University rankings are always controversial

Phil Baty

World university rankings are highly influential and of keen interest to students, faculty, university administrators and policy-makers around the world, but they face a great deal of criticism too. There is too much movement from one year to the next; they count only what can be measured, but do not measure what counts; they encourage conformity and fail to capture the diversity of institutional missions.

Much of this criticism is valid. But I’d suggest that there is at least one global university rankings system that is seeking to capture a wider range of university activities and striving to see past simplistic research-driven tables. That system is the Times Higher Education (THE) World University Rankings, powered by data from Thomson Reuters.

Of course, there is strong work being done by other rankings providers. Shanghai Jiao Tong University’s Academic Ranking of World Universities is objective, stable and useful, but is best suited to those who want to consider a narrow picture of research power. Its six indicators are restricted purely to research, almost exclusively in science.

Spain’s Webometrics Ranking of World Universities also has some value, but only for institutions seeking to monitor their global online visibility – an increasingly important issue in a world where brands really matter.

The THE world rankings recognise the wider range of what global universities do: pushing the boundaries of understanding and innovation with world-class research; sharing their expertise with the wider world, including the local, national and international business community, through ‘knowledge transfer’; working in an international environment and competing for the best staff and students wherever they may be; and, crucially, providing a rich and enriching teaching environment for undergraduate and postgraduate students.

The THE magazine has been serving the higher education world for four decades – 2011 is our 40th anniversary – and we have been publishing a global university rankings since 2004. We live or die by our reputation among university staff and policy-makers as a trusted source of news, analysis and data, week in, week out.

Our rankings are part of that. They need to stand up to the close scrutiny of our highly intelligent and demanding readership.

So in 2009, we abandoned an established world university ranking methodology that had become influential during the six years we had published it – from 2004 to 2009 – and started again from scratch. Why? Because we wanted to do a better job.

Creating a new and improved rankings system

So what did we do? First of all, we brought in one of the world’s most trusted and respected information specialists, Thomson Reuters, to collect and analyse all the data to be used for a brand-new rankings system, and to help us develop an entirely new methodology.

Next, we hired a polling company, Ipsos, to help us carry out a worldwide survey of university staff and stakeholders, asking them what they felt about rankings and what they wanted and needed from such exercises. The survey found that respondents generally felt that rankings had recognisable utility. About 40 per cent globally said rankings were ‘extremely / very useful’, and a further 45 per cent said they were ‘somewhat useful’.

But the data indicators and methodology used in the existing rankings were perceived unfavourably by many, and there was widespread concern about data quality in North America and Europe. Some 74 per cent of respondents believed that institutions manipulate their data to move up in rankings. The survey also gave us a clear sense of the indicators that people wanted to see in rankings.

Adopting a revised set of indicators

The THE World University Rankings were finalised only after ten months of open consultation, and the methodology was devised with expert input from more than 50 leading figures from 15 countries, representing every continent. The rankings use 13 separate indicators – more than any other global system – to take a holistic view.

Our world university rankings do place the most weight on a range of research indicators. We think this is the correct approach in a world where governments are investing heavily in developing the knowledge economy, and seeking answers to global challenges such as climate change and food security.

We look at research in a number of different ways, examining reputation, income and volume (through publication in leading academic journals indexed by Thomson Reuters). But we give the highest weighting to an indicator of ‘research influence’, measured by the number of times published research is cited by academics across the globe.

We looked at more than 25 million citations over a five-year period from more than 5 million articles. All the data were normalised to reflect variations in citation volume between different subject areas,
so universities with strong research in fields with lower global citation rates were not unfairly penalised.

We also sought to acknowledge excellence in research from institutions in developing nations, where there are less-established research networks and lower innate citation rates, by normalising the data to reflect variations in citation volume between regions. We are proud to have done this, but accept that more discussion is needed to refine this modification.

The ‘research influence’ indicator has proved controversial, as it has shaken up the established order, giving high scores to smaller institutions with clear pockets of research excellence and boosting those in the developing world, often at the expense of larger, more established, research-intensive universities. We are consulting further on this indicator for the 2011–12 tables, especially with regard to only a handful of statistical outliers, where a small number of extremely highly cited papers boosted an institution’s overall performance in the tables.

We judge knowledge transfer with just one indicator – research income earned from industry – but plan to enhance this category with other indicators. One proposal, at the time of going to press, is to look at the number of research papers a university publishes jointly with a partner from the business world.

Internationalisation – an indicator highlighted as desirable by the European Commission (EC) – is recognised in the THE World University Rankings through data on the proportion of international staff and students attracted to each institution, a sign of how global an institution is in its outlook. The ability of a university to attract the very best staff from across the world is key to global success. The market for academic and administrative jobs is international in scope, and this indicator suggests global competitiveness. Similarly, the ability to attract students in a competitive global marketplace is also a sign of an institution’s global competitiveness and its commitment to globalisation.

For the 2011–12 tables, the Times Higher Education is also set to add a further indicator of an institution’s international outlook, which would examine the proportion of an institution’s published research that is co-authored with an overseas research partner.

But the flagship – and most dramatic – innovation for the world university rankings for 2010 and beyond, is the set of five indicators used to give proper credit to the role of teaching in universities, with a collective weighting of 30 per cent.

But I should make one thing very clear: the indicators do not measure teaching ‘quality’. There is currently no recognised, globally comparative data on teaching outputs – although we eagerly await the results of the Organisation for Economic Co-operation and Development (OECD)’s AHELO (Assessment of Higher Education Learning Outcomes) project. What the THE rankings do is look at the teaching ‘environment’, to give a sense

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Mombasa Polytechnic University College (MPUC) reflects the Government of Kenya’s concerted efforts in promoting technical, industrial, vocational and entrepreneurship education and training (TIVET) in line with the changing demands of industrially developing nations like Kenya.

**BACKGROUND**
The former Mombasa Technical Institute (MTI) was transformed to become the Mombasa Polytechnic in 1972. The dream to convert the Polytechnic to a Polytechnic University College, a Constituent College of JKUAT, was realised in August 2007.

Over the last four years, MPUC has developed and expanded its infrastructure and equipment. Currently, the MPUC is offering various demand-driven academic programmes in different fields, some ranging from certificate to degree level. The University College has since opened satellite campuses in Lamu County and Ukunda in Kwale County, which offer Diploma and Certificate programmes.

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of the kind of learning milieu in which students are likely to find themselves.

The key indicator for this category draws on the results of an annual academic reputational survey carried out for the world university rankings by Thomson Reuters.

The Academic Reputation Survey is distributed worldwide each spring. It is an invitation-only poll of experienced scholars, statistically representative of global subject mix and geography. It looks at the perceived prestige of institutions in both research and teaching.

Respondents are asked only to pass judgement based on direct, personal experience within their narrow area of expertise. They are asked ‘action-based’ questions (such as: ‘Where would you send your best graduates for the most stimulating postgraduate learning environment?’) to elicit more meaningful responses.

In 2010, the survey received feedback from 13,388 respondents, attracting a good balance of responses around the regions and the disciplines. In 2011, despite the fact that everyone who completed the survey in 2010 was excluded from the distribution list, the survey attracted 17,500 responses, with an excellent balance of respondents across disciplines and across regions.

In addition to the Academic Reputation Survey’s results on teaching, four further indicators are used to provide information on a university’s teaching and learning environment.

The rankings also measure staff-to-student ratios. This is admittedly a relatively crude proxy for teaching quality – I am often asked whether the number of waiters in a restaurant really tells you much about the quality of the food. But the indicator hints at the level of personal attention students may receive from faculty, and there was strong demand for it among our stakeholders, so it remains in the rankings, but receives a relatively low weighting of just 4.5 per cent.

We also look at the ratio of PhD to bachelor’s degrees awarded, to give a sense of how knowledge-intensive the environment is, as well as the number of doctorates awarded, scaled for size, to indicate how committed institutions are to nurturing the next generation of academics and to providing strong supervision.

The last of our teaching indicators is a simple measure of institutional income scaled against academic staff numbers. This figure, adjusted for purchasing-price parity so that all nations compete on a level playing field, gives a broad sense of the general infrastructure and facilities available. This is another major innovation in world rankings.

Income measures are of course controversial, but we believe that it is highly relevant to a prospective student, or indeed a prospective faculty member, to have an idea whether the institution has US$10,000 per student, or US$20,000.
Global responses to the revised rankings system

Our efforts as the only world university rankings system to recognise the importance of teaching have been praised by Philip Altbach, director of the Center for International Higher Education at Boston College in the US. In a recent article, he noted that while there are no solid global measures of teaching quality, ‘the new Times Higher Education rankings have recognized the importance of teaching’.

He said that while there are obvious limitations to the teaching proxies employed, ‘at least Times Higher Education has recognized the importance of the issue... [and] gets an A grade for effort, having tried to include the main university functions – research, teaching, links with industry and internationalization.’

Other responses to our new tables have been excellent. I will not pretend that there has not been criticism (notably from vice-chancellors whose institutions have taken the biggest hits from our new methodology), but other comments have been positive.

Significantly, the Times Higher Education World University Rankings only rank the world’s top 200 institutions, no more than 1 per cent of the global number (and possibly a lot less, depending on whose figures you use for the number of universities in the world). While the institutions in our top 200 have different histories, cultures, sizes and structures, they all share broadly similar characteristics: they recruit from the same global pool of leading administrators, academics and students; they push the boundaries of knowledge with world-class research, published in leading international journals; they teach at both the undergraduate and postgraduate levels; and they tend to be well resourced.

Restricting our tables to a small world research-led elite, we leave much room in national higher education for true diversity of university missions and roles. Like the famous California system, highly ranked world-class research universities can work in harmony with those with separate, clearly defined missions, such as community access.

We stop our official world rankings list at 200 institutions, despite having data on many more universities, because we also recognise that the deeper you go, the smaller the data differentials, and the more you risk comparing apples with oranges, with the potential of distorting universities’ missions and encouraging uniformity. As the rankings database grows, we will seek to work harder to ensure that we compare, as far as possible, apples with other apples.

We are proud of our new and improved Times Higher Education World University Rankings, but we will continue to engage with our critics, and to take expert advice on further methodological modifications and innovations. We are always listening.

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