The Emperor has no Clothes?: Rankings and the Shift from QA to World-class Excellence

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The Emperor Has No Clothes? Rankings and the Shift from QA to World-Class Excellence

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

‘This is the opportunity for more of our universities to emerge as world-class institutions. More of our universities should aim to be within the top 100 internationally and I would like some of our universities to aspire to the top 10’ (Bishop, 2007).

‘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.’

‘To be number two – that would be good – and to be among the first ten universities in Germany is also a goal. We are ten or eleven so it differs between the different rankings so that’s a point. So we might reach number five or six, would be possible.’
Themes

1. Why Rankings?

2. Can/Do Rankings Measure Quality?

3. How Rankings Impact on Higher Education

4. Moving Beyond Rankings
1. Why Rankings?
Knowledge has become the foundation of economic growth, social development, and national competitiveness.

If higher education is the engine of the economy, then the productivity, quality and status of HE and HE research becomes a vital indicator.

But many OECD countries face sharp demographic shifts evidenced by the greying of population and a decline in PhD graduates.

Countries with high levels of international students benefit from the contribution they make to domestic research and development’ (OECD, 2007, p34).

Global competition is reflected in the rising significance and popularity of rankings which attempt to measure knowledge-producing and talent-catching capacity of HEIs.
Rise in Popularity and Notoriety

- Rankings part of US academic system for 100 yrs, but today increasing popularity worldwide

- Use/audience for national rankings on the rise, but worldwide rankings having increasingly wider penetration
  - Near-obsession with rankings
  - Coverage in popular press rising
  - Statements by politicians, policy-makers, etc

- 17,000 HEIs worldwide, but obsessing about less than 100.
Global Rankings

- Rankings appear to order global knowledge and provide a framework through which the global economy can be understood.

- Rankings used to measure national competitiveness as expressed by number of HEIs in top 20, 50 or 100;

- Yet, there is a gap between national/supra-national ambitions and global performance;

- All HEIs drawn into the global knowledge market.
But, if higher education is so critical, additional funding and autonomy comes with a price:

- Greater accountability, efficiency and value-for-money,
- Reform of curriculum, organisation and governance model,
- Emphasis on academic output which is measurable and comparable,
- Quality assurance mechanisms
- 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)
QA, Benchmarking, Assessment & Rankings

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.
- Because of connectivity with future career and salary, students demanding better information about HEI choices.

Global rankings next logical step. The rising significance and popularity of worldwide comparisons.
2. Do Rankings Measure Quality?
How Rankings Work

- Compare institutions by using a range of indicators
- Different indicators are weighted differently
- 3 different data sources
  - Independent third parties – e.g. government sources
  - University sources – institutional
  - Survey data – opinions or experiences of stakeholders – students, peer institutions, faculty
- In addition to global rankings, national rankings in 45+ different countries
Most Influential Rankings

Global
- SJT – Academic Ranking of World Universities (ARWU)
- Times QS World University Rankings
- Taiwan Ranking World Universities
- Webometrics

European
- Leiden CWTS Bibliometric Ranking

Single-country
- Das CHE-HochschulRanking (Germany)
- US News and World Report (US)
- Sunday Times, Guardian (UK)

Business Schools
- Financial Times
- The Eduniversal Palms
## Comparing What Rankings Measure

<table>
<thead>
<tr>
<th>SJT ARWU</th>
<th>Times QS</th>
<th>Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of Education</td>
<td>Peer Appraisal</td>
<td>Research Productivity</td>
</tr>
<tr>
<td>Quality of Faculty</td>
<td>Graduate Employability</td>
<td>No. Articles in last 11 years</td>
</tr>
<tr>
<td>No. Nobel Prize/Field Medal</td>
<td>Teaching Quality/SSR</td>
<td>No. Articles in current year</td>
</tr>
<tr>
<td>No. HiCi Researchers</td>
<td>International Students</td>
<td>Research Impact</td>
</tr>
<tr>
<td>Research Output</td>
<td>International Faculty</td>
<td>No. Citations in last 11 years</td>
</tr>
<tr>
<td>No. Articles in Nature/Science</td>
<td>Research Quality/Citations per Faculty</td>
<td>No. Citations in last 2 years</td>
</tr>
<tr>
<td>No. Articles in Citation Index</td>
<td>Size of Institution</td>
<td>Avr. no Citations in last 11 years</td>
</tr>
<tr>
<td>Size of Institution</td>
<td></td>
<td>Research Excellence</td>
</tr>
</tbody>
</table>

- SJT ARWU: 10% Quality of Education, 20% Quality of Faculty, 20% Research Output, 20% Size of Institution
- Times QS: 40% Peer Appraisal, 10% Graduate Employability, 20% Teaching Quality/SSR, 5% International Students, 5% International Faculty, 20% Research Quality/Citations per Faculty
- Taiwan: 10% Research Productivity, 10% Research Impact, 10% Research Excellence

### Specific Metrics
- **SJT ARWU**
  - Quality of Education
  - Quality of Faculty
    - No. Nobel Prize/Field Medal
    - No. HiCi Researchers
  - Research Output
    - No. Articles in Nature/Science
    - No. Articles in Citation Index
  - Size of Institution

- **Times QS**
  - Peer Appraisal
  - Graduate Employability
  - Teaching Quality/SSR
  - International Students
  - International Faculty
  - Research Quality/Citations per Faculty

- **Taiwan**
  - Research Productivity
    - No. Articles in last 11 years
    - No. Articles in current year
  - Research Impact
    - No. Citations in last 11 years
    - No. Citations in last 2 years
    - Avr. no Citations in last 11 years
  - Research Excellence
    - HiCi index of last 2 years
    - No. HiCi Papers, last 10 years
    - No. Articles in High-Impact Journals in Current Year
    - No. of Subject Fields where University Demonstrates Excellence
<table>
<thead>
<tr>
<th>Indicators used for Research</th>
<th>Ranking System (Country)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall grants (money amount)</td>
<td>Slovakia</td>
</tr>
<tr>
<td>Grants per faculty (money amount)</td>
<td>Austria, Germany, Italy</td>
</tr>
<tr>
<td>Grants per faculty (absolute numbers)</td>
<td>Italy</td>
</tr>
<tr>
<td>Research projects funded by EU</td>
<td>Italy</td>
</tr>
<tr>
<td>Participation in int’l research programmes</td>
<td>Poland</td>
</tr>
<tr>
<td>No. of publications</td>
<td>Sweden</td>
</tr>
<tr>
<td>Publications per researcher</td>
<td>Germany, Slovakia, Switzerland</td>
</tr>
<tr>
<td>Citations per faculty</td>
<td>UK</td>
</tr>
<tr>
<td>Citations per publication</td>
<td>Germany, Slovakia, Switzerland</td>
</tr>
<tr>
<td>No. of int’l publications</td>
<td>Poland</td>
</tr>
<tr>
<td>% articles cited within 1st two years after publication</td>
<td>Sweden</td>
</tr>
<tr>
<td>No. of publications with 5+ citations</td>
<td>Slovakia</td>
</tr>
<tr>
<td>% articles belonging to top 5% most cited articles (HiCi)</td>
<td>Sweden</td>
</tr>
<tr>
<td>No. of patents (absolute number)</td>
<td>Germany</td>
</tr>
<tr>
<td>Patents per faculty</td>
<td>Germany</td>
</tr>
<tr>
<td>Ratio of pg research students</td>
<td>UK</td>
</tr>
<tr>
<td>Research quality</td>
<td>Germany, UK</td>
</tr>
<tr>
<td>Reputation for research</td>
<td>Austria, Germany</td>
</tr>
</tbody>
</table>

Hendel and Stolz, 2008
Audience

- Undergraduate, domestic students
- Parents
- Internationally mobile students and faculty
- Postgraduate students
- Academic partners and academic organisations
- Government/Policymakers
- Employers
- Sponsors and private investors
- Industrial partners
- The public and public opinion
- Ranking agencies/organisations
Indicators as Proxies for Quality?

- Student Selectivity = Institutional Selectivity
- Citations & Publications = Academic Quality
- Budget & Expenditure = Quality of Infrastructure
- Employment = Quality of Graduates
- Reputation = Overall Status and Standing
- Nobel Winners = Quality of Research/Research Standing'
Data Sources

- Shanghai – reliance on publically available data means that it emphasizes research
- Times QS – generates new data via peer review
- Leiden – reliance on bibliometric

But...
- Limitation of bibliometric indicators – Scopus and Thompson Scientific ISI
- What do citations actually measure?
- Peer review open to professional bias and ‘gaming’

‘Not everything that counts can be counted, and not everything that can be counted counts.’ (sign in Einstein’s office)
Measuring Reputation?

- Rater bias? Halo effect? Reputational ranking? Self-referential or ‘self-perpetuating quality’
  - *Times*: 40% overall criteria
  - *US News & World Report*: 25% overall criteria

- Susceptible to ‘Gaming’
  - ‘I know from a university in Bavaria the professors told the students to make the department actually better than it was…because they are afraid that universities which are better will get more money than others. So they were afraid of a cut of money…’ (Interview with students in Germany, 01/08)
  - ‘I filled it out more honestly this year than I did in the past…I [used to] check “don’t know” for every college except [my own]…’ (Finder, NY Times, 17/04/07)
  - ‘removal of Kingston's psychology department data follows a recording which caught staff instructing students to falsify their approval ratings.’ (BBC 25/07/08)
Single Definition of Quality?

- Institutional rankings may not measure what users think they are measuring
  - Does institutional ‘volatility’ = changes in quality?
  - Metrics/weightings are not value free but reflect national or rankers’ views.
- How to measure the full range of HE activities?
  - Teaching/learning
  - ‘Added value’
  - Community engagement/regionalism
  - Breadth and depth of research
  - 3rd mission and innovation
  - Social and economic impact
## English-language bias

<table>
<thead>
<tr>
<th>Language/Language Group</th>
<th>No. of Voices (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>1000</td>
</tr>
<tr>
<td>Putonghua (Mandarin)</td>
<td>1000</td>
</tr>
<tr>
<td>Hindi/Urdu</td>
<td>900</td>
</tr>
<tr>
<td>Spanish/Portuguese</td>
<td>450/200</td>
</tr>
<tr>
<td>Russian</td>
<td>320</td>
</tr>
<tr>
<td>Arabic</td>
<td>250</td>
</tr>
<tr>
<td>Bengali</td>
<td>250</td>
</tr>
<tr>
<td>Malay-Indonesian</td>
<td>160</td>
</tr>
<tr>
<td>Japanese</td>
<td>130</td>
</tr>
<tr>
<td>French</td>
<td>125</td>
</tr>
<tr>
<td>German</td>
<td>125</td>
</tr>
</tbody>
</table>

Source: Linguasphere Observatory, 2006 quoted in Marginson, 2007)
Comparing Institutions/Systems

- Is it possible to measure ‘whole’ institution?
  - Complex institutional activities (‘wealth of quantitative information’) aggregated into single rank = proxy for overall quality
  - Exaggerates differences between institutions
- Do Rankings impose a ‘one-size-fits-all’ measurement?
  - Institutions have different goals and missions, nationally and internationally
  - Complexity of different HEIs and HE systems reduced to single number
  - Absence of internationally comparable data
3. How are Rankings Impacting on Higher Education?
'They did not tell me frankly but I could read their minds that if I am lucky enough to graduate at this university I could not be as highly appreciated as the one who graduated from Columbia University.

We are ‘unlikely to consider research partnerships with a lower ranked university unless the person or team was exceptional.’

‘I think the university needs to calm down. We’ve had two career panic days; it’s what I call them where they’re like Communist training sessions where everyone has to stand up and say what they are doing to improve their career.’

... those who are looking at their institution on an international scale are fully aware of the potential of these ratings, rankings, evaluations to attract students, to attract faculty and so on and it is also commented in...the newspapers, in comments in the media and so on ....
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.

(Hazelkorn, 2007)
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
  
  ‘Might know about Australia, but not where in Australia to go’

- Rankings influence on 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).

- Above-average students make choices based non-financial factors, e.g. reputation (Spies 1978; cf. Ireland, 2008).
  - Full-pay students likely to attend higher ranked college (even by a few places) but grant-aided students less responsive.

- 61% of UK students referred to rankings before making their choice, and 70% considered they were important/very important (Roberts, 2007, 20).

- 60% prospective German students ‘know rankings and use rankings as one source of information among others’ (Federkeil, 2007).
Impact on Social Selectivity

- Above-average students make choices based on 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.
- In binary systems, evidence suggests students migrating out of ‘lower status’ institutions.
- US Universities increasing recruitment of high SAT scorers to influence student/selectivity metric.
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' Success
  - To show which colleges have produced the workers it considers most valuable (Chronicle HE 19/09/08).
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% said thought rankings influencing willingness of other HEIs to partner with them;
  - 34% respondents said rankings influencing the 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 using performance data to influence ‘choice of partners for academic research and...decisions about which colleges...to share in the $100-million that Boeing spends...on course work and supplemental training’ (Chronicle of HE, 19/09/08).
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 and Saroyan, 2007, 40).
- 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 and Times QS.
Changes in Academic Work

- Increased emphasis on academic performance/research 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
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.

(Hazelkorn, 2007)
# Mapping Institutional Actions

<table>
<thead>
<tr>
<th>Specific Actions</th>
<th>Weightings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research</strong></td>
<td></td>
</tr>
<tr>
<td>• Relatively develop/promote bio-sciences rather than arts, humanities &amp; social sciences</td>
<td>SJT = 40% Times = 20%</td>
</tr>
<tr>
<td>• Allocate additional faculty to internationally ranked departments</td>
<td></td>
</tr>
<tr>
<td>• Reward publications in highly-cited journals</td>
<td></td>
</tr>
<tr>
<td>• Publish in English-language journals</td>
<td></td>
</tr>
<tr>
<td>• Set individual targets for faculty and departments</td>
<td></td>
</tr>
</tbody>
</table>

| **Organisation** | |
| • Merge with another institution, or bring together discipline-complementary departments | SJT = 40% Times = 20% |
| • Incorporate autonomous institutes into host HEI | |
| • Establish Centres-of-Excellence & Graduate Schools | |
| • Develop/expand English-language facilities, international student facilities, laboratories | |

| **Curriculum** | SJT = 10% Times = 20% |
| • 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) | |

| **Students** | Times = 15% |
| • Target high-achieving students, esp. PhD | |
| • Offer attractive merit scholarships and other benefits | |

| **Faculty** | SJT = 40% Times = 25% |
| • 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 | |

| **Academic Services** | Times = 40% |
| • Professionalise Admissions, Marketing and Public Relations | |
| • Ensure common brand used on all publications | |
| • Advertise in high-focus journals, e.g. | |
4. Moving Beyond Rankings
Positive and Perverse Effects

- Creating sense of urgency and accelerating modernisation agenda;
- Driving up institutional performance and providing some public accountability and transparency;
- Creating elite group of global universities via accentuating vertical/hierarchical differentiation;
- 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.
Policy Trends

- Global Rankings as Indicator of HE Performance
- Indicators linked to Resource Allocation
  - Shift from input $\rightarrow$ outcome/output $\rightarrow$ impact
- Re-structure HE System to Improve Efficiency, Output and Impact, Critical Mass, Visibility and Reputation
- Concentrate Resources in ‘Centres of Excellence’ or a small number of Universities
- Rankings used to foster Mission Differentiation
  - Allocate Resources According to Mission, Performance or Rankings
Responding to Global Rankings

- EU Classification Project;
- OECD AHELO Project;
- EU Expert Group: Assessment of University-Based Research;
  - Declaration on Ranking of European Higher Education Institutions
  - EU Tender for a European Ranking of HE
- OECD Selects Scopus ‘to help countries compare research output’.
World Class Universities or a World Class System?

- Diverse and coherent set of high performing, globally-focused institutions and student experiences:
  - Scale and quality of graduates to provide for desired societal and economic outcomes;
  - Research base for creation of knowledge to fuel innovation and forge/attract international links.
- Excellence across diverse fields of activity:
  - Research across the full RDI spectrum,
  - Teaching & learning,
  - Regional and community engagement,
  - Social and economic impact.
- Developing competences to operate *proactively* as a global agent.
Conclusion

- Rankings have taken on QA function but with different definitions of quality (Usher and Savino, 2007).

- Increasing evidence suggests wider usage, impact and influence by a growing group of stakeholders.

- Rankings incentivise and influence behaviour and decision-making:
  - More attention to benchmarking and performance.
  - Changes to curriculum, research and organisation;

- Reputation race leading to widening gap between mass and elite HE, and threatens other public policy objectives.

- A world-class system enables countries and HEIs to maximise capabilities beyond individual capacity.