Moving Beyond Institutional Rankings: Towards a World-Class System

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‘What do we need to achieve by 2013? Two universities ranked in the top 20 worldwide’ (Cronin, 2006).

‘We want our higher education system to be world class so wherever students are in this country, whatever institution they’re at, they’re getting a world class education.’ (Gilliard, 2008)

‘This strategic plan…reflects our unswerving commitment….to transform [xxx] University, within the next 10 years, into a world-class institution that will be ranked among the top 30 leading universities in the world.’

‘Small economies such as Singapore, Australia and Switzerland can’t compete with giant economies. In the global economy, small means you have to be focused and nimble, find a niche and work with partners’ (Shih Choon Fong, President, National University of Singapore, 2007)

Themes

1. Globalisation and the Rise of Rankings
2. How Rankings Impact on Higher Education
3. Beyond Institutional Rankings
4. Conclusion

1. Globalisation and the Rise of Rankings

The Policy Context

- Knowledge becoming the '*one* factor of production sidelining both capital and labor' (Drucker, 1998)
- 'Battle for Brainpower' (Economist, 2006), 'Scramble for students' (Matsumoto and Ono, 2008, p1) or 'Skilled Migration' (OECD, 2008)
- 'New Public Management'
- Student is savvy participant/consumer/customer as link between HE and career/salary grows.

Rankings and the K-economy

- If HE is the engine of the economy, then productivity, quality and status of HE/HE research is vital indicator;
- Global competition reflected in the rising significance and popularity of rankings
  - Attempt to measure knowledge-producing and talent-catching capacity of HEIs,
  - Appear to (re)order global knowledge by giving weight and prominence to particular disciplines/fields of investigation,
  - Provide a framework or lens through which the global economy and national (and supra-national) positioning can be understood by giving a 'plausible' explanation of world excellence,
  - Measure national competitiveness as expressed by number of HEIs in top 20, 50 or 100…
- There is a gap between national/supra-national ambitions and global performance.

Trends

College guides: fulfil public service role, helping and informing domestic undergraduate students and their parents.

Evaluation and assessment of research, and teaching & learning or whole institutions for QA and accreditation.

Benchmarking: used to manage more strategically, effectively and efficiently as systematic comparison of practice and performance with peer institutions.

National rankings

- Modernisation of HE management, strategic planning and accountability/public disclosure,
- 45+ countries have a national ranking system.

Global rankings next logical step. The rising significance and popularity of worldwide comparisons.

Obsession With Rankings

- Satisfy a ‘public demand for transparency and information that institutions and government have not been able to meet on their own.’ (Usher & Savino, 2006, p38)
  - Cue to students/consumers re: monetary ‘private benefits’ of university attainment and occupational/salary premium,
  - Cue to employers what they can expect from graduates,
  - Cue to government/policymakers re: quality, international standards & economic credibility,
  - Cue to public because they are perceived as independent of the sector or individual universities,
  - Cue to HEIs because they want to be able to benchmark their performance.

2. How Rankings Impact on Higher Education

Ranking Status

Despite methodological concerns, HEIs taking rankings very seriously…

- 58% respondents unhappy with current rank;
- 93% and 82% respondents, respectively, want to improve their national or international ranking.
- 70% of all respondents wish to be in top 10% nationally, and 71% want to be in top 25% internationally.

Despite context, mission, age or size – all HE drawn into global marketplace.

Impact on Students (1)

- *Domestic undergraduate*: rely on local intelligence, national rankings and entry scores BUT mobility on the rise;
- *Domestic postgraduate*: becoming internationally mobile and ranking sensitive;
- *International undergraduate*: influenced by institutional partnerships & familial links – some rankings sensitivity;
- *International postgraduate*: Highly receptive to global rankings
  - Rankings = short-listing mechanism
  - Rankings influence employment opportunities.

Impact on Students (2)

- 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).
- Applicant behaviour conditioned by rankings (Ehrenberg, 2004, 26) but may affect middle-ranking/new universities more than top ranked (Gunn and Hill, 2008).

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.
- 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

- French, German and Russian governments introduced initiatives to boost performance in rankings:
  - French Senate Debate, Conference and Declaration
  - German Excellence Initiative
- Malaysian government established Royal Commission of Inquiry to investigate why rankings of two top universities fell by almost 100 places within a year (Salmi & Saroyan, 2007, 40) .
- Governments use rankings as an indicator of 'value-for-money' w/ ref to scholarship for int'l study (Clarke, 2007, 43; Salmi & Saroyan 2007, 52).
- 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.

Impact on Faculty and Academic Work

- Increased emphasis on academic performance/outputs
  - Contracts tied to metrics/performance,
  - New salary and tenure arrangements,
  - Active head-hunting of high-achievers.
- Rankings used to identify under-performers.
- Impact on Staff Morale.
- Faculty not innocent victims:
  - Rankings confer social and professional capital on faculty in high-ranked HEIs,
  - ‘Research power’ in deregulated global division of academic labour.

How are Institutions Responding?

63% HE leaders have taken strategic, organisational, managerial or academic actions in response to the results.

Of those,

- Overwhelming majority took either strategic or academic decisions and actions.
- Only 8% respondents indicated they had taken no action.

Mapping Institutional Actions

	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%
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	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	SJT = 40% Times = 25%
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%

To summarise...

1. Audience/User goes beyond the usual suspects,
2. High achievers – students and faculty – are particularly sensitive to rankings,
3. Rankings influence decision-making, and incentivize behaviour with positive and perverse effects,
4. HE are focusing resources on fields and activities that will positively affect position, status and reputation.

3. Beyond Institutional Rankings

Legacy of Rankings

Rankings = metaphor for competition and driver of HE reform

- Using rankings to inform policy and restructure HE system
  - As a ‘market mechanism’ to drive difference,
  - To concentrate resources in ‘Centres of Excellence’.
- Linking indicators to resource allocation and accreditation
  - Shift from input → outcome/output → impact,
  - Will intensify as economic/financial situation tightens.
- Cross-national comparisons as indicator of HE performance.

Indicator of Global Competitiveness?

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

What Global Rankings telling Us

- Of world's 17,000+ HEIs, research concentrated in top 500.
- There are ~250 world-class research-intensive institutions.
- There is a 'super-league' of ~25 world-leading institutions:

Concentrating Resources: Favoured Strategy

1. Concentrate research excellence and funding in small number of elite universities;
2. Create greater vertical (reputational) differentiation;
3. Neo-liberal model: using ranking as market indicator/shaper.

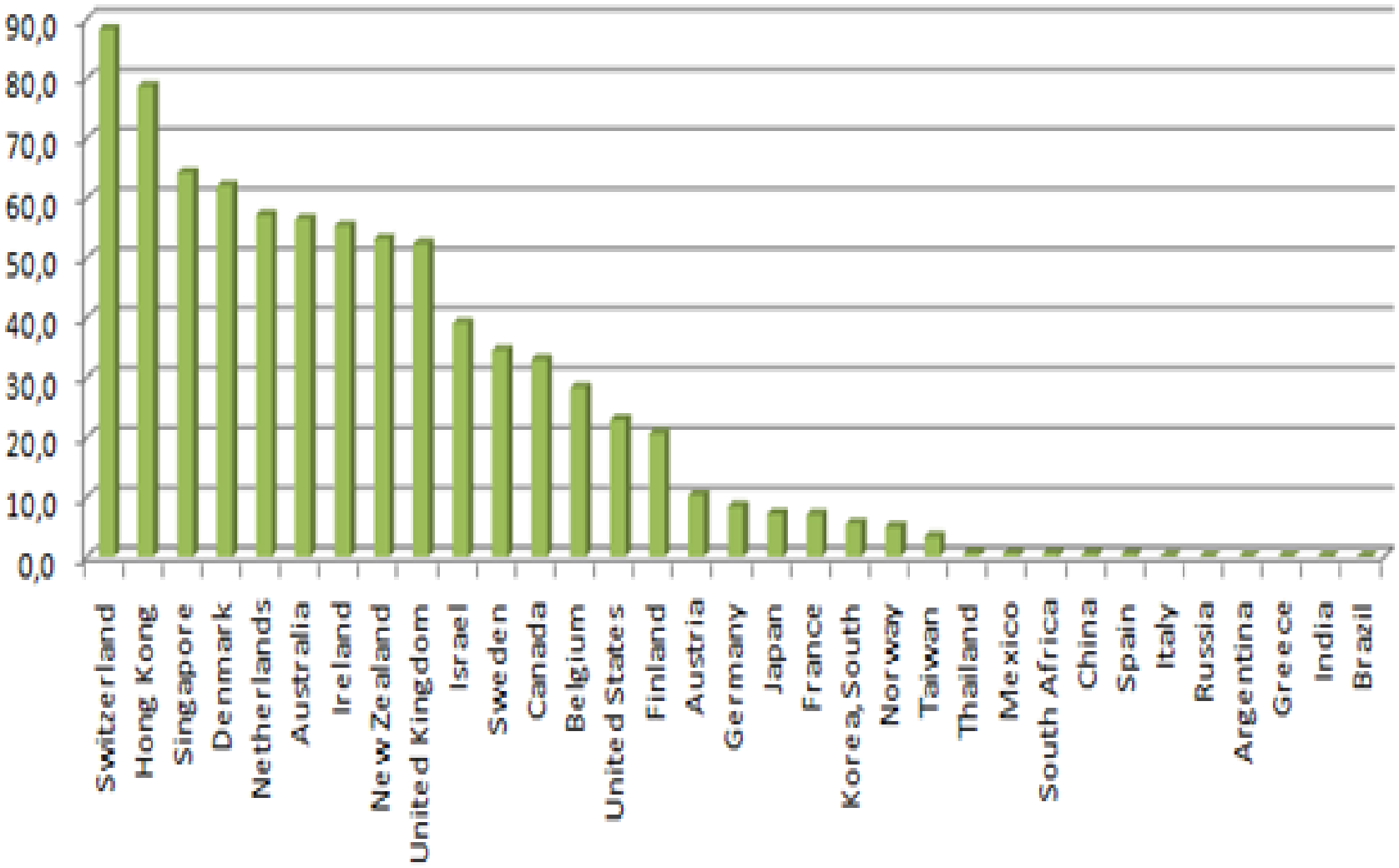
- China 985 and 211 Projects
- Germany Excellence Initiative
- Brain Korea 21 Program
- Japan Top 30 & Global Centers of Excellence
- Canada Networks of Excellence
- Taiwan Development Plan for University Research Excellence
- France ‘Operation Campus’

Does Strategy Work?

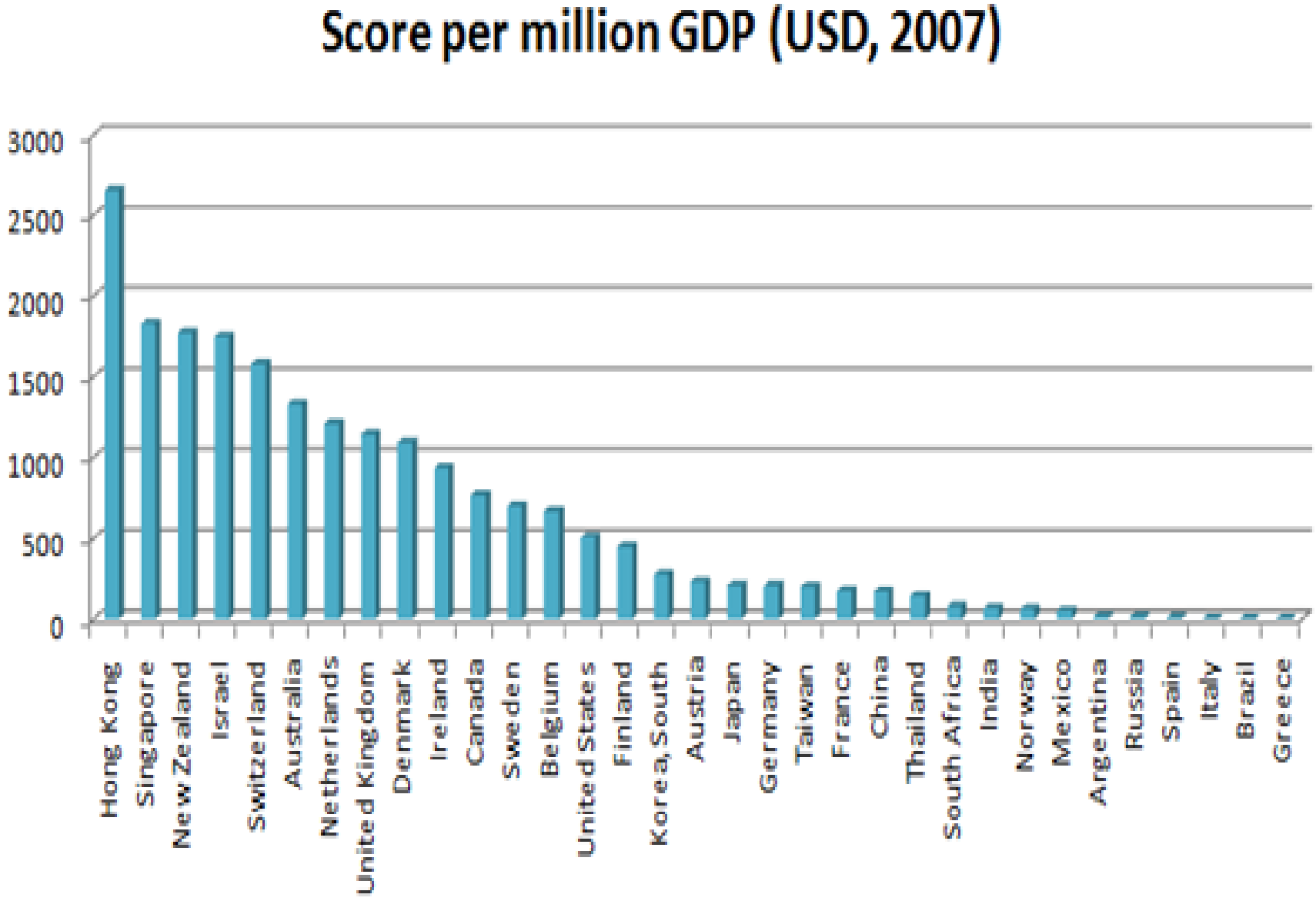
- Mergers and concentration done for ‘right reason’ can increase efficiency, productivity, and quality.

But…

- No evidence that more concentrated national systems generate higher citation impact than those in which article output is more evenly distributed (Moed, 2006);
- Concentration/specialisation most relevant in only 4 disciplines of ‘big science’ (Moed, 2006);
- Could reduce national research capacity with ‘knock-on consequences for regional economic performance and the capacity for technology innovation’ (Lambert, 2003, p6).
- Total investment in R&D is main indicator of success rather than manner in how funding distributed between institutions (Hoj, nd; Barlow, 2007)



Times QS, 2008, http://blog.beerkens.info/index.php/tags/topic/ranking/



Times QS, 2008, http://blog.beerkens.info/index.php/tags/topic/ranking

Who can Afford this Reputation Race?

- There are very few ‘movers’ on the SJTU index.
- Major non-US movers in the Top 100 (since 2003) are the result of mergers and strategic alliances:
  - Manchester (gained 49 places),
  - Copenhagen (21 places)
  - Paris XI (24 places), Paris VI (UPMC) (21 places).
- Access to top 100, for the foreseeable future, is beyond most nations/HEIs – without impoverishing the rest of the system or sacrificing other social/political objectives.
- ‘World-class University’ estimated to cost min. $1.5-$2b year operation (Usher 2006; Sadlak & Liu 2007; Sowter, 2008).

An Alternative Strategy

1. Create diverse and coherent portfolio of differentiated high performing, globally-focused institutions and student experiences;
1. Aim for greater horizontal (mission) differentiation;
2. Social-democratic model: supporting excellence wherever it occurs – adopting a 'whole of country' strategy.

- Australia: *Review of National Innovation System* (2008), *Review of Higher Education* (2009)
- Norway: *Review of Higher Education* (2008)
- Catalonia: *University of Catalonia* (2008)

Ranking World Class Systems (1)

Rank	Country	Score
1.	United States	100
2.	United Kingdom	98
3.	Australia	94
4.	Germany	92
5.	Canada	92
6.	Japan	90
7.	France	89
8.	Netherlands	86
9.	South Korea	79
10.	Sweden	79
11.	Switzerland	79
12.	Italy	77
13.	Belgium	77
14.	New Zealand	76
15.	China	75
16.	Hong Kong	72
17.	Ireland	71
18.	Finland	70
30.	South Africa	54
40.	Turkey	35

- *System*: No. HEIs ranked 500 or higher ÷ average position.
- *Access*: Total FTE at top 500 HEIs ÷ population size.
- *Flagship*: normalized score based on performance of leading university.
- *Economic:* performance relative to investment.

QS SAFE - National System Strength Rankings

Ranking World Class Systems (2)

Overall Rank	Country	Overall Score
1	Australia	30.6
2	UK	31.1
3	Denmark	39.1
4	Finland	40.8
5	USA	49.0
6	Sweden	49.2
7	Ireland	49.2
8	Portugal	54.3
9	Italy	60.9
10	France	62.2
11	Poland	64.4
12	Hungary	64.5
13	Netherlands	69.6
14	Switzerland	70.3
15	Germany	72.5
16	Austria	76.4
17	Spain	79.4

- *Inclusiveness* – participation rates
- *Access* – Threshold of skill aptitude required for HE graduation.
- *Effectiveness* – Value of HE to labour market as per wage premia.
- *Attractiveness* – Ability to attract international students.
- *Age range* – Lifelong learning capacity as % 30-39 year olds enrolled.
- *Responsiveness* – ability of system to reform and change – measured by speed/effectiveness Bologna Declaration.

University Systems Ranking. Citizens and Society in the Age of Knowledge. Lisbon Council, 2008.

Characteristics of World Class System

- International reputation for participation rates/educational attainment assessed against OECD/other benchmarks;
- Produces graduates with skills/knowledge required to compete in the global employment market;
- Ensures every university identifies/builds on its research and/or teaching strengths and has a distinctive internationally regarded reputation/focus,
- International reputation for research;
- Recruits staff and students from international market;
- Systematically benchmarks its entire system, universities and departments worldwide;
- Supports lifelong learning opportunities for citizens;
- Attracts a high proportion of postgraduate students, both taught and research;
- Contributes to generation of knowledge/innovative ideas making a major contribution to society and our times.

4. Conclusion

Positive and Perverse Effects

- Creating sense of urgency and accelerating modernisation agenda;
- Driving up institutional performance and providing some public accountability and transparency;
- Distorting the focus of HE away from innovation eco-system towards ‘science’ in the narrowest sense;
- Reshaping HE by aligning national and institutional priorities – education and research – to indicators;
- Challenging government, HEIs and the public to (re)think HE, and how and what should be measured.

Urban Myths (1)

1. Rankings provide useful comparative information about the performance of HEIs facilitating student choice & benchmarking.

While some rankings do include metrics on teaching and learning, most are focused on (life-science) research.

2. Indicators are 'plausible'/meaningful measurements of research and knowledge creation.

They are the only publicly available comparable data.

Indicators do incredible damage to the RDI enterprise.

Urban Myths (2)

3. High ranked HEIs are better than lower ranked/not ranked institutions.

According to the IAU, there are 17,000 HEIs worldwide. Since when does being in the top 3% mean failure?

4. Concentrating research in a few elite institutions or scientific disciplines will 'lift all boats'.

Not obvious this kind of investment will create patentable knowledge that can be exploited, while concentration could reduce over-all national research capacity.

Conclusion (1)

- Rankings have gained popularity because they (appear to) gauge world class status, provide accountability and measure national competitiveness;
- Growing tendency to measure outputs to ensure value-for-money, especially in ‘bad times’. History of rankings shows measuring the wrong things can produce distortions.
  - Even in relation to scientific research, rankings do great damage to the research enterprise.
  - Clarity of purpose, and choice of metrics (and weightings) are critical.

Conclusion (2)

- The current recession is likely to be harder and longer in some countries. Governments/EU should:

1. Target 3% of GDP for investment in R&D recognising that research productivity is driven by investment and a strong competitive system that rewards excellence wherever it occurs;

2. Develop benchmarks which reflects its innovation needs and assess performance against those KPIs;

3. Mobilise and amplify the potential of the whole HE system and its benefits to society at large.

‘Not everything that counts can be counted, and not everything that can be counted counts.’

(Sign hanging in Einstein's office at Princeton)

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