technology transfer.
  - Emphasis on short-term outputs .
- Hierarchically orders/stratifies theoretical and conceptual knowledge, and their institutions (see Howard, *Chronicle of HE*, 2008).

4. Where do we go from here?

Positive and Perverse Effects

- Cross-national/jurisdictional comparisons are inevitable by-product of globalization and will intensify in the future;
- Creating sense of urgency and accelerating modernisation agenda;
- Driving up institutional performance and providing some public accountability and transparency;
- Pushing HE to focus on quality and accurate data collection/benchmarking.
- Distorting the focus of HE away from research-informed teaching towards research, in the narrowest sense;
- Reshaping HE and HE systems:
    - Driving wedge between mass and elite HE institutions,
    - Aligning national /institutional priorities to indicators.
- Changing the way we think about HE, and we measure performance.

Measuring the Quality of the System

'With rapid technology changes, single universities or research institutes may not be able to accommodate the needs of business development for skills, knowledge and innovation....[T]he most successful high-science locations today are those that take a multiple form, rather than a link between firms and a single university. ' (OECD, 2006, p119).

'[W]e must address the rights of all citizens to share in [society's] benefits' (Australia Review of HE, 2008, pxi)

- *University Systems Ranking. Citizens and Society in the Age of Knowledge* - Lisbon Council 2008
- *The QS SAFE (*2008) System, Access, Flagship, Economics
- *Washington Monthly* (2005) Social mobility, Research and Service
- *Saviors of Our Cities: Survey of College and University Civic Partnerships*

QS SAFE – National System Strength Rankings		Lisbon Council University System Ranking	
Country	***Rank***	***Country***	***Rank***
United States	1	Australia	1
United Kingdom	2	United Kingdom	2
Australia	3	Denmark	3
Germany	4	Finland	4
Canada	5	United States	5
Japan	6	Sweden	6
France	7	Ireland	7
Netherlands	8	Portugal	8
South Korea	9	Italy	9
Sweden	10	France	10
Switzerland	11	Poland	11
China	15	Hungary	12
Ireland	17	Netherlands	13
Finland	18	Switzerland	14
Austria	20	Germany	15
South Africa	30	Australia	16
Turkey	40	Spain	17

Conclusion (1)

• Rankings are manifestation of globalization and marketisation of HE – and the 'battle for world class excellence'.

• They have gained popularity because they (appear to) gauge world class status, provide comparative information and accountability, and measure global competitiveness – in a simple, user-friendly format;

• Rankings are helping reshape higher education – intentionally and unintentionally, and with positive and perverse outcomes:

  • Underpin power relationships at an institutional, national and global level;

  • Emergence of 'model' of global university 'unfettered by nation states' (EUA, 2008) – but HE is not an innocent victim.

Conclusion (2)

- Public policy imperative is being lost in the (self-interest) belief that elite research universities have a bigger impact on society and the economy, or have higher quality – especially during the GFC:

  - 'Sheriff of Nottingham' model seeks to concentrate resources (Currie, *Nature* 09) by valuing some institutions and research more highly;

  - But even in relation to scientific research, rankings do great damage – inducing HE and governments to adopt simplistic solutions and skew systems, research agendas and policies to become what is measured.

Conclusion (3)

• HE needs to be responsive, responsible, quality assured and assessable – however...

- Is it better to have multiple rankings rather than one or two major ones?
- Is classification an instrument for better ranking?
- Because it is impossible to control the use to which the information is put, the methodology and choice of indicators is vital.
- Absence of internationally comparable definitions and data means cross-national comparisons suffer from similar defects and distortions .

Conclusion (4)

• ‘World class excellence’ has become a mantra, comparable to using GDP as the ‘key’ indicator of economic growth.

• But the history of rankings shows measuring the wrong things can produce distortions and perverse actions – by government, institutions and individuals.

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http://www.oecd.org/edu/imhe/rankings