



Open Access – broad readership, high impact

What authors need to know and how they can benefit

White Paper



"...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

Peter Suber, Director of the Harvard OA Project and leading OA advocate



"...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

Source: "Open Access Publishing today: what scientists do and why."
Talk given at the SOAP Symposium, Berlin,
January 13, 2011, http://de.slideshare.net/
ProjectSoap/soap-symposiumtalkiii

Introduction

Open access (OA) publishing has emerged as a viable publishing model. 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, 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, it 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 for authors of academic content.

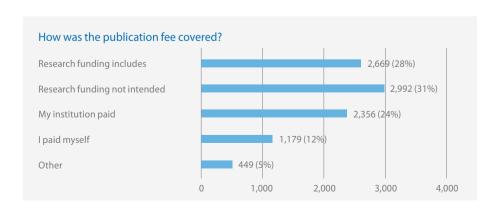
How does open access work?

OA publishing removes barriers to accessing academic content. In a well-designed OA model, all participants benefit. Researchers and authors value the broad access to 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 uses two basic models: Green OA (also referred to as self-archiving) and Gold OA. Green OA is the practice of placing the accepted version of an author's manuscript into a repository, making it freely accessible for everyone.¹

Gold OA, which will be the primary focus of this paper, makes the final version of an article freely and permanently accessible for everyone, immediately upon publication. It also removes most of the permission barriers, allowing unlimited re-use and distribution. Gold OA articles can be published either in hybrid journals or in fully OA journals. A hybrid journal is a subscription-based journal that offers an OA option; fully OA journals on the other hand exclusively publish OA content.

Gold OA publishing is not without costs and publishers defray these costs through so-called article-processing charges (APCs). APCs are levied after article acceptance, at the beginning of the publication process, and vary depending on the respective publisher, journal and discipline. There are also journals that do not charge an APC; however in these cases, the



¹ Depending on the respective publisher's policy embargo periods may apply.

processing and publication costs are covered by other sources, e.g. a sponsoring party like a society. Authors are responsible for paying the APC but they are rarely required to deliver the funds from their own pocket. In fact, the SOAP (Study of Open Access Publishing) project found that many researchers encounter few problems in sourcing the funding for the APC, although this varies by subject area and country.

To support the benefits of OA, a large number of funders and institutions have made open access fees part of their general funding or have created funds dedicated to covering APCs for their researchers, faculty, members or scholars producing work in a particular field of study. More than 220 institutions and 90 funders all over the world have now made open access mandatory,² and many have also signed OA initiatives including the Berlin Declaration (2003), which is endorsed by more than 270 leading research organizations and universities worldwide.³ 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 list of OA funds can be found online in the Open Access Directory.⁴

The development of open access

The OA movement traces its origins at least back to the 1960s, but it was the advent 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 broad 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 2012, there were about 28,100 active scholarly peer-reviewed journals collectively publishing about 1.7–1.8 million articles a year. The number of peer-reviewed journals as well as articles published annually has been growing at a very steady rate of about 3% to 3.5% per year over the last few decades. 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 an ever-widening horizon of possibilities for authors to deliver more content in more ways. Physical proximity is no longer a requirement for conducting cutting-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 argued for unrestricted access to scientific publications, particularly those that benefited from public funding. 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 an 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

² ROARMAP: Registry of Open Access Repositories Mandatory Archiving Policies, http://roarmap.eprints.org, status: September 2014

³ Berlin Declaration, http://oa.mpg.de/lang/en-uk/berlin-prozess/berliner-erklarung, status: September 2014

⁴OA journal funds, http://oad.simmons.edu/oadwiki/OA_journal_funds, status: September 2014

⁵The STM report, November 2012, page 23, http://www.stm-assoc.org/2012_12_11_STM_Report_2012.pdf

⁶ Open Access Overview, Peter Suber, http://legacy.earlham.edu/~peters/fos/overview.htm, status: September 2014

Support for OA continues to grow, as demonstrated by the rapid expansion in the number of OA journals and articles published each year. Over the past decade, open access journal publishing has steadily grown at a rate of 1% a year. In 2011, an estimated 340,000 articles were published by 6,713 fully open access journals, which is about 17% of the 1.66 million articles indexed in Scopus, the most comprehensive article-level index of scholarly articles. The Directory of Open Access Journals (DOAJ) now includes nearly 10,000 journals, while the Directory of Open Access Books (DOAB) lists more than 2,200 titles from 75 contributing publishers. Furthermore, there are currently more than 850 societies publishing over 800 fully OA journals, and 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 40 million open access documents.

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

"Working with Springer in launching the SpringerOpen Journal of Cloud Computing has been a wonderful experience, in large part due to the extensive support provided by Springer. Their pro-active approach to both marketing and submission processing has been highly commendable and invaluable in the early stages of life of the journal, and long may it continue."

Dr Lee Gillam FBCS CITP FHEA, Senior Lecturer, Department of Computing, University of Surrey, UK

Academic publishers and open access

Over the last few years, leading academic publishers have taken a forward-looking view and started embracing developments such as the OA movement. Springer has been at the forefront of OA publishing for many years and was the first 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 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 OA route, enabling authors to comply with institutional OA mandates by allowing <u>self-archiving</u> for articles published in its subscription-based journals.

Springer also supports Gold OA through its various OA options. In 2004, Springer launched Open Choice, providing authors with the option to publish OA articles in the majority of its subscription-based journals. In 2008, Springer acquired the pioneering OA publisher BioMed Central, and in June 2010, launched SpringerOpen, its portfolio of peer-reviewed, fully open access journals covering all areas of science, technology, medicine, the humanities and social sciences. The portfolio ranges from very specialized titles to SpringerPlus, an interdisciplinary, open access journal. With over 38,000 open access articles published across all Springer journals in 2013 and more than 450 fully open access journals as of September 2014, Springer has now become one of the largest OA publishers in the world.



"The ESR has always had a policy of making congress material and many other publications available to its members.

Making resources open access to all researchers makes knowledge accessible to everyone, not just to those who can afford it."

"We started publishing open access with Springer in 2011, and since then have been very happy with this cooperation. We appreciate Springer's global network and international work as well as the support and professionalism of their entire team." Stefanie Muzik, Head of the Scientific Publications Department of the European Society of Radiology

⁷ Mikael Laakso, Bo-Christer Björk (2012), "Anatomy of open access publishing: a study of longitudinal development and internal structure." BMC Medicine. doi: 10.1186/1741-7015-10-124, https://www.biomedcentral.com/

⁸ Directory of Open Access Journals (DOAJ): http://www.doaj.org, status: September 2014

⁹ Directory of Open Access Books (DOAB): http://<u>www.doabooks.org</u>, status: September 2014

¹⁰ Society Publishers with Open Access Journals: https://docs.google.com/spreadsheet/ccc?key=0AgBYTDKmesh7dDZ6 __UnBfcnpOdVpnd3ptSnVpQ0xrenc#gid=1, status: September 2014

¹¹ BASE: http://www.base-search.net/about/en/index.php, status: September 2014

 $^{^{12}\,\}text{More information on Springer's OA portfolio can be found at}\, \underline{\text{springer.com/openaccess}}\, \text{and}\, \underline{\text{springeropen.com}}$

About 100 SpringerOpen and BioMed Central journals are fully sponsored by one or more affiliated institutions or societies; the remainder charge APCs. However, for many of these journals costs are fully or partly covered by institutions participating in Springer's Open Access Membership Program. The membership program, with over 480 members worldwide as of September 2014, enables academic and research institutions, societies and funders to actively support open access by covering some or all of the publication costs for their researchers. ¹³

In August 2012, the growing demand for open access publishing and the success of Open Choice and its SpringerOpen journal portfolio led Springer to expand its offering to include <u>OA books</u>. Springer's OA books are also published under the SpringerOpen brand and complement the established journal portfolio. The launch of these products underscores Springer's continuing support for this important publishing model.

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 reliability of the work.

Reaching larger audiences

The most obvious benefit of OA is access to a larger, international and more diverse audience. Thanks to unrestricted online access, OA enables more researchers to find an author's work, leading to increased visibility and exposure. In addition, OA research can also find its way into the hands of non-academics, who may still have an interest in the research, increasing the real impact of the author's work.

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.

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 as used with its subscription-based 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.



"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."

"We are a small society so being able to partner with a world leading scientific publisher such as Springer is a great opportunity. We benefit from their professionalism, excellent editorial support and marketing capabilities, which not only help to promote our society but encourage new members to join."

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

¹³ More information at <u>springeropen.com/libraries</u>

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Complying with OA mandates

The use of the CC BY license also allows authors to easily comply with the OA mandates of their academic institutions and funding sources. The final version of an article can be deposited in bibliographic databases and institutional repositories without any embargo periods.

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 subscription-based journals. 14 The Journal Citation Reports® by Thomson Reuters lists 179 Springer open access journals with a 2013 Impact Factor. All open access articles are included in major bibliographic databases, including Scopus, PubMed Central and Google Scholar, so that the work can easily be found and cited by researchers around the world.

Conclusion

OA has emerged as a viable, fully developed publishing model. 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 sacrifices in terms of 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.

Would you like to know more about Springer's open access portfolio? Visit us at springer.com/ openaccess









¹⁴ Lists & Infographics. High-Impact Open Access Journals, UOC Virtual Library: http://bit.ly/1wppfe9, status: September 2014