

Caught in a Trap: Impact Factors and the Scramble for “World Class” Status

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Globalisation has affected many areas of human endeavour and education has not been exempted. The global Higher Education sector is defined by issues of prestige which have led to the formulation of various ranking systems acting as measures of “global excellence”. The spread of these rankings and the uses they are put to in national and international prestige contests has meant that key questions around the global relevance of rankings methodologies have received less attention than their outputs. Governments have embraced them as means of quantifying “progress” and universities themselves have adopted strategies to enhance their positions. These often come with unintended consequences, at the expense of academic endeavour. This paper examines the context of global rankings, the effects of the pursuit of “global excellence” on academic endeavour, and the growing disquiet within the academic community over obsessive pursuit of “world-class status”.

Keywords: university rankings, SSCI syndrome, impact factors, journal publication, world-class university

Introduction

Controversial university rankings-based evaluation systems are coming under increasing scrutiny across the globe, as academics and university administrators start to question both the methodologies and underlying philosophies of “world class” criteria. Of particular concern are the narrowing focus of global academia and the effects of research-related metrics on academic careers.

Sources of Tension

The drive to establish “world-class” universities stems from the accelerated pace of globalisation in the late 20th century (Chou, 2014). As countries sought to develop their economies, “massification” of higher education played a significant part in their strategies. With this came the need to assess achievements and to meet this need various ranking systems were developed. They differ widely since there is no universally-agreed definition of educational “excellence”, let alone universally-agreed criteria for measuring it (Usher, 2008) but the main rankings systems have two significant commonalities: their criteria focus on measurable outputs in the quest for

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hard data; and as a result, they prioritise research-related activities over less quantifiable academic endeavours.

Rankings Methodologies and the De-prioritization of Academic Endeavours

The Times Higher Education Supplement (THES) World University Rankings, for example, breaks its criteria into five main areas: teaching, research, citations, industry income, and international outlook, worth 30%, 30%, 30%, 2.5%, and 7.5% of the total respectively (Times Higher Education, 2015). Two of these criteria (research and citations) are explicitly determined by the institution’s research activity while the other three are profoundly influenced by it. Even in the teaching category, THES awards points for the ratio of doctorate-to-bachelor degrees awarded by the institution, adjusted by the number of academic staff. This is justified by a belief that “that institutions with a high density of (postgraduate) research students are more knowledge-intensive and that the presence of an active postgraduate community is a marker of a research-led teaching environment” (Times Higher Education, 2015). This bias towards research-related factors means that rankings neglect other academic responsibilities such as “pure” teaching, social engagement, and public intellectualism.

“Rankings Fever”

The adoption of rankings as global success criteria has led various governments to deliberately aim at improving the scores of key national universities or driving selected universities into the prestigious “top 100” categories, by fair means or foul. In 2012, the French government launched the €7.7 billion Excellence Initiative (IDEX) to create between five and 10 world-class research and higher education clusters across the country (Casassus, 2012). In the UK, which has a long history of allocating funding based on research assessments, some universities have created new staff positions dedicated to selecting and honing the research summaries to be submitted to the Research Excellence Framework (REF) (Stokstad, 2014). Universities in Saudi Arabia have gone one step further with both King Saud and King Abdulaziz hiring established highly-cited researchers on lucrative “adjunct professorship” contracts with the stipulation that they add the university’s name as a second affiliation on the Institute for Scientific Information’s (ISI’s) list of highly cited researchers (Bhattacharjee, 2011). The rankings agencies’ automated data handling methods then link these universities to a large number of pre-existing research citations and thus artificially boost their scores.

Limitations of Publication as Proxy for Academic Quality

Citation Indexes themselves are, as the organisations which promote them admit, a proxy for academic impact: The assumption is that the most widely-cited articles are those which have made the greatest contribution to their field. However, several studies cast doubt on the validity of that assumption (Hazelkorn, 2008; Ioannidis et al., 2007; Turner, 2005). The irony is that these “impact factor” statistics are themselves flawed methods of assessing the quality of research. The length of time needed to both conduct genuinely ground-breaking research and have it accepted as such mean that measurements of “impact” do not automatically accord with “high-quality research” in today’s publication-driven academia. Even where research is genuinely ground-breaking, how much impact it has on the academic community is debatable: a prime example being that of Japanese Nobel Laureate Hideki Shirakawa whose Nobel Prize for chemistry came *24 years* after the research for which it was awarded.

Indeed, the search for new paradigms is often neglected in the first place, owing to the pressure to have publications accepted in citation-index journals (Foster, Rzhetsky, & Evans, 2015); and even when conducted it remains widely uncited until the “tipping point” is reached and it becomes accepted by the mainstream. Recent studies using the Mendeley academic referencing platform (<https://www.mendeley.com/>) also suggest that citing in science and engineering is dominated by doctoral students and not fellow-researchers (Mohammadi, Thelwall, Haustein, & Larivière, 2015). Citation indexes thus favour “safe” established research over the genuinely ground-breaking and this must call into question their relevance as a measure of quality.

The “SSCI Syndrome” in Global Academia

Beyond disquiet at the criteria and how easily the systems can be “gamed”, concern is emerging around the globe at the corrosive side-effects of the single-minded pursuit of rankings. The drive to be seen to produce “world class” research has driven universities to focus their hiring practices on academics with strong histories of journal publications and to adopt promotion and reward systems which emphasise journal publication over other endeavours. Academics seeking rapid promotion or transfers to more prestigious institutions will therefore devote a higher proportion of their time to researching and writing for those journals used in impact assessments and less to other academic endeavours: book publication, teaching, social engagement, etc. The relatively narrow scope of journals which used to assess impact in the Science and Social Science Citation Indexes (SCI/SSCI) mean that more and more effort is put into shaping research to a form more likely to be accepted by a journal which will “count” in career terms. As a result, the quest for high “impact factors” constrains the types of research career-minded academics embark on and favours publication in English for a global audience ahead of publication in local languages for local audiences. This emerging “SSCI Syndrome” (Chou, 2014) is spreading perniciously across the globe, fuelled by a desire on the part of governments and institutions to be seen as “world class”, yet ironically it risks making national higher education systems less relevant to the nation that is funding them.

Those Who Choose Not to Compete for Rankings

Another question that merits an answer is that of what happens to the others, the ones that do not achieve “World Class” status. Universities do not appear in global tables for a variety of reasons: They may not have the facilities required for highly research-intensive scientific research; they may not publish primarily in English; their research interests may not catch the attention of citation-index journal editors; or they may focus on other academic activities at the expense of research output. Those of the developing world, whose prime social responsibility is to boost economic and social development through teaching, are particularly affected, to the detriment of pluralism in global academia (Altbach, 2015). Clauzet, Arbesman, and Larremore (2015) raised the spectre of an academic community dominated by graduates of only a few “prestigious” institutions who then set their own accustomed standards as the benchmark for determining “global prestige” in the first place.

Emerging Responses

However, there are signs that the dangers are being recognised and a growing backlash is emerging within some sections of the academic community. The idea of a “sustainable career” (Holgate, 2014) is taking off as

faculty seek to shake off “narrow metrics” and reinstate wider endeavours at the heart of academia. The American Society for Cell Biology launched a proposed “Code of Conduct” in December 2012 which would stop “impact factors” being used to judge research or individual academics, citing “me-too science” and the discouragement of innovative research as the outcome of quantitative evaluation methods (Alberts, 2013). However, the increasingly commercialised nature of global academia means that academics are increasingly excluded from control of education policy and relegated at best to an advisory role. With higher education increasingly directed by government or market forces, it is important that global academe continues to send the message that there are large parts of their role that cannot be reduced to numbers and those parts are in danger of being snuffed out in the pursuit of good intentions. The contribution of “rankings fever” to the stagnation of global academic endeavour cannot be over-stressed.

Conclusion

The academic community has only recently begun to stage a fight-back against rankings-obsessed managerialism (Stack, 2016; Post & Chou, 2016). Although there are promising signs that the most corrosive effects have been effectively challenged, the power to control academic structures often lies in the hands of governments or university management who remain convinced of the value of rankings as performance metrics. Global academe must therefore remain alert to the adverse effects of managerialism if the worth and essence of academic endeavour are not to be undermined.

References

- Alberts, B. (2013). *Impact factor distortions*. Retrieved from Science: <http://science.sciencemag.org/content/340/6134/787.full>
- Altbach, P. G. (2015). Higher education and the WTO: Globalization run amok. *International Higher Education*, 23, 2-4.
- Bhattacharjee, Y. (2011). *Saudi universities offer cash in exchange for academic prestige*. Retrieved from Science: <http://science.sciencemag.org/content/334/6061/1344.full>
- Casassus, B. (2012). *€22 billion stimulus brings worries about égalité*. Retrieved from Science: <http://science.sciencemag.org/content/335/6069/644.full>
- Chou, C. P. (2014). Why the SSCI syndrome is a global phenomenon? In C. P. Chou, *The SSCI syndrome in higher education: A local or global phenomenon*. Rotterdam: Sense Publishers.
- Clauset, A., Arbesman, S., & Larremore, D. B. (2015). *Systematic inequality and hierarchy in faculty hiring networks*. Retrieved from Science Advances: <http://advances.sciencemag.org/content/1/1/e1400005>
- Foster, J. G., Rzhetsky, A., & Evans, J. A. (2015). Tradition and innovation in scientists’ research strategies. *American Sociological Review*, 80(5), 875-908.
- Hazelkorn, E. (2008). Learning to live with league tables and ranking: The experience of institutional leaders. *Higher Education Policy*, 21, 193-215.
- Holgate, S. A. (2014). *Establishing a sustainable career by breaking the academic mold*. Retrieved from Science: <http://www.sciencemag.org/careers/2014/02/establishing-sustainable-career-breaking-academic-mold>
- Ioannidis, J., Patsopoulos, N., Kavvoura, F., Tatsioni, A., Evangelou, E., Kouri, I., Contopoulos-Ioannidis, D., & Liberopoulos, G. (2007 (5)). International ranking systems for universities and institutions: a critical appraisal. *BMC Medicine*, 5, 30-39.
- Mohammadi, E., Thelwall, M., Haustein, S., & Larivière, V. (2015). Who reads research articles? An altmetrics analysis of Mendeley user categories. *Journal of the Association for Information Science and Technology*, 66(9), 1832-1846.
- Post, D., & Chou, C. P. (2016). Preface: Measuring up for what cause? *Higher Education Policy*, 29(4), 423-429.
- Stack, M. (2016). *Global university rankings and the mediatization of higher education*. Hampshire: Palgrave Macmillan.
- Stokstad, E. (2014). *Good grades for U.K. university research*. Retrieved from Science: <http://www.sciencemag.org/news/2014/12/good-grades-uk-university-research>

- Times Higher Education. (2015). *World university rankings 2015-2016 methodology*. Retrieved from Times Higher Education World University Rankings: <https://www.timeshighereducation.com/news/ranking-methodology-2016>
- Turner, D. A. (2005). Benchmarking in universities: League tables revisited. *Oxford Review of Education*, 31(3), 353-371.
- Usher, A. (2008). Rankings 2.0—The future of university rankings. *Evaluation in Higher Education* (高教評鑑), 2(2), 51-76.