Open Dialog: SciELO’s Approach to Open Access Publishing

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Abstract

For over 20 years, Scientific Electronic Library Online (SciELO) has been engaged in an ambitious program of open access journal publishing. In Brazil and 15 other countries, society journals and other publications rely on SciELO for online publishing infrastructure and a platform that gives visibility to a global audience. SciELO’s network of national level collections has expanded to 16 countries and provides an alternative model to approaches centered around commercial publishers or new open access journals.

Keywords

Latin America; open access; open science; society journals

Introduction

While the open access (OA) movement is not new, recent years have seen several disparate attempts to increase OA publication at large scale. These efforts have taken many forms, including institutional repositories, discipline-level preprint servers, national policies like the Finch Report (https://www.acu.ac.uk/research-information-network/finch-report-final), and transformational agreements between library consortia and publishers. Most of these approaches rely on existing commercial publishers, entirely new journals, or repositories that offer an additional copy to the version of record. One of the world’s most ambitious OA publishing programs has taken a different approach and has been doing so for over 20 years. After a pilot project in 1997, SciELO (Scientific Electronic Library Online) began in earnest in Brazil in 1998 (Marcondes & Sayão, 2003). SciELO can be difficult to briefly sum up as the name applies to a network of journals and journal collections organized by country or discipline, a portal that searches across all these collections, and an OA publishing platform and methodology (Packer, 2001). In a letter to Nature, Alonso and Fernández-Juricic (2002) refer to it as “a publicly funded initiative set up to promote cooperative, free electronic publishing of scientific journals from developing countries.” Since its start in Brazil, SciELO has added collections in 15 additional countries as well as adding regional thematic collections1, making it a truly impressive international OA publishing network.

Structure of the initiative

The SciELO program is based on three principles: “the conception of scientific knowledge as a public good,” a network structure with decentralized governance, and “alignment with the state of the art of scholarly communication” (SciELO, 2018). The networked structure of the initiative has allowed SciELO to achieve its present scale and continue to extend to new countries. While there is some centralized funding for the project from a large grant from São Paulo Research Foundation (FAPESP), much of the publication costs are handled by each participating country (Van Noorden, 2013). It is not just the costs that are handled at the country level, but also editorial concerns of which journals will be included in the collection. Each country has a national scientific committee to determine the makeup of their collection and to monitor the output and usage of titles already included (SciELO, 2018). The SciELO network is composed of separate sites for each country as well as some for thematic focuses such as public health, but all the various sites can be cross-searched. Participating countries include Chile, Spain, and South Africa.

The user experience of each SciELO site is fairly standardized. Users are able to browse lists of journals...
and issues or search at the level of the journal, country, or the entire network. Articles are given Digital Object Identifiers (DOIs), authors who have supplied an Open Researcher and Contributor ID (ORCID) have that information listed, and links are provided to analytics at both the article and journal level. Though still in beta, an analytics site at https://analytics.scielo.org provides data on downloads, citations, and documents published at a number of different levels.

Content in SCiELO

SCiELO is focused on the publishing of “original works, case reports, technical reports, reviews, and communications related to scientific research” (Packer, 2001). The majority of the journals included in each collection are national journals published by professional associations, academic institutions, and scholarly societies (SCiELO, 2018). It is important to note that SCiELO serves as a sort of meta-publisher here, selecting existing journals that may not have a robust electronic publishing program rather than creating new journals entirely. SCiELO provides infrastructure and a publishing platform but does not dictate peer review practices to individual journal editors. There is a strong health sciences focus to the network, but there are also plenty of journals from sciences and social sciences. There are now 1723 journals across all sites, with 1363 of those focusing to the network, but there are also plenty of journals from sciences and social sciences. There are now 1723 journals across all sites, with 1363 of those publishing currently.

SCiELO includes documents published in several languages, with an emphasis on Spanish, Portuguese, and English. An advanced search shows roughly 300,000 documents in each of these three languages, and about 2,000 in Afrikaner, the next most popular language. Most of the sites associated with SCiELO are available in these three most popular languages, and many of the journals provide abstracts and full text in multiple languages as well. This is both a strength and a challenge for the network. Part of the reason for SCiELO’s existence is to provide a platform for journals and authors that publish scientific literature in languages other than English and to reach readers of those languages. This aligns closely with the conception of scientific knowledge as a public good – the public that stands to benefit from this information is not strictly English-speaking. However, accommodating multiple languages is not without its challenges. Making the various collections cross-searchable in a meaningful way can be a challenge when an individual article’s abstract, text, and keywords are likely only in one or maybe two of the many languages represented. Additionally, the distributed and international nature of the project means that policies and other documents must be available in a variety of languages.

Impact and development

In 2015, Jeffrey Beall published a blog post making derogatory claims about SCiELO and calling it a “publication favela.” (Beall, 2015) Because of limited awareness among scientists in the United States and Europe, and a perceived lack of indexing, Beall stated that SCiELO journals were “very effectively hiding the research they publish.” These claims were difficult to reconcile with SCiELO’s increasing popularity and growth. For example, Beall mentioned a lack of indexing while acknowledging that Web of Science was preparing to release a SCiELO citation index that now includes approximately 650 SCiELO titles. The claim that nobody was reading the publications was even more unfounded. Usage was already formidable at that time and has continued to grow. In May of 2019, SCiELO Brazil had nearly 17 million PDF downloads. Low citation counts have been a concern (Van Noorden, 2013), but overall usage and readership are impressive.

The initiative is also focused on keeping pace with developments in scholarly communications. A current direction for SCiELO is alignment with the principles and practices of open science. In SCiELO’s current priorities document, they include a suite of practices to support open science (SCiELO, 2018). These efforts include a focus on continuous publication for quicker dissemination, guidelines regarding articles previously submitted to preprint servers, and the management of data and materials related to articles. This was also a topic of several presentations at last year’s conference celebrating the initiative’s twentieth anniversary.

Conclusions

SCiELO offers a stark contrast with many other OA efforts. It is not centered on commercial publishers, instead offering a platform that can be extended to other countries that wish to offer OA scholarly publishing as a public good. This approach also supports scholarly societies that need infrastructure and

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2A full list of journals is available at https://www.scielo.org/en/journals/list-by-alphabetical-order.

3Details on the index are available at http://wokinfo.com/products_tools/multidisciplinary/scielo/.

4Data on downloads is available at https://analytics.scielo.org/w/accesses, with the total for PDF downloads in May listed as 16,816,539.

5The program is available at https://www.scielo20.org/en/#program, including slides and videos for many sessions.
metadata and discoverability assistance to reach more readers. Many society journals in the United States and Europe are now frequently published by commercial publishers\(^6\), so SciELO offers an approach that does not put the content behind a paywall. While an approach like SciELO may not make sense for all countries and scholarly communities, it certainly represents an ambitious effort to bring scientific information to more of the world.

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\(^6\)Wiley alone publishes over 1,000 society journals according to their site at https://www.wiley.com/en-us/societies.