How Rankings are Reshaping Higher Education

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Why Rankings

More than two decades after US News and World Report first published its special issue on “America’s Best Colleges” and almost a decade since Shanghai Jiao Tong University published the Academic Ranking of World Universities (ARWU), university rankings continue to dominate headlines for several reasons. First, they present a simple and easy comparison of educational performance and productivity nationally and across international boundaries. Second, by drawing attention to the characteristics and performance of the top universities world-wide, rankings have become a major tool for measuring educational quality and excellence. This is true for HEIs but also for nations. And, third, given the importance of higher education to social and economic growth and prosperity, especially in these difficult times, rankings are often interpreted as an indicator of a nation’s global competitiveness.

Today, politicians regularly refer to rankings as a measure of their nation’s economic strengths and aspirations, universities use them to help set or define targets mapping their performance against the various metrics, academics use rankings to bolster their own professional reputation and status, and students use them to help them make choices about where to study. But do rankings provide appropriate information about higher education or measure what’s important? Is it always a good thing when a university rises up the rankings and breaks into the top 100? Do rankings raise standards by encouraging competition or do they undermine the broader mission to provide education? Do rankings enhance strategic decision-making by governments and institutions, or are there better methods? Is it time to move beyond rankings?

This paper will provide an overview of what rankings measure, and then address the impact and influence that rankings are having on higher education and government policy. There are three sections: Part 1 looks at the rise and growing attention given to rankings; part 2 will consider how rankings are reshaping Higher Education; and part 3 will look at where we go from here, including consideration of some alternative methodologies.

1. Rise and Growing Attention to Rankings

Globalisation has been forcing change across all knowledge-intensive industries. These developments have been intensified by the global financial crisis and the adjustment period that has
defined its aftermath. Yet, even before the transition to this new economic reality, world-wide comparisons were becoming increasingly significant. Globalisation, characterised by the evolution towards a single world market in goods and services, is most recently signified by the rise in global rankings. Nations, their institutions and all aspects of daily life, are regularly measured against each other according to indicators in which comparative and competitive advantages come into play with geopolitical implications.

At the same time, the knowledge society is placing a premium on education and high educational attainment. While countries are increasingly dependent upon talent, many are under severe demographic pressure. Society is aging at the same time that the birth rate is falling, especially in the more developed countries. Because higher education plays a fundamental role in creating competitive advantage, this situation presents a challenge for national strategies based on growing knowledge-intensive industries, and heightens competition for high-achieving students.

These developments are having a profound impact on higher education. Questions are being asked about the way in which higher education is managed, funded and organised. There is increasing emphasis on value-for-money, international benchmarking and (public) investor confidence. Performance assessment of scientific-scholarly research is also increasingly important, especially for publicly funded research. Accordingly, many governments are busy reshaping/restructuring higher education systems and institutions to ensure they can better compete. Some countries are able to invest heavily in higher education and research, while others are financially restricted because of the severity of public and private debt. At the international and national level, these developments are driving greater differentiation between elite and mass HEIs and systems.

The EU is no exception. The publication of the Shanghai Jiao Tong Academic Ranking of World Universities in 2003 and followed quickly by the Times Higher Education-QS Top University Ranking in 2004 challenged the perceived wisdom about the reputation and excellence of European universities especially when placed alongside the Lisbon strategy’s objectives. A year later, June 2005, the German government launched the Exzellenzinitiative (Initiative for Excellence), followed by a report by the French Senate arguing its researchers were disadvantaged in favour of English-speaking institutions. In 2008, under the auspices of the French Presidency of the European Commission, a conference was organised championing a new EU ranking. Europa 2020 has restated the challenge: “Europe must act: … According to the Shanghai index, only two European universities are in the world’s top 20”. It speaks about the need to “Enhance the performance and international attractiveness of Europe’s higher education institutions and raise the overall quality of all levels of education and training in the EU…”

Today, there are 10 main global rankings—albeit some are more popular than others (see Box 1). Over 60 countries have introduced national rankings, especially in emerging societies, and there are a number of regional, specialist and professional rankings. More recently several system-level rankings have emerged. While undergraduate, domestic students and their parents were the initial target audience for many rankings, today rankings are used by myriad stakeholders, including governments and policy-makers; employers and industrial partners; sponsors, philanthropists and private investors; academic partners and academic organizations; the media and the public. Postgraduate students, especially those seeking to pursue a qualification in another country, are the most common target audience and user. What started as an academic exercise in the early 20th century in the USA has today become a major driver of a geo-political reputation race today. There
are over 16,000 HEIs worldwide, yet rankings have encouraged a fascination with the standing and trajectory of the top 100 universities – less than 1%.

**Box 1: Main global rankings**

- Academic Ranking of World Universities (ARWU) (Shanghai Jiao Tong University), 2003
- Webometrics (Spanish National Research Council), 2003
- World University Ranking (Times Higher Education/Quacquarelli Symonds), 2004–09
- Performance Ranking of Scientific Papers for Research Universities (HEEACT), 2007
- Leiden Ranking (Centre for Science & Technology Studies, University of Leiden), 2008
- World’s Best Colleges and Universities (US News and World Report), 2008
- SCImago Institutional Rankings, 2009
- Global University Rankings (RatER) (Rating of Educational Resources, Russia), 2009
- Top University Rankings (Quacquarelli Symonds), 2010
- World University Ranking (Times Higher Education/Thomson Reuters—THE-TR), 2010
- U-Multirank (European Commission), 2011

Note: Date indicates date-of-origin.

2. How Rankings are reshaping Higher Education

The popularity of rankings is largely related to their simplicity – but this is also the main source of criticism. Rankings compare HEIs using a range of different indicators, and then aggregate the scores into a single digit as a proxy for overall quality. The scores are listed according to a league table. The choice of indicators is based upon the judgement of each ranking organization; there is no such thing as an objective ranking. There is also no agreed method on what or how to measure academic or educational quality. This process ignores the fact that HEIs are complex organizations, residing within vastly different national contexts, underpinned by different value systems, meeting the needs of demographically, ethnically and culturally diverse populations, and responding to complex and challenging political-economic environments.

Most global rankings focus disproportionately on research using data drawn from the Thomson Reuters/ISI *World of Science* or Scopus bibliometric databases, or occasionally from Google Scholar. However, this data is most accurate for bio- and medical sciences research. Uniquely, ARWU collects publication data for *Nature* or *Science*. Some rankings, notably *THE-TR* and *QS*, use questionnaires to gauge institutional reputation assigning weightings of 34.5% and 50%, respectively. On the other hand, rankings do not measure educational quality, e.g. the quality of teaching and learning or the quality of the student experience. Bibliometric data is less reliable for the arts, humanities and social science disciplines, and there is no focus on the impact or benefit of research. Rather the focus is on quantity or intensity as a proxy for quality. Finally, no attention is given to regional or civic engagement – a major policy objective for many governments and mission focus for many HEIs (see Table 1).
Table 1: What Rankings Measure

<table>
<thead>
<tr>
<th>Rankings Measure</th>
<th>Rankings Do Not Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Quantity and Intensity as proxy for quality</td>
<td>• Quality of teaching or research</td>
</tr>
<tr>
<td>• Bio- and medical sciences Research</td>
<td>• Teaching and Learning, incl. “added value”, impact of research on teaching</td>
</tr>
<tr>
<td>• Publications in <em>Nature</em> and <em>Science</em></td>
<td>• Arts, Humanities and Social Science Research</td>
</tr>
<tr>
<td>• Student and Faculty Characteristics (e.g. productivity, entry criteria, faculty/student ratio)</td>
<td>• Technology/Knowledge Transfer or Impact and Benefit of Research</td>
</tr>
<tr>
<td>• Internationalization</td>
<td>• Regional or Civic Engagement</td>
</tr>
<tr>
<td>• Reputation – amongst peers, employers, students</td>
<td>• Student Experience</td>
</tr>
</tbody>
</table>

Despite these shortcomings, they have become a formidable influence on higher education. Higher education leaders believe that benefits flow directly from doing well in rankings, while a ‘poor’ showing can lead to a reduction in funding or status or both. Rankings can help maintain and build institutional position and reputation, good students use rankings to ‘shortlist’ university choice, especially at the postgraduate level, and stakeholders use rankings to influence their own decisions about funding, sponsorship and employee recruitment. Other HEIs use rankings to help identify potential partners, assess membership of international networks and organizations, and for benchmarking. There is a sliding scale, but even for lower-ranked institutions, the mere inclusion of an institution within the published rankings can grant an important level of national and international visibility with branding and advertising value. International experience shows that almost regardless of institutional type, rankings are now being used to help inform strategic decision-making and management choices.

Rankings also influence the attitude of and towards peer institutions: 76% of HE leaders said they monitored the performance of peer institutions in their country, and almost 50% said they monitored the performance of peers world-wide. Almost 40% of HEIs said they considered an institution’s rank prior to forming a strategic partnership with them. Related to this, 57% of leaders said rankings influenced the willingness of other HEIs to partner with them, and 34% said rankings influenced the willingness of other HEIs to support their institution’s membership of academic or professional organizations (Hazelkorn, 2011). High standing can assure and reassure potential partners or sponsors, but conversely, for HEIs with a less prestigious ranking, it can lead to a cycle of disadvantage. African universities have said establishing collaboration can be difficult; universities in developed countries are usually “seeking to improve their image internationally” and say “they cannot work with our institution, because it does not have adequate status in global-university rankings” (Holm and Malete, 2010).

Rankings are also influencing the internal organization or restructuring of institutions. A study of US university Presidents found that they targeted specific indicators in order to try to improve their ranking: 88% targeted student retention rates; 84% targeted philanthropic contributions from alumni; 75% targeted graduation rates; 71% targeted entry scores; 63% targeted faculty salaries as a way to attract faculty from high-ranked universities or “capacity-building professors” who can help
improve rank; and 31% targeted the faculty student ratio (Levin, 2002, p. 14). Some HEIs are altering the balance between teaching and research, between undergraduate and postgraduate activity, and between disciplines. Resources are being (re)directed towards research or disciplinary fields and units that are likely to be more productive, have faculty who are more prolific especially at the international level, and which are more likely to positively affect publication or citation factors.

Given the importance attached to doing well in rankings, many HEIs are specifically targeting the recruitment of talented students, raising the entry levels, changing admissions strategies to recruit particular types of students, limiting class/cohort size to improve the faculty student ratio, etc. (Hazelkorn, 2011: 140–44). HEIs have also been accused of falsely recording their data; this usually refers to the information on student entry scores or performance, or recruitment criteria and processes. There are some particularly notorious examples of US colleges and universities “gaming” their student statistics, but the practice of managing student entry and numbers is not restricted to the USA.

Small changes in rankings can affect student choice. Students, especially high achievers, international and postgraduate students, are especially conscious of and influenced by rankings. As the (perception of a strong) correlation between the status of the institution and career opportunities grows, students modify their behaviour in response to rankings. Attendance at select universities and colleges is seen to “confer extra economic advantages to students, in the form of higher early career earnings and higher probabilities of being admitted to the best graduate and professional schools” (Ehrenberg, 2004). It also confers indirect benefits, such as connections to elites and future decision-makers, membership of “the right” social and golf clubs and schools, etc. As nations and HEIs battle to recruit the best talent, the balance of power is shifting in favour of discerning students. Universities in Spain spoke to this author about their fear of falling behind in the “global battle for excellence”.

This alarm is reflected in the actions taken by many governments. Because higher education has become an essential weapon in the battle to attract international and mobile talent and capital, ranking are often interpreted as a proxy for the global competitiveness. Concern may be most acute for countries faced with on-going public and private debt, high unemployment and economic recession, but all countries are affected. Many governments are taking steps to restructure their higher education systems and institutions, creating greater vertical or reputation differentiation based on concentrating resources in a small number of elite universities. France, Germany, Russia, Spain, China, South Korea, Taiwan, Malaysia, Finland, India, Japan, Singapore, Vietnam and Latvia – among many other countries – have all launched initiatives with the primary objective of creating “world-class” or flagship universities, often using indicators promoted by rankings to define excellence.

An alternative model is being developed by countries such as Ireland, Australia and Norway. They have sought to emphasize horizontal or mission differentiation. Their aim is to create a diverse portfolio of globally competitive HEIs, characterized by differentiation based on qualifications level, discipline specialization, programme orientation, regional engagement, student profile, mode of provision, and research intensity and specialization.
Where do we go from here?

The emergence and rising prominence of global rankings was inevitable. It highlights the fact that in a competitive global economy, national pre-eminence is no longer sufficient. Rankings use a common set of indicators to measure all institutions and publish the results in a league table format. This makes global comparisons quick and easy – in the same way that tourists use guide books to help identify the best hotels and restaurants. Accordingly, they have provided a level of transparency and accountability that has hitherto been missing, and have forced HEIs and governments to pay more attention to quality and excellence, and performance and productivity.

However, rankings have also reduced the multiple endeavours of higher education to a few simple indicators. Yet, quality is a complex phenomenon, and cannot easily be correlated with either resources or faculty student ratio. Because of the absence of internationally meaningful comparative data, rankings rely on indicators which can be easily measured rather than those that are most important.

Rankings are only one way to compare institutional performance or provide greater transparency. Other formats and methodologies can provide more meaningful information and facilitate better understanding and comparability, such as college guides, quality assurance, benchmarking and classification. Each approach differs according to methodology and its objective. The critical and initial question to be asked is which format and methodology best fits for purpose. Which university is best depends on who is asking the question, what information is required and for what purpose. A fuller discussion of different approaches is listed in Table 2.

Table 2: Alternatives to Rankings

- **College Guide** can provide detailed information about individual HEIs and educational and research programmes, student facilities, the location, etc. Guides were originally published in the US beginning in the 1970s; they were a commercial product, in book-format, in response to the growing mobile domestic undergraduate student market. Nowadays, there are many electronic versions in different countries. The Internet also ensures much greater and wider access of information is available to all stakeholders.

- **Assessment of Higher Education Learning Outcomes** (AHELO) is a specific project being developed by the OECD to measure the quality of teaching and learning in higher education using a test of generic and discipline-specific skills. AHELO is in its feasibility stage, but is likely to become a tool for comparability and benchmarking similar to the role played by OECD Programme for International Student Assessment (PISA).

- **Benchmarking** is a process of comparing and evaluating quality and performance across peer countries and institutions. It is usually undertaken as part of a strategic or policy approach to improvement. Benchmarking highlights similarities/differences by the analysis of comparable data, or through more informal mechanisms such as peer-to-peer learning or mentoring.

- **Classification** systems provide a typology or framework to “describe, characterize, and categorize colleges and universities” usually according to characteristics of institutional mission. The most well-known is the US Carnegie Classification of Institutions of Higher Education, first produced in 1973 and redesigned in 2005. **U-Map** is a European profiling project which aims to highlight the diversity of the European higher education landscape using a multi-dimensional format enabled by interactive web-based technologies.

- **Multi-dimensional rankings**, such as the EU U-Multirank, have a range of indicators which can be arranged according to individual preferences. Powered by interactive web-based technologies,
multi-dimensional rankings can easily facilitate peer-group comparability whereby HEIs of similar mission are compared. U-Multirank builds upon the approach developed by the German Centre for Higher Education University Rankings (CHE), and is a sister project of U-Map.

- **System-level Rankings** are a new attempt to assess the quality, impact and benefit of the higher education system as-a-whole rather than focusing on the performance of individual institutions. They use a broad set of indicators, such as investment, access and participation rates, contribution of higher education and research to society, internationalisation, and government policy/regulation. The most well-known are the QS National System Strength Rankings (UK); the Lisbon Council, University Systems Ranking. Citizens and Society in the Age of Knowledge (Belgium), and most recently, the Universitas 21 Rankings of National Higher Education Systems (Australia).

*Quality Assurance and Evaluation* is used to assess, monitor and audit academic standards, and to provide relevant information to key stakeholders about the quality of teaching and research. It is usually conducted at the whole-of-institution or sub-institutional level. In the US, QA is a non-governmental enterprise and has been associated with accreditation for over 100 years. In contrast, in Europe, QA operates at the nation-state level. The European Association for Quality Assurance in Higher Education (ENQA) has developed “an agreed set of standards, procedures and guidelines on quality assurance”.

- **Qualifications Framework** provides an integrated approach to learning, forming a single hierarchy of different qualifications, usually from primary school to doctoral level. It describes basic standards of learning outcomes to be achieved at each level including professional oriented qualifications. The European Qualifications Framework (EQF) was launched by the European Commission (2008) in 2006.

- **Ratings** set a threshold of achievement or common standards of quality for which a star or similar attribution is assigned. The ISO, International Organisation for Standardisation, sets standards of “best practice” for business, government and society, and once achieved, the organisation heavily promotes itself as a quality organisation. QS, one of the main ranking organisations, has developed its Star System as a commercial product for higher education.

Source: Hazelkorn, 2012

While globalisation will ensure that international and cross jurisdictional comparisons are “here to stay”, rankings are only one type of comparability tool. They have gained significance because of their simplicity. New models and processes are already beginning to emerge and to challenge the predominance of rankings. Over-time, the multiplicity of different types of comparative and transparency tools may diminish the authority of the current market leaders. For example, open source publishing and electronic search engines will challenge the proprietary hold that Thomson Reuters and Scopus currently have over bibliometric data, and similarly the role performed by rankings. Social networking, such as Facebook and Rate-my-professor sites, are putting transparency tools directly into the hands of students and other stakeholders producing an effect similar to TripAdvisor for the travel industry.

In conclusion, rankings are having a profound effect on higher education and research systems, at the global, national and institutional level. However, their indicators of success are very misleading. They have served as a wake-call for higher education and to governments. They have raised questions about higher education, and about how to measure and meaningfully demonstrate quality and performance. There is some evidence that the pendulum is beginning to swing back - and new formats are emerging. One thing is clear: rather than using definitions of excellence designed by
others for other purposes, what matters most is whether HEIs fulfil the purpose and functions which governments and society want them to fulfil.

References


