



A coordinated approach is key for open access

Cooperation and a clear set of aims are essential for Europe to be a front runner in making research freely available, says **Christoph Kratky**.

Even the most optimistic advocates of open access to academic publications must admit that we are years — and perhaps decades — away from full conversion to such a system. It is easy to call for open access, but more difficult to make it happen. More science funders must put their money where their mouths are, and back their positive words with action. It will not be cheap, but the longer we wait, the more expensive it will be.

Open access (OA) was an idea originally put forward by activists within the scientific community and later taken up by science policy-makers through declarations signed in Budapest, Bethesda in Maryland and Berlin. A decade after these statements, we are again faced with a wave of declarations on this topic, such as the position paper published in April by Science Europe, a research organization in Brussels, and the action plan prepared by the Global Research Council that was announced in May. All such declarations agree that the public that funds the research should have free access to the results, and that the current subscription-based publication model should be replaced.

Much progress has been made. The number of OA publications is on the rise, as is their reputation. Innovative OA concepts such as the Public Library of Science (PLOS) and BioMed Central have been established, some of which have proved economically viable. Countries such as the United Kingdom and disciplines such as high-energy physics have set their sights on moving to OA. And the European Commission plans to impose OA requirements on publications based on research funded under the Horizon 2020 Programme.

Yet despite this progress, a worrying imbalance remains between the efforts of research funders (including organizations that perform research), which can act only at a local level, and big publishing houses, which act globally. As a result, countries and institutions have different OA policies and behaviours that form a confusing patchwork. Some have explicit OA policies; others do not. Some require; others recommend. Some offer funds to pay for OA costs; others do not. Some have opted for 'gold' OA, which demands that publishers make papers freely available; others prefer 'green' OA, which allows researchers to archive the work.

Green OA seems a more workable solution, at least in the short term, but it is a mess. Many scientists simply don't know how, where and when to self-archive their papers. This confusing picture is confounded by the controversial question of whether widespread green OA can work as a cheap way to force reluctant publishers to adopt OA.

Some argue that it will succeed, because libraries will cancel subscriptions as soon as

enough self-archived articles are available. Others point out that archiving often happens only after an agreed embargo period — during which the only way to access the work is to pay the journal — and they say that subscriptions will endure. After all, who wants to settle for last week's newspapers? If publishers find it economically sustainable to establish a green world of subscription journals with embargo periods of six months or more, this road would turn out to be a dead end and thus fail to promote the desired transition to full OA.

The quality control imposed by publishers helps to ensure the integrity of the scholarly system, and that warrants financial compensation. Yet the current system of subscription journals is a classic example of a dysfunctional market, leading to high costs for the mostly publicly funded scholarly system. It is naive to expect that publishers might be persuaded to exchange a profitable business model for a potentially less profitable one.

Those who push for full OA must take firmer steps, and Europe should take the lead. Funding bodies should agree through their umbrella organizations on clear and uniform rules for the self-archiving of publications for both authors and users, with the support of appropriate legislation by the European Commission. Embargo periods of 6 to 12 months should be allowed, but only for the first few years.

Non-profit publishers need funds to move their high-ranking journals — which offer better value for money than commercial rivals — to OA. Funders should help to establish new, non-commercial academic publication models, which could be hosted by institutions such as universities, research organizations and learned societies.

This strategy could contribute to revitalizing the market, which is hindered by a lack of competition between few oligopolistic publishers.

It is easy to call for more money, but in recent years the Austrian Science Fund (FWF) in Vienna has provided it. The FWF has gradually increased its OA publishing costs, which now amount to about 0.8% (€1.5 million, US\$2 million) of the organization's annual budget. These costs are substantial compared with those of similar institutions. In a world of globalized research, however, national funding agencies quickly reach their limits. Only through close cooperation, starting at a European level, can we develop and implement models to accelerate the transition to full OA. It will be cheaper to invest now than to prolong the agony. ■

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