FATAL ATTRACTION? RESEARCH ASSESSMENT, PUBLICATIONS AND UNIVERSITY RANKINGS

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Australian universities scored highly in the “World University Rankings”, announced by The Times Higher Education Supplement on November 5. ANU’s Vice Chancellor, Professor Ian Chubb, while naturally pleased at ANU’s high ranking, quite correctly stated that “all these rankings are imperfect – they all aggregate different variables”. Professor Chubb was also referring to the equally well publicised Shanghai Jiao Tong Index (http://ed.sjtu.edu.cn/ranking.htm), which uses a different total set of indicators to the THES.

Professor Chubb could afford to be diplomatic as ANU came out on top of both these international rankings. Professor Gavin Brown, Vice Chancellor of Sydney, however, is quoted as saying that he found the rankings list “totally mystifying”. But as Mandy Rice-Davis once said of Lord Profumo in the infamous Christine Keeler case of 1963, “he would say that, wouldn’t he?”. On the other hand, Professor Robert King, Deputy Vice Chancellor of University of NSW, said, the THES “would appear to have based the rankings on highly relevant criteria”.

The Australian National University used their top fifty ranking in the 2003 Shanghai Jiao Tong rankings to great effect. Asian students are quoted in the recent ANU Quality Report as saying they came to ANU after reading about ANU’s place in the Shanghai Index. They didn’t realise that the methodology of the Shanghai Index has been significantly questioned. Professor Chubb cleverly hammered home the message that ANU was in the top fifty of the world’s universities.

High ranking universities will now see their marketing and student recruitment sections go into overdrive to reflecting the fact that education now operates in a global environment. A leading international consultant on fundraising and marketing recently visited many Australian universities in October. He provided advice to one Victorian university on how to improve their rankings in global league tables by indicating how they could use publication strategies to improve their university’s rankings through Institute of Scientific Information (ISI) Citation Indexes.

No matter in this context that one of the world’s leading bibliometricians, Professor A F J Van Raan, has recently shown that the Shanghai Index is significantly flawed in its methodologies - from the use of Nobel Laureate data, ISI citations and language bias. Some of the same criticisms could be made of the THES data. The debate on how one counts Nobel Laureates differs. In a THES article Professor Alan Gilbert, formerly Vice Chancellor of Melbourne University and now at Greater Manchester University, has a view on whether Nobel Laureates should be counted into the universities in which they are currently working rather than where they did their original research.
Social Sciences and Humanities disciplines also suffer badly in the comparative rankings. The compilers of the Shanghai rankings table concede that the criteria they have used focus predominantly on the “hard” sciences, and not on social sciences. “We tried really hard but were not successful in finding special criteria and internationally comparable data for social sciences and humanities. Many well-known institutions specialised in humanities and social sciences are missing from our list, or their ranks are relatively low”.

Professor Diana Hicks of Georgia Institute of Technology, has recently reaffirmed that while bibliometrics provide powerful tools for the evaluation of scientific research, the quantitative evaluation of research output in the social sciences and humanities faces severe methodological difficulties. She has said “to evaluate scholarly work in the social sciences and humanities, we are rudely forced to work outside this (science) comfort zone in a frankly messy set of literature”. Much of the work in the social sciences and humanities is also interdisciplinary compared to several scientific disciplines. In general terms, bibliometrics confront problems in evaluating aspects of Mode 2 research, particularly interdisciplinary and transnational research.

Few, however, are questioning the overall effect that the rankings message has on the medium, ie what does this rush for rankings and measurements mean in a wider scholarly environment? Articles and letters in recent issues of The Australian Higher Education Supplement, from Wilfred Prest, Gavin Moodie, Louise Adler and Marjorie Garber, while appearing to discuss separate issues, are all linked if an “holistic” view of scholarly communication is assumed. Research assessment, the stresses on scholarly publishing, the measuring of the “excellence” of individuals, departments and universities, peer review and the marketing of universities are all part of a whole which is rarely viewed as such.

Sir Gareth Roberts, Chair of the UK 2008 RAE Exercise, in a June 2004 presentation to the Australian National Scholarly Communication Forum, indicated that the purpose of research assessment exercises was to allow funding bodies to assess the quality of research arising from the investment of public money; enabling the academic sector to assess its success; and inform its future strategy and perhaps most importantly, to inform a funding model.

How will such issues play out in the upcoming discussions on an Australian Research Assessment Exercise? (RAE) At the present time it seems likely that the Government will adopt a “light touch” research assessment exercise following the visit of Sir Gareth Roberts, Chair of the UK RAE 2008, to Australia in June. Early indications for an Australian RAE seem to favour an approach based on peer review combining elements of the UK and Hong Kong exercises. These issues will be examined in a DEST funded two day seminar early in 2005. Universities in Australia would be wise to follow the RAE debate in the UK which has ranged or raged on topics such as the retrenchment of staff to enhance research profiles; the bending of publication patterns to improve citations, and even the need for an RAE at all, but this latter scenario is unlikely in the UK.

The understandable desire for accountability by governments and administrators has led, for example, to a distortion of the research process in terms of scholarly
Publications are becoming one of the most significant indicators of academic worth but are arguably losing an original purpose of the dissemination of research. A recent editorial in the *British Medical Journal* has noted that publications have become more important than teaching and the actual research itself! Lord May, President of the Royal Society, stated in evidence in May this year to the UK House of Commons Science and Technology Committee on *Research Assessment Exercise: a re-assessment* that people talk about how many papers in *Science* and *Nature* there have been, rather than what was in the papers.

The dominance of citations and publications has had profound effects globally on scholarly publishing practice. Statements cited in *The Australian* earlier this year from Monash and Sydney Universities called for increased publications output from academic staff. In the context of DEST Reporting, it is “never mind the quality, feel the width”. The DEST criteria for publication, so correctly chastised by Professor Prest and others in the columns of the Australian, were ironically not promoted originally by DEST, but rather by the Australian Vice Chancellor’s Committee. Linda Butler, from the ANU, has shown how the DEST Index has led to an increase in publications, but in lower impact journals in recent years.

A recommendation from the ANU 2004 Quality Review recommends that ANU “continues to raise its sights in terms of the quality of journals for its research publications”. This, like the rankings, unless an Open Access approach is adopted, plays into the hands of the huge northern hemisphere multinational publishers, such as Reed Elsevier, Springer and Thomson, the influence of which is often bemoaned by Vice Chancellors wearing other hats.

The purchase of ISI by Thomson in the early 1990s has seen a marked change in the marketing and commercialisation of the ISI Citation Indexes. Sir Gareth Roberts in his presentation in Australia to the NSCF Roundtable implied that for certain science disciplines the existing citation data, ie the ISI data, could be taken at face value. Many administrators and policy makers are often unaware of the problems in the use of the data, eg the need for bibliographical cleansing, the differences between different disciplines, the lack of coverage of certain subjects, author self-citation patterns, etc.

Australia therefore needs to be extremely careful about the path it treads in terms of bending publications into purposes which were never intended before the commercialisation of science publishing – the “Faustian Bargain” by academics with multinational publishers. If publishing is simply to gain rankings then the process of scholarly knowledge creation, distribution and access is being increasingly distorted. Science metrics are not applicable even across science, let alone to the social sciences and humanities, as Professor Iain McCalman, President of the Australian Academy of Humanities, reaffirmed to the National Academies Forum in June this year.

Australia appears on the latest rankings to be “punching well above its weight” in terms of funding to universities – even the Vice Chancellor of Oxford has used the THES ranking to indicate Oxford’s under resourcing – and the figures could be used to emphasise a distinction between research and teaching priorities between universities. Such data could play a part in any future debates emanating from the
Minister of Education on the role of universities in Australia. Quality frameworks need to be transparent if they are to underpin a major structural change debate.

The 2003 Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities affirmed that the mission of disseminating knowledge is only half complete if information is not made widely and readily available. The Group of Eight Vice Chancellors endorsed this in shorter form earlier in 2004. Partly as a result of the “crisis” in scholarly communication, a number of global Open Access initiatives have emerged in 2004.

In Scotland, for example, a “Scottish Declaration of Open Access” was launched in October. The Declaration included the following words, “Open access publishing … provides a more cost-efficient means of disseminating the outputs of research funded from the public purse than does the current system which requires that public money be paid over to external bodies in order to gain restricted access to the same research outputs.” Similar calls were made in the Australian context after the June 2004 National Scholarly Communications Forum.

New metrics will allow more transparent evaluations, for example, the emerging Open Access Impact Factor propounded by the Open Society Institute based in New York. Professor Stevan Harnad of Montreal University, and Professor Charles Oppenheim of Loughborough University have shown that making articles openly available, both within commercial and non-commercial publications and repositories, increases downloads and ultimate citations.

Dr Robin Batterham, the Chief Scientist, in a speech on “The Use of the Web by Australian Scientists” at the National Library on Tuesday November 9, pondered the role of public/institutional repositories, mechanisms for peer review and open access publishing – how do we secure a reliable source of the salient information needed for scientific investigation?

In the Humanities, the book, according to an American Ivy League survey this year, is the prime tool for tenure and promotion, but rather than bemoan the fact that PhD students don’t write commercial books, as several University Press Managers have done recently, non-Science PhD students in particular, should place their material in the Australian University Digital Theses program (ADT). This will give them far greater exposure and penetration through search engines like Google for their scholarship rather than forlornly waiting for the elusive goal of book publication.

This all may seem a long way from the euphoria or depression of university rankings. In an ideal world university league tables should be relegated to the intellectual basement but this is clearly not going to happen, rather the reverse. In that process of ranking universities there is a clear need for coordinated analysis of the methodologies, the need to establish improved data for comparative purposes and most importantly, a wider examination of the implications for scholarly research itself. Otherwise the current “Wizards of Oz” could reach the same conclusion as Dorothy on the bibliometric yellow brick road?

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