

Roads to Knowledge: Activities for Promoting Open Access by the DFG

Response to the study Publishing Strategies in Transformation?
Results of a study on publishing habits and information acquisition
with regard to open access

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Preliminary notes

The aim of the study *Publishing Strategies in Transformation? Results of a study on publishing habits and information acquisition with regard to open access* was to establish an empirical basis on which the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) could decide on its future publishing policy in relation to open access. The strong approval from all respondents for the idea that the DFG should give more encouragement to open access across all scientific disciplines is significant for the DFG's funding policy. Over 80 percent of all respondents thought that a culture of open access could play a decisive role in encouraging the exchange of scientific information, and considered that funding free access publications was basically a good idea. However, the results of the survey also reveal insufficient awareness of open access in the scientific community. This is why the desired effect of open access, to facilitate the exchange of information, has not yet been achieved, although there is a clear willingness on the part of respondents to provide free access to their journal articles on the internet in addition to publishing them in the conventional manner, particularly when the information is made available in their own disciplines. This willingness is underlined by actual publishing activities in open access: while publications in open access journals have played a distinctly secondary role over the last five years, the number of papers published on the internet in addition to publishing via conventional channels, in order to provide free access to these publications, has grown significantly across all scientific disciplines.

Modified funding strategy

On the basis of the study's results, which indicated a trend in favour of funding open access, the DFG's statutory bodies also addressed the issue of free access to scientific knowledge at their annual meeting in early July 2005. In the view of the members of these statutory bodies, it was essential that researchers be made aware of the various ways in which they could make their articles available for open access. As a result, future DFG award letters will encourage project leaders to make their (journal) publications available through open access wherever possible. Researchers can do this either by publishing electronic archive copies of their articles on the internet, after these have been published in traditional journals by a publisher, or by publishing their work directly in open access journals of high repute, a few of which already exist in some subjects.

In a further step, the legal framework surrounding the secondary publication of journal articles that have already been published elsewhere needs to be amended. One option might be for researchers to retain a non-exclusive

right to exploit their publications vis-à-vis publishing houses. The DFG should clarify how this policy can be formulated in such way that it does not discriminate against early-stage researchers in particular, who tend to be encouraged to publish in journals with the highest impact.

Capacity building

Since the aim of open access is to facilitate the exchange of scientific information, one of the primary matters of concern for any research funding organisation must be to establish a technical infrastructure that allows easy access to scientific content, as well as the means and assistance to support it from a legal, technical and organisational point of view. This view was echoed by the survey respondents.

Over the last few years, a number of relevant services have been developed within the DFG's Scientific Library Services and Information Systems (LIS) Division. Through this division the DFG funds pilot projects for developing the means of open access and for projects that encourage the establishment of open access journals as accepted discussion forums within individual disciplines. The implementation of procedures for critically assessing the scientific quality of articles submitted plays a vital role. This is also demonstrated by DFG-funded open access journals such as *sehpunkte*, *German Medical Science* and *Forum Qualitative Sozialforschung*. With its support of *German Academic Publishers* and *Dissertationen Online*, the DFG is funding projects that develop business models for electronic publishing on the principle of open access, ensure the continued use of these products at a professional level and create the means of setting up legal, organisational and IT structures for new electronic journals in particular. The results of these DFG-funded projects can be used by universities and small and medium-sized publishers wanting to exploit the new opportunities of electronic publishing.

Building and networking institutional and discipline-specific repositories

A further area in which action is needed is the consistent building and developing of an infrastructure that will be attractive to researchers and allow the full potential of electronic publications to be exploited. The future funding of electronic publishing by the DFG should therefore focus primarily on discipline-specific electronic publications, making them accessible via discipline-specific reference and research instruments and linking them together and with primary data. The development of a standardised infrastructure for scientific publications on the internet, which must retain the high quality required of scientific contributions, is also necessary in respect of the activities of other European countries; the Netherlands and the United Kingdom have both set up large funding programmes to develop and network institutional repositories, and a standard framework is required in order to establish a future culture of open access at the European level.

As regards the actual funding policy, this means first and foremost supporting projects designed to develop and network institutional platforms for free access to secondary publications. It also means establishing mechanisms for linking repositories that take into account specific discipline-related aspects. Germany's existing comprehensive network of university publication servers, along with the certificate developed by the German Network Information Initiative (DINI) as the new technical standard for linking document and publication servers¹, offers an optimum basis for this. The enrichment of open access platforms with high-quality content will be more successful the more

individual institutions use appropriate publishing policies to encourage their researchers to make their work available on the internet through electronic archive copies.

Measures are also needed to develop and link institutional and discipline-specific repositories in order to strengthen Germany's position in the European scientific community. The European Union's Seventh Framework Programme (FP7) may contain a separate funding line in the area of "research infrastructures" to develop a Europe-wide networked structure of institutional and discipline-based publication servers. In June 2005, the DFG's LIS division participated in a workshop in Brussels, during which proposals for structuring this funding line were discussed. In August 2005, a German initiative group called "Digital Repositories", in collaboration with the DFG Head Office and members of the statutory bodies, met to discuss how to strengthen the prospects of German researchers should this new EU programme be established.

Awareness-building

The results of the survey also reveal that many researchers are still sceptical about exclusively electronic publications, regardless of open access. This is reflected in particular in reservations about the lack of quality control, less frequent citation and doubts about long-term availability. However, these reservations decreased in line with the experience that researchers had of publishing on the internet. The DFG must therefore make it a priority to raise awareness of the advantages of open access publications within the scientific community, in particular the increased visibility of their own research which open access provides, and about forms of quality assurance for electronic publications.

Discussions are currently being held regarding how to improve the accessibility and exchange of information in Germany. "Cream of Science," an open-access initiative from the Netherlands, could serve as an example. This Dutch initiative provides references on 41,000 publications from 206 top researchers in the Netherlands (see <http://www.darenet.nl/en/page/language.view/keur.page>). Sixty percent of these publications are accessible free of charge over the internet and can be searched by author's name, academic discipline or research institution.

Finally, the enormous need for information and advice about open access should also initially be served by the continued development of this issue by the DFG (see http://www.dfg.de/forschungsfoerderung/wissenschaftliche_infrastruktur/lis/projektfoerderung/foerderziele/open_access.html)

1. The establishment of the DINI Office was supported by the DFG. Additional information on the certificate, in German only, can be found at <http://www.dini.de/dini/zertifikat/>.

