Open access – broad readership, high impact

What authors need to know and how they can benefit
Introduction

Over the last decade, the emergence of digital publishing with instant global reach has offered the promise of expanded access to academic content. Digital delivery has now replaced print as the primary method for distributing academic content, reducing or removing many of the limitations and costs inherent in a physical distribution model.

Digital delivery has fundamentally changed the manner in which nearly all content - including academic content - is delivered, discovered and consumed. Technical advances in electronic publishing and delivery have been complemented by improvements in the packaging and marketing of academic journals and books. These new models have had a profound impact on the purchasing habits of academic institutions and have greatly increased the breadth and depth of titles available in many institutional catalogs.

The improvements brought on by digital delivery have fostered the creation of new business models that deliver on the promise of increased access. Publishers, institutions and academic authors are exploring alternatives to traditional publication models.

Open access (OA) publishing has emerged as a leading alternative to traditional publishing models. In an OA model, all costs associated with the added value provided by publishers are covered up front so there are no subscription costs or access fees for either the institution or the individual researcher. OA publishing delivers content at no cost to the reader and without restrictions, thereby expanding access to literally anyone with an Internet connection and an interest in a given topic. This is an especially salient point for authors of scientific content.

OA is no longer a new or experimental model. Over the past ten years, OA has matured into one of the standard models with specific benefits for the academic community and it is a model whose growth continues to accelerate. This paper will provide an overview of the OA model and its evolution over the past decade. We will also look at the key benefits and leading concerns for authors of academic content.

How does open access work?

Open access publishing offers an alternative model to traditional subscription-based journal publishing by removing barriers to access academic content. In a well-designed OA model, all participants benefit. Researchers and authors value wide access and visibility of their research. Academic institutions, funders and societies see benefits from research that is freely available, helping them to achieve their mission to develop and disseminate knowledge in a particular field of study. And society as a whole will see positive effects as researchers and non-researchers alike gain access to high quality academic scholarship.

OA publishing has two basic models: Green and Gold. Green OA, also referred to as self-archiving, is the practice of placing the author's accepted manuscript in an institutional repository offered without cost or restrictions.

Gold OA, which will be the primary focus of this paper, differs only in the business model and the point at which access is available. While Green OA articles are generally published first under the traditional subscription model - to allow wider access to the article before it is published in a subscription journal - Gold OA articles are all published open access from inception, without cost or restrictions for the end user. Publication can occur either in a fully OA journal or in a hybrid journal. A hybrid journal is a subscription-based journal offering the OA option.

In the Gold OA model, publishing costs are often covered by article-processing charges (APCs) levied at the beginning of the publication process. Authors are responsible for paying these APCs but they are rarely required to deliver the funds from their own pocket. In fact, the SOAP project (Study of Open Access Publishing) found that many researchers encounter few problems in sourcing the funding for the APCs, although this varies by subject area and country.

"…scientists now have the satisfaction of seeing the results of their research available to a large audience in a much quicker timeframe. Another enormous advantage of open access publishing is that research results, once they are available in the open access space, will remain accessible indefinitely and will continue to be available to ever increasing numbers of researchers."  
» Heinz Pampel, Coordinator of the Open Access Project at Helmholtz Association, Germany

"…scholars write journal articles for impact, not for money. In the age of print, they had no choice but to publish their articles in journals of limited circulation. That’s no longer the case.”  
» Peter Suber, Director of the Harvard OA Project and leading OA advocate

1 Depending on the respective publisher’s policy embargo periods may apply.
To support the benefits of OA, a large number of funders and institutions have created funds dedicated to cover APCs for their researchers, faculty, members or scholars producing work in a particular field of study. More than 180 institutions and 50 funders all over the world have made open access mandatory. Many institutions have signed OA initiatives including the Berlin Declaration (2003), which is endorsed by more than 270 leading research organizations and universities worldwide. There are now more than 100 funds available to authors and the number continues to grow. Organizations such as the Austrian Science Fund (FWF), the European Cooperation in Science and Technology (COST) and the World Bank have also started establishing special funds for OA books. A constantly updated list can be found online in the Open Access Directory. 

The development of open access

The OA movement traces its origins at least back to the 1960s but it was the availability of the Internet in the 1990s that fostered the rapid growth of OA publishing that has occurred over the last decade. The ability to publish a digital version of text online and make it immediately accessible to researchers worldwide provided an infrastructure that enabled wide distribution at comparatively low cost. Digital distribution has in fact been a driving factor in the rapidly increasing number of academic journals published each year. In 2010, just over 1.4 million scholarly journal articles were published; this figure represents an increase of nearly 50% over a ten-year period. During that same span of time, the vast majority of STM journals also became available online. And as digital distribution expands to reach more parts of the world, it continues to offer a widening horizon of possibilities for authors to deliver more content in more ways. Physical proximity is no longer a requirement to conduct leading edge academic research.

Another driving factor in the OA movement was the so-called ‘serial crisis.’ Over the last two decades, prices for scientific literature increased steadily, while library budgets remained fairly static. Over time, the result was a decrease in access to published academic research. As a consequence, a chorus of prominent voices called for ‘digital equality.’ In essence, they were arguing for unrestricted access to scientific publications, particularly those that benefited from publicly funds. These critics argued that a researcher’s access to scientific information should not be limited by the size of their institution or budget.

As discussed above, a number of leading institutions agreed and have since taken measures to broaden access to their publications. Many of them have adopted OA mandates, which require their members and faculty to make their research freely available to all. In a recent interview with Springer, Peter Suber noted that, “the number is not only growing, but the growth is accelerating. Funders are charities or philanthropies, and that explains why they grasp the logic of OA. If a research project is worth funding, then its results are worth sharing.”

“Open Access allows authors to (finally!) make their own decision about whether or not they want their work to be freely available. Authors can have the best of both worlds: if they prefer restricted access to a work they can publish in a paid-for journal but if they want wider access, they can publish open access.”

Prof. Dr. Alexander Steinbüchel, Full Professor at the Institute of Microbiology, University of Münster, Germany


How was the publication fee covered?

| Research funding includes | 2,569 (28%) |
| Research funding not intended | 2,992 (31%) |
| My institution paid | 2,356 (28%) |
| I paid myself | 1,179 (12%) |
| Other | 449 (5%) |


2 http://roarmap.eprints.org, status: July 26, 2012
4 http://oad.simmons.edu/oadwiki/OA_journal_funds, status: August 17, 2012
5 Scientific Technical and Medical (STM) journal publishing in 2010, 4/2010
6 http://www.earlham.edu/~peters/fos/overview.htm, status: August 17, 2012
Support for OA continues to grow as demonstrated by the rapid expansion in the number of OA journals published each year.

In July 2012, the Directory of Open Access Journals (DOAJ) reached the 8,000-title milestone7 while the Directory of Open Access Books (DOAB) lists more than 1,100 titles from over 25 contributing publishers8. Furthermore, there are currently 609 societies publishing 702 fully OA journals.9 The Bielefeld Academic Search Engine (BASE) operated by Bielefeld University Library and described as “one of the world’s most voluminous search engines especially for academic open access web resources” counts over 36 million open access documents as of June 2012.

Information is becoming more widely accessible. The arrival of digital publishing has provided the infrastructure to enable this shift; and OA provides an increasingly important publishing model.

**Academic publishers and open access**

Digital content distribution delivers obvious benefits but also comes with its share of challenges. As has been demonstrated in other content industries in the recent past, protecting copyright on digital content is a difficult issue and striking the right balance between access and security can be a daunting task. Leading academic publishers have taken a forward-looking view of technology, embracing developments such as the OA movement rather than attempting to shield their content from the inevitable march of technology.

Springer has been at the forefront of OA publishing for many years and was the only major commercial publisher that took a constructive approach to the business model, preferring to experiment with it, rather than dismiss it. Springer was also the first major “traditional” publisher to wholly embrace it. This stance contributed to the growth of the model, reinforcing its credibility and broadening its appeal. Springer follows the Green route of OA enabling authors to comply with institutional OA mandates by allowing self-archiving for articles published in their traditional subscription-based journals. Springer also supports Gold OA through its various OA offerings. In 2004, Springer launched Open Choice, providing authors with the option of publishing OA articles in the majority of their subscription-based journals. In 2008, Springer acquired the pioneering OA publisher BioMed Central, making Springer the largest OA publisher in the world with just over 30,000 open access articles published in 2011 and a total of over 340 journals.10

In June 2010, Springer launched SpringerOpen, its portfolio of peer-reviewed open access journals covering all disciplines of science, technology and medicine (STM). The portfolio ranges from highly specialized titles to SpringerPlus, Springer’s interdisciplinary open access journal that publishes scientific research across all areas of science. Following the OA model, most SpringerOpen journals charge APCs. For many of these journals, costs are fully or partly covered by institutions participating in Springer’s Open Access Membership Program.11 The Membership Program with over 400 Members12 worldwide enables academic and research institutions, societies, groups, funders and corporations to actively support open access by covering some or all of the publication costs for their researchers. About one third of Springer’s open access journals are fully sponsored by one or more affiliated societies.

The growing demand for open access publishing and the success of Open Choice and its SpringerOpen journal portfolio led Springer in August 2012 to expand its offering to OA books. Springer’s OA books are also published under the established SpringerOpen brand. The launch of these products underscores Springer’s steadfast and continuing support for this important publishing model.

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10 [https://docs.google.com/spreadsheet/ccc?key=0AgBYTDKmesh7dDZ6UnBcnpOdVpnd3ptSnVpQxrenc#gid=1](https://docs.google.com/spreadsheet/ccc?key=0AgBYTDKmesh7dDZ6UnBcnpOdVpnd3ptSnVpQxrenc#gid=1), status: August 3, 2012
11 Status: March 2012
12 Status: July 2012
13 More information can be found on the SpringerOpen website: [http://www.springeropen.com/libraries](http://www.springeropen.com/libraries)
14 Status: August 2012
Authors benefit from open access

In addition to the positive impacts noted above, publishing under an OA model has numerous advantages for the authors of scholarly research. OA enables broader distribution, increased visibility, as well as retention of copyright, all without compromising the quality or integrity of the work.

Reaching larger audiences
The most obvious benefit of OA is access to a larger, international and more diverse audience. By eliminating financial barriers to access, OA enables more researchers to find an author’s work, leading to increased visibility and exposure. In addition to traditional academic users, OA research can also find its way into the hands of non-academics, who may still have a vested interest in the research. This expanded audience will undoubtedly increase the real impact of the research.

Enhancing author visibility and reputation
Increased usage means increased visibility for authors, elevating their profile and enhancing the reputations of the publications, societies and funding institutions with which they are associated. In addition, because OA articles are online and freely available, authors can use the content itself as a platform to raise their own profile and establish a more direct relationship with the users of their own content.

Providing high quality and standards
In OA publishing Springer observes the same fundamental values that have made for great academic publishing for decades. At Springer, OA articles are subject to the same rigorous peer review process and editorial scrutiny followed by traditional journal articles, so there is no question about the quality and reliability of the research. Furthermore, an easy to use online submission system and efficient production process enable immediate publication.

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Citation tracking and inclusion in bibliographic databases
An increasing number of OA journals are citation tracked and assigned Impact Factors allowing authors to gauge the reach of their work in OA journals, just as they can with traditional subscription-based journals. The Journal Citation Reports’ by Thomson Reuters lists over 135 SpringerOpen and BioMed Central journals with a 2011 Impact Factor. All articles published in SpringerOpen journals are included in many bibliographic databases so that the work can be found easily and cited by researchers and clinicians around the world.

Complying with funders’ OA mandates
Articles published in SpringerOpen journals can comply with OA mandates in the fastest and easiest way. Final articles can be deposited into bibliographic databases and institutional repositories without any embargo periods.

Conclusion

OA has emerged as a viable, mature alternative to traditional subscription publishing. The benefits of OA publishing for researchers, authors and readers as well as academic institutions, societies and funders are numerous and far-reaching. OA provides unlimited access to scientific information without any sacrifice to the quality of the work or protection for the author’s contribution. Authors and academic societies alike should evaluate their publishing partners to understand their approach to OA and to ensure that they have an integrated, forward-looking digital strategy; one that expands access to content, and does so with minimal restrictions and limitations for the user. Springer has a long reputation for innovation and quality and has been a leader in OA publishing since its inception.

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"We promote research across all fields and wanted it to be available to as many people as possible, so we chose the open access publishing model as it allowed this access without the barrier of a subscription. Adopting the open access model also helps us to achieve the aims and goals of our society.”

Aamir Shahzad, M.D., Secretary General and Director of Administration of the International Society for Translational Medicine

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