

Opening academics

Opening access in the academic world

Executive Summary

Scientific publishing has been dominated by a few larger publishers, thus some journal prices have increased from 60 to 98 percent. Traditional publishing has problems in process slowness, excessive uniformity, and power political playing. At worst these issues cause delays in the accumulation of information and hinder the effect of new ideas. Impact factor, a popular method to rank journals, is a major reason for publishers' dominance. Despite its popularity it is easily manipulated and often has a poor coverage over geographies and journals.

There are two kinds of open access, green and gold. Green open access stands for author, institute or community repositories. Golden open access transfers the article processing costs to authors or their financiers, still maintaining the high quality review processes. Open access articles are free for every one to read, print and distribute, thus widening information availability and removing publishing queues.

Authors utilizing golden open access are not left alone with the article processing cost – many financiers, like Academy of Finland and Tekes, accepts these costs as a part of their funding. Also the copyright issues are being confronted by the SHERPA project, which lists author's archiving rights by journal and publisher. Today, many publishers actually allow authors to archive revised post-prints.

Open access archives have been utilized since 1991 and there are over twelve million e-prints available today through OAIster harvester. The first open access journal was established in 1987 and today Lund University's journal database lists over 2 800 open access journals.

Several lobbying and research groups have been established to support open access movement: SPARC, SPARC Europe and FinnOA. Also the

European Commission and Finnish Ministry of Education have recommended the adoption of open access policies and similar development is undergoing all over the world. In addition, several pieces of open source software have been developed basis to facilitate the change, for example EPrints and DSpace e-prints archiving systems. Also, to ease copyright issues Science Commons, a non-profit company, offers modified copyright statements.

The most intriguing part of open access is that the free availability seems to increase and advance article's citations and thus impact. Also the archives' interoperability enhances the spreading of e-print articles. The experiment of Oxford University Press suggests also that even partial open access invokes more interest in the provider.

Institutional repositories around the world have had quite impressive results. After one year the Nebraska-Lincoln University had 2 397 e-prints, with 58 743 downloads. After three years of operation the Granfield University's repository had 20 000 item views per month on their 1 000 items. Even more impressive is the first year of the University of Otago. They had only some 600 repository items, but some 60 000 full text downloads and 134 000 abstract views.

Open access attitudes are spreading with varying speeds. In poorer countries and among vitally important study fields the acceptance is significantly larger. But also in developed countries the diminished library funding and open access citation increase indicators speed up the development. Author with an existing personal homepage may feel that their work is accessible enough, but larger repositories can offer permanent addresses and centralized contents management. Universities should also take in account the views of younger generations – for

today's master's thesis information is mostly searched online.

The Department of Industrial Engineering and Management has a good access to research materials and many of the journals in their field do not provide open access possibilities, so the focus should be in establishing an e-prints repository. Helsinki University of Technology already has an e-prints repository but it is not focused on article archiving. Therefore it would be best to launch a new repository or use the Munich Personal RePEc Archive, which disseminates individual articles further.

Launching a new repository does not need a lot of expertise, because the platforms like EPrints and DSpace are made to be quite simple. In addition, a few of Finland's universities and libraries have already had much experience in establishing institutional repositories and they would gladly pass on this knowledge. At the University of Otago the repository was established in ten days, from which most time was spent on shaping the looks and collecting material.

However, in order to gain enough content for an interesting repository and to avoid doubled work, the department should collaborate with other economics schools in Finland, like Hanken or Helsinki School of Economics. Despite the benefits of open access, too much uncategorized information hinders to effective usage. Therefore, archives should be established according to their study fields, not by communities. This has been noticed also in Central Europe, where the Nereus consortium is starting the Network of European Economists Online.

The highest ranked universities are well under way with institutional repositories. To mention a few of the universities with utilize article repositories: Cambridge, MIT and Caltech. University's reputation as a research institute, it is an important issue which should be addressed jointly. Every department should increase their staff's awareness of open access publishing and archiving, but eventually this issue needs collaboration throughout universities and libraries.