

# Citation, Citation, Citation? Scholarly Publishing Trends on Campus

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Real estate agents on popular television shows cite location, location, location as the three most important factors in selling a house. Similarly, publishers and academics might say that the three most important factors for them, with the proliferation of university league tables and research assessment exercises, are increasingly citation, citation, citation!

Publication metrics have become one of the most significant indicators for academic assessment. The scholarly process is increasingly geared to publish or perish syndromes, with number crunching of citations often taking precedence over the effective dissemination of research knowledge.

Eugene Garfield, the creator of the *Science Citation Index* (SCI), currently part of Thomson Scientific, has argued that impact factors in scientific literature are now used in a way that was scarcely envisaged when they were developed. Garfield says “like nuclear energy, the impact factor is a mixed blessing. I expected it to be used constructively while recognising that in the wrong hands it might be abused ... we never predicted that people would turn this into an evaluation tool for giving out grants and funding”.

## **Thomson metrics**

Thomson Scientific metrics are the dominant player in citation indicators, as will be evidenced in the Australian 2008 Research Quality Framework (RQF) metrics outcomes, The Development Advisory Group (DAG) of DEST's (Department of Education, Science and Training) 'Guiding Principles', issued in late August, specifically mentioned Thomson indicators.

The drive to publish particularly in Thomson ISI cited journals drives the author into those journals dominated by a small number of northern hemisphere multinational publishers whose avowed main purpose is to return profits to their shareholders.

EPS Services Limited in the UK recently predicted that the STM information market is likely to reach 11 billion US dollars by 2008 .The five largest players (Reed Elsevier, Thomson, Wolters Kluwer, Springer and Wiley) continued to grow, and now account for over half (52.3%) of total STM market revenues.

Many southern hemisphere and Asian journals, which are highly relevant in their local environments, are excluded from the Thomson indices. A recent as yet unpublished analysis by Elsevier's Scopus has indicated that 15% of the top 160 journals in which Australian researchers have published between 2003 and 2005 are non-Thomson Scientific journals.

### **Impact factors**

The RQF, and similar global exercises, clearly drives both academic and publisher behaviour. There are an increasing number of examples of 'crib sheets' used by publishers and library suppliers (the latter aggregating journal subscription packages) to increase impact factors. Strategies range from courting key academics, producing special issues with prestigious editors, maximising review times, providing feedback after publication of articles, targeting new scholars, deliberately creating polemical editorials, publishing best papers early in a calendar year, publishing vanilla papers on cutting edge research, identifying new hot topics, publishing more review articles and encouraging self citations.

Mid - 2006 saw a flurry of press releases from major publishers announcing their ability to increase journal impact factors, for example Blackwell Publishing, Cambridge University Press and Taylor and Francis. There are also recent examples of academics being 'requested' by editors to provide more references in their submitted articles to the journals in which they are seeking to be published. This is a new variant of 'self citation clubs', but no less worrying in the long term effects on publishing trends and habits for library budgets and smaller publishers.

### **Article obesity-size without stature?**

One of the results of the desire to publish in high impact journals has been an increased flow of manuscripts to those journals and consequent issues for cost structures in terms of peer review and editorial costs. In 2005, 25,000 papers were submitted to *Nature*, according to the journal, but only around 2,000 were published, giving a rejection rate of 90 -95%. Similar ratios exist for the top medical journals.

A large proportion of rejected papers then ricochet down the publishing chain with consequent costs to the peer review process and demands on the largely unpaid academic refereeing community. With the increase in manuscript submissions some publishers are turning to Thomson citation patterns to reject articles without prior reading.

### **Cite unseen**

Even within high impact journals, however, the well-known 80:20 rule seems to prevail, with most citations coming from a relatively small number of articles. In 2004, 89% of citations in *Nature* were generated from just 25% of the papers. Garfield has stated that out of about 38 million source items published from 1900 to 2005 about half were not cited at all!

Analysis of library data globally tends to show that a significant amount of purchased material is little used. The cost of the scholarly communication system viewed globally, is increasingly inefficient if costs are viewed holistically. With low citations and low downloads for a large proportion of published scholarly articles, who benefits but the high end multinational publishers operating within the metrics framework?

### **In the country of the blind?**

Researchers are often ignorant of global publishing trends and opportunities and particularly of copyright issues in respect of their own intellectual output. The University of California's Academic Senate stated, in this context, in late 2005:

“The current model for many publications is that faculty write articles and books, referee them, edit them and then give them to a publisher with the assignment of copyright. The publisher then sells them back to the faculty and their universities, particularly to university research libraries. While there clearly are costs of publication, a number of publishers (particularly, but not always, for-profit corporations) earn munificent profits for their shareholders and owners. However, maximizing profits for these latter groups may work to the detriment of faculty, educational institutions and the public. Meanwhile, opportunities to reduce production and distribution costs and to create innovative forms of publication and dissemination are increasingly manifest, and enabled by networked digital technologies, new business models, and new partnerships.”

### **Conclusion**

Rene Olivieri, CEO of Blackwell Publishing Ltd, in a 2006 editorial in the UK journal *Learned Publishing* concluded: “More public good benefits from the scholarly communication system, will be achieved, only if we review “the whole value chain, from initial research proposal to article citation and archiving”, but how often does this occur in Australia?

Researchers, publishers, librarians and consumers are the key components in scholarly communication debates, but rarely come together on campuses in meaningful dialogue, remaining in professional and disciplinary silos. Maybe the 2008 Australian Research Quality Accessibility Framework will provide the key for change to ensure, as DEST puts it, “that information about research and how to access it is available to researchers and the wider community”.

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