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Citations count: the provision of bibliometrics training by university libraries

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INTRODUCTION

The use of citation analysis as an indicator of research quality is gaining momentum: in the higher education (HE) sector. League tables are increasingly relying on citation data to inform their rankings of universities. In the recently published Times higher education World University Rankings, citations were given the heaviest weighting (32.5%) of the total for each university assessed. The forthcoming Research Excellence Framework (REF) was originally to be based solely on citation data. This idea has now been dropped, but citation data will still be supplied to all sub-panels- they will decide whether and how it is used. Overseas institutions have been using citation data to make recruitment and selection decisions for a long time. Many higher education institutions in North America, Asia, and parts of Europe require applicants to academic posts to supply their h-index (an index that attempts to measure both the productivity and impact of the published work of a scientist or scholar based on the set of their most cited papers and the number of citations that they have received in other people's publications). Increasingly, UK-based institutions are making research quality assessments based on citation counts.4 despite its critics and its limitations- and there are many- citation analysis looks set to stay.

As the use of citation analysis becomes. More widespread, so do the number of tools available to perform bibliometric calculations. When I started working in HE libraries we had access to the Journal Citation Reports on microfilm. If your journal was not covered, we could not help you.

Today Thomson Reuters (inheritor of the original Institute of Scientific Information (LSI) citation data) offer a suite of bibliometric services: the Journal Citation Reports database; Web of Science with incorporated citation data; Researcher ID; InCites; Eigenfactor.org and the BIOSIS Citation Index. Elsevier have come on-stream with a number of offerings including SCOPUS, Scimago Journal and Country Rank, and SciVal. Google Scholar provides citation searching, and Anne Wil-Harzing has

developed the freely available Publish or Perish service that uses Google Scholar data to perform author and journal analyses.

LIS-BIBLIOMETRICS DISCUSSION LIST

As the interest in citation analysis grows and the options for performing the analyses increases, so the demands on academic librarians to keep up to date and provide related services grows commensurately. To this end, in December 2010 Jenny Delasalle of Warwick University and I set up the discussion list Lis-Bibliometrics. The purpose of the list was to provide a forum for those involved in applying such measures and for discussing the practical application of bibliometric tools. As evidence of the growing interest in this area, the list attracted 363 members in the first four months of operation.

BIBLIOMETRICS TRAINING

One of the earliest questions I posed to the list related to bibliometrics training. What form of bibliometrics training and support did institutions offer? If they provided workshops, what did they cover? And what was the take-up of such sessions like? These questions were rooted in the development of bibliometrics training at Loughborough University, where our support was undergoing a transition from a piecemeal approach to a more coordinated approach which was supported at the highest level by the Vice-Chancellor and Pro- Vice-Chancellor for Research. Twelve responses were received, including four from outside the UK. Some were in the early days of developing bibliometrics support; however, many shared plans to increase the level of support they offered. In some cases the support provided did not take the form of training. As one respondent noted:

'We do not run straight "bibliometrics" classes...

It is simply part of the discussion that comes up around strategic publishing and research information management.'

In all twelve cases, the bibliometrics support provided was by library staff, although some indicated that they had worked with other sections of the university such as IT services, or the Research Office.

WHO WAS TARGETED?

Of those that already offer bibliometrics training, those most commonly targeted were research postgraduates (PGR) and early career researchers. These groups usually have pre-existing, often mandatory; training programmes so it is easy to incorporate bibliometrics into these structures. Established academic staff usually attended training on a self-selecting basis. However, other university groups had also been targeted for training: departmental administrators were the focus of two institutions' sessions, as the job of performs ing citation analyses on academic staff had fallen to them. Research Office staff at some institutions had also attended

training with an eye on the measurement of research quality offered by citation analysis. The take up of sessions, where reported, tended to be very good with between 15 and 30 attending.

WHAT WAS COVERED?

The content of most sessions seems to be fairly similar, with slight changes of emphasis depending on the audience. Common topics were: an introduction to bibliometrics and why it matters; measuring journal impact factors; calculating your h-index; and ways of improving your citation rates via open access publishing. The main tools covered were the Journal Citation Reports, Scopus and the software Publish or perish, and hands-on opportunities were often offered. Discussions around the merits and limitations of these tools, as well as bibliometrics more generally, were also common. Some respondents had clearly been on a journey in the development of their training. One said:

Once we began with 'what is bibliometrics' in all its possibilities, it quickly became clear that the underlying question that researchers were interested in was 'what do I do about it' and so we developed, and always include, material on publishing strategy: not [a] direct answer to 'should I choose journal A or B?' But the role of visibility, open access, self-marketing, what to think about when choosing journals etc. The feeling I have, is that it is the latter that has been more appreciated than the raw, how one calculates field-normalized citations etc, of bibliometrics.

This has certainly been our experience at Laugh- borough. Having delivered a number of bibliometrics sessions over the years, we now tend to focus less on how an academic can calculate their own h-index, but more on how they can improve it. Our sessions are usually entitled 'Maximising your citations' and 'Improving your research impact' and as such tend to generate good audiences. We are also keen to spread the message that citations are not the only fruit. Services such as Eigenfactor, Mendeley and Public Library of Science are developing metrics based on alternative 'social networking' measures of impact such as comments on papers, blog items, tweets, hyper- links and so on. 5 Also, web analytics can provide another measure of the 'popularity' of research papers. Institutional and subject repositories pro- vide access and download statistics which give researchers an earlier indication of the impact of their research than citations, which can take years to accrue. The Toolkit for the Impact of Digitised Scholarly Resources6 gives a window onto a wide range of alternative ways of measuring the value of scholarly outputs that go beyond the traditional citation count.

OTHER BIBLIOMETRICS SUPPORT

AB mentioned above, not all institutions had gone down the route of offering formal training sessions in bibliometrics. One university had developed a leaflet outlining the major bibliometrics tools and their uses. Two others reported that they were developing online tutorials that either included bibliometrics or that entirely focused

on bibliometrics category. In the latter category there were four academic libraries in Dublin who

Are collaborating on an online introductory tutorial on bibliometrics and a range of other materials such as worksheets, posters, datasheets, booklet etc from which trainers can pick and choose what they want to use to deliver bibliometrics awareness and training. It will initially be generic materials plus some special items focused on the areas of geography and computer science.

The good news for the rest of us is that these outputs are to be made available on open access via the Irish National Digital Learning Resources repository.8 Loughborough University is also involved in the development of an online tutorial for researchers that covers bibliometrics. It is hoped that this will provide 'anytime, anywhere' support for researchers in this developing area.

LESSONS LEARNED

A presentation by Kate Bradbury of Cardiff University that she shared with Lis-Bibliometrics highlighted some useful lessons she had learned from delivering bibliometrics training. Being unable to improve on them, I have her permission to share some of them here to finish:

• Reduce- it is difficult to avoid too much detail given the subject, but have to try!

• Stay up to date -with the REF; journal articles; features in Scopus/Google Scholar/Web of Science

• Emphasise benefits for the researcher, such as increased visibility of publications/profile

• Expect it to take time for departments to take up the offer

• Target- best attendance with sessions tailored for schools/departments

• Be flexible and adapt -length/ audience/content

• Be prepared for discussions about the value of using bibliometric data

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