bio Focus

Mark Downs looks at journal publishing



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ver 60 of our 92 member organizations are other learned societies, which we represent on issues such as funding, science and education policy, and careers and skills. These are all important, but increasingly, a key topic of discussion has been publishing. Learned societies have long histories of publishing high-quality scientific journals, books and reports. These publications not only serve their communities, but earn income to support the societies' charitable work. The surplus from publishing is often used to fund membership activity, engage the public, provide career and educational support, and to offer the high-level scientific oversight which these societies do so well.

Journal publications — using a peer review system to ensure quality and credibility — are a key part of the way the UK disseminates scientific research and knowledge, usually via university and other library systems. But a challenge to this long-established route is the argument that the public often has to pay twice to access this knowledge: once through the public funding of research, and then again through the need to pay for the journals which disseminate the outcomes. Government and other funders of research think it is time to change this model, to ensure anyone can access scientific publications funded through public money with no charge. This sounds eminently sensible, but does the ideology match the reality of publishing? As ever, the answer is not straightforward. If these publications are available for free, then how will they be edited, formatted, presented and stored in an accessible way? In practice, the peer review system and the important process of generating the final copy — the 'version of record' — cannot be delivered for nothing; it must be funded by a sustainable mechanism. Someone will have to pick up the cost even if it is not a traditional subscriber.

There are two open access systems that could allow the public to see articles for free. Firstly there is Gold Open Access, where the author pays a fee to cover publication; the money to support this might well have been included by funders in a grant. Then there is Green Open Access, where an author deposits the final draft of an article or data in a



searchable online archive, as a result of an agreement or after an embargo period. To construct a viable financial model for the latter system is tricky: how is the infrastructure paid for and maintained, and can we really risk losing the value of professional publications in terms of quality control, format, style and presentation? Gold Open Access also has its problems, particularly where publication happens after a grant has ended, where small or financially stretched funders simply won't pay the fee, and where the research is essentially unfunded (this is not uncommon).

Both Green and Gold systems are already operating in a limited way and many publishers, including learned societies, offer the option of Open Access Publications or a hybrid of Open Access and traditional publishing. It is clear that Open Access of some colour is here to stay, and there is an urgent need to produce a viable and sustainable financing mechanism to ensure a rosy future. But learned societies are concerned. Although many make their publications available for free after a set period anyway, if Green Open Access took off in a substantial way, subscriptions would fall and the drop in income could threaten the substantial charitable work they do. And even switching to the Gold system, which seems more likely, will lead to a period of change that will need to be carefully managed. What the Society and our Member Organizations would like is recognition from Governments that the changes in publishing are complex: learned societies have a critical role to play as charities in education, public policy and professional development, as well as being key publishers. It's important to see that these things are all linked: publishing revenue funds charitable work, which is critical to the future success of science in the UK and hence the economy. Policymakers need to take account of that as publishing models evolve. And before we start redesigning publishing, is it really an issue for the public as Open Access supporters claim? Who are the thronging masses who want to read specialist science publications? If there is such demand it has passed me by. And interlibrary loans for people with a real interest are still there. Open Access is a different model. But the jury is out on whether it is a better model.

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