



The Role of “Open” in Strategic Library Planning

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This article is part of EPAA/AAPE’s Special Issue on *Models of Open Education in Higher Education*, Guest Edited by Drs. Lisa Petrides and Cynthia Jimes.

Abstract: Academic libraries are undergoing evolutionary change as emerging technologies and new philosophies about how information is created, distributed, and shared have disrupted traditional operations and services. Additionally, the population that the academic library serves is increasingly distributed due to distance learning opportunities and new models of teaching and learning. This article, the first in this special issue, suggests that in today’s increasingly networked and distributed information environment, the strategic integration of open curation and collection development practices can serve as a useful means for organizing and providing structure to the diverse mass of available digital information, so that individual users of the library have access to coherent contexts for meaningful engagement with that information. Building on insights from extant research and

practice, this article proposes that colleges and universities recognize a more inclusive open access environment, including the integration of resources outside of those owned or created by the institution, and a shift toward policies that consider open access research and open educational resources as part of the library's formal curatorial workflow and collection building. At the conclusion on this article, authors Lisa Petrides and Cynthia Jimes offer a commentary on the six remaining articles that comprise this special issue on *Models of Open Education in Higher Education*, discussing the significant role that "open" policy and practice play in shaping teaching, learning, and scholarship in the global context of higher education.

Keywords: academic libraries; open access; open access research; Open Educational Resources (OER); collection development; curation

El papel de lo "abierto" en la planificación estratégica de las bibliotecas

Resumen: Las bibliotecas universitarias están experimentando un cambio evolutivo en buena medida porque las tecnologías emergentes y las nuevas filosofías sobre cómo se crea la información, se distribuye y se comparte han alterado las operaciones y servicios tradicionales. Además, los grupos que una biblioteca académica atienden están cada vez más dispersos debido a las oportunidades de aprendizaje a distancia y los nuevos modelos de enseñanza y aprendizaje. En este artículo, el primero de este número especial, sostenemos que en un entorno donde la información esta cada vez más interconectada y distribuida, la integración estratégica de las prácticas de curación y desarrollo de colecciones abiertas puede servir como un medio útil para organizar y centralizar la masa dispersa y diversa de información digital disponible para mejorar las practicas de descubrimiento por parte de los usuarios a través de las bibliotecas académicas. Sobre la base de la investigación y prácticas existentes, este artículo propone que las universidades reconozcan un ambiente más inclusivo para el acceso abierto, incluyendo la integración de los recursos fuera de los que son propiedad o creados por la institución, y un cambio hacia políticas que tengan en cuenta la investigación de acceso abierto y recursos educativos abiertos como parte de los recursos formales en el flujo de trabajo y la recogida curatorial de la biblioteca. A la conclusión de este artículo, los autores Lisa Petrides y Cynthia Jimes ofrecen un comentario sobre los seis restantes artículos que componen este número especial sobre Modelos de Educación Abierta en la Educación Superior, discutiendo la importancia del papel que la política y prácticas "abiertas" tienen en la configuración de la enseñanza, el aprendizaje, y la investigación en el contexto global de la educación superior.

Palabras clave: bibliotecas universitarias; acceso abierto; acceso abierto a la investigación; Recursos Educativos Abiertos (REA); desarrollo de colecciones; curadoría

O papel do "aberto" no planejamento estratégico das bibliotecas

Resumo: As bibliotecas universitárias estão passando por uma mudança evolutiva em grande parte porque as tecnologias emergentes e novas filosofias sobre como a informação é criada, distribuída e compartilhada alteraram as operações e serviços tradicionais. Além disso, grupos que frequentam uma biblioteca acadêmica estão cada vez mais dispersos por causa das oportunidades de aprendizagem à distância e novos modelos de ensino e aprendizagem. Neste artigo, o primeiro deste dossiê, argumentamos que, em um ambiente onde a informação é cada vez mais distribuída em rede e, integração estratégica de práticas de curadoría e desenvolvimento de coleções abertas pode servir como uma maneira útil para organizar e centralizar o corpo disperso e diversificado de informação digital disponível para melhorar as práticas de descoberta pelos usuários através de bibliotecas acadêmicas. Com base em pesquisas e práticas existentes, este artigo propõe que as universidades desenvolvam um ambiente mais inclusivo para o acesso aberto, incluindo a integração de recursos externos a aqueles possuídos ou criados pela instituição, e uma mudança na direção de políticas que

tomem em conta o acesso aberto e recursos educacionais abertos como parte dos recursos formais no fluxo de trabalho e a coleção curatorial da biblioteca. Na conclusão deste artigo, os autores Lisa Petrides e Cynthia James oferecem um comentário sobre os seis artigos neste dossiê sobre os modelos de Educação Aberta no Ensino Superior, discutindo a importância do papel que a política e prática “aberta” têm na formação, ensino, aprendizagem e pesquisa no contexto global do ensino superior.

Palavras-chave: bibliotecas universitárias; acesso aberto; o acesso aberto à pesquisa; Recursos Educacionais Abertos (REA); desenvolvimento de coleção; curadoria

The Role of “Open” in Strategic Library Planning

Over the past decade, the value of the traditional academic library with its physical and printed formats has been challenged, as users increasingly use network-level discovery tools and the Internet to find and access digital resources that meet their information needs (Dillon, 2008). And yet, although ubiquitous availability of web-based information appears to be the new norm, many students, faculty, and practitioners are not able to access a significant portion of valuable research, data, and resources that could inform and advance their practice. This is partially due to the fact that many resources are associated with technical, legal, and financial barriers, which in turn results in large portions of content being held behind paywalls. At the same time, though, a growing volume of highly valuable open access research and educational content remains largely untapped by higher education stakeholders because, although openly licensed and accessible, their curation and organization continue to lie outside of traditional library workflows and practices (Allen et al., 2015; SPARC, 2016).

The historical structure of libraries was designed to be a cost-effective and an efficient means of providing access to relatively scarce physical objects—through localized collections, managed organization of and access to relevant resources, and discovery tools such as the catalog (Jones, 2011). However, over the past decade, academic libraries have become increasingly digital, and like the postsecondary education institutions that they are a part of, libraries face heightened demand to provide a rich and varied set of affordable and accessible resources and services in a sustainable way (Simmons-Welburn, Donovan & Bender, 2008).

The fact that open access (OA) research and open educational resources (OER) are not yet mainstreamed into academic library collection development workflows demonstrates a missed opportunity to bridge the gap between historical library curation practices and the potential benefits of 21st century technologies. While OA research applies to free, unrestricted, immediate access to online academic research (Lasko et al., 2011), OER are defined as teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others (William & Flora Hewlett Foundation, 2013). As articulated by the Scholarly Publishing and Academic Resources Coalition (SPARC), the current system for curating and disseminating research overlooks the possibilities offered by digital technologies, including the potential for an open system for accelerating research, knowledge, and scholarly content through contributions to existing findings from anyone, anywhere, and at any time (SPARC, 2016; c.f. IFLA, 2016; Lawton & Flynn, 2015).

The authors of this article, as open education researchers, advocates, and library science professionals, seek to respond to this gap by elevating the discussion between academic library administrators, collection development officers, and instructional and scholarly communications librarians—toward policies and practices that mainstream the curation and organization of open resources into core library collection development workflows.

Evaluating Core Library Practice Through the Lens of “Open”

In spite of the dynamic, distributed, and ever-expanding information landscape within which academic libraries today operate, collection development remains a central function and core service of the library (Saunders, 2015). Users continue to expect libraries to provide authoritative collection development and high-level access to relevant resources and research in their field of study and practice. In this environment, targeted curation and collection development is more needed than ever, as a means of improving access for scholars, researchers, and practitioners to high-quality collections of materials and services through the university library (Palmer et al., 2009). Although open access (OA) services and policies have been implemented by many universities globally as part of institutional repositories that house and serve local scholarship, there has, as of yet, been little discussion and integration of open access policies and approaches into libraries' mainstream collection development policies (Bonn, 2015).

According to Matarazzo and Pruzak (1990), the value of the academic library should be measured first and foremost in terms of users and stakeholder groups. Further, Lee (2005) identifies several components that are important to users seeking information in an academic library, including precision of search, ease of use, well-structured presentation of available resources and information, and access to the collections of other institutions. In specifically examining digital collections, other scholars have found that users expect digital library collections to provide instant availability, material stability, organization of material by sub-collections, and ability to narrow the focus of a search to increase relevancy and usefulness of returns (see, for example, Bonn, 2015; EUN, 2009; Lee, 2005).

This article further emphasizes that in today's widely distributed and expanding information landscape, faculty, students, and staff will also greatly benefit from increased access to curated and organized collections of open access research (OA) and open educational resources (OER) through the library. The International Federation of Library Associations (IFLA), in its *Statement on Open Access to Scholarly Literature and Research Documentation*, emphasizes that comprehensive open access to scholarly literature is central to knowledge building and to the identification of solutions to global challenges, and that it helps maintain the the integrity of the system of scholarly communication by ensuring that research findings are available for unrestricted examination, discussion, and refutation (IFLA, 2016). Furthermore, open access provides opportunities for niche and developing subject areas to establish resolute research outlets, often limited or slow to emerge in the subscription-based publishing world (Lawton & Flynn, 2015).

To meet the growing need to provide access to open research and scholarly literature, many universities have developed institutional repositories to openly house the output of their researchers; however, as Bonn (2015) points out, there are few well-marked paths to these repositories and they most often sit outside of the local library catalog, remaining invisible to potential readers. In the United States, large services such as SHARE (Shared Access Research Ecosystem) and CHORUS (Clearinghouse for the Open Research of the United States) are aggregating and serving open research. These efforts continue to serve content outside of the mainstream library discovery system and, as such, their value for adding discovery from within library systems is yet unrealized, presenting another layer of discovery challenges for users (Ibid). Until open access research and open educational resources are integrated into the mainstream curation workflow of the library, their

discovery and access will continue to run in a separate—and yet parallel—stream from other resources in the library collection.

Recent scholarship has also shown that access to and use of open educational resources by higher education faculty and students enhances teaching, learning, and student retention. Wiley et al.'s (2016) examination of OER adoption in business administration course sections at Tidewater Community College in the U.S. revealed a significant reduction in student drop rates as compared to students in course sections where OER had not been adopted. Additionally, Petrides et al.'s (2011) study of the impact of open textbook use on teaching and learning found that faculty's adoption and use of an open textbook in statistics courses lead to new collaborative teaching practices focused on ways to use and integrate new, open curriculum materials into their existing course plans.

Even so, a 2014 study from Babson Survey Research Group and Pearson found that only one third of the faculty whom they surveyed claimed to be aware of open educational resources. According to the same survey, the biggest deterrents to use of OER are lack of a comprehensive catalog of resources, difficulty of finding needed resources, and lack of understanding about open licensing, which reportedly led to concerns about the use of openly licensed content (Allen & Seaman, 2014). The fact that search and discovery of open resources is identified as a significant deterrent to their use clearly calls for stronger integration of open access research and open educational resources into the curation workflows of all librarians. This includes mainstreaming the organization of open collections into the library, with indexing to enable discovery at the library user's primary point of access—the library catalog.

The Current Siloed Nature of OA and OER

As noted, although open access (OA) services and policies have been implemented by universities across the globe as part of institutional repositories that house and serve their intellectual works, there has, as of yet, been limited discussion and integration of open access research and open educational resources more broadly into mainstream library collection development policies. A 2014 survey of chief collection development officers at 78 North American academic libraries—undertaken to inform institutional collection policy at the University of Toronto—found that the majority of officers surveyed recognized the importance of the inclusion of OA philosophies in collection development policies. However, the survey also revealed that for the libraries represented in the survey, there has been minimal emphasis or uptake on the strategies to do so (Dyas-Correa & Devakos, 2014). Findings from the collection development officers survey further revealed specific barriers to inclusion of OA policies, including the perceived prematurity of including OA in collection policy or strategy statements; a lack of urgency, due to limited funds being available to invest in OA; a desire for policies to be agnostic and not to promote or eliminate any particular form of material or means of access; the challenge of keeping policies up to date; and a lack of alignment with the larger institution on scholarly sharing issues (Dyas-Correa & Devakos, 2014).

These findings are underscored through a 2014 content analysis of publically available strategic plans of North American academic libraries undertaken by Saunders (2015). Saunders' analysis revealed that collection building was a key priority for libraries, with 100 percent of the libraries including collection building in their strategic plans. However, less than 25 percent of the libraries addressed open access initiatives in their strategic plans, and there was no information provided about library planning for inclusion of OER in library strategic planning. Saunders summarizes the study's findings as follows:

“[...] the priorities of the plans included in this study, however, seem to be largely within traditional library areas. Rather, to put it bluntly, these plans seem to reflect the notion that what is reported as strategic planning in many libraries is less strategic and more a reactive form of long range resource allocation planning that lacks leader-defined vision, [and] does not apply competitive environmental analysis” (Saunders, 2015, p. 290).

In sum, the management of open access materials still largely falls outside the workflows of library collection development, including inclusion in catalogs or indexing services (Dyas-Correa & Devakos, 2014). Most institutional repositories, as well as other large initiatives (Research Gate, CHORUS, SHARE, eScholarship, and others) include pathways and workflows that enable academics to upload their research to OA repositories. In some academic libraries, scholarly communication librarians may train and support faculty to share research in these repositories. At the same time, though, scholarly communications librarians are seldom directly connected to the collection development librarian, and the work of the two generally does not intersect or run in close parallel (Ibid). This results in a gap in the work of collection building, and requires that library users must often go outside of the library catalog to discover open access research and OER.

Integrating Open Practices Across the Library

Foundations for OER Strategy Development, a summary of recommendations that grew out of a year-long conversation among leaders in the OER movement, discusses the significant progress that has been made in expanding the availability of OER, but also notes that the potential for mainstreaming open practice to scale has not been reached, citing, among other factors, challenges experienced by users attempting to discover such resources (Allen et al., 2015). To remain responsive to users, institutions must address strategic questions about how they can help reach a common goal—including how to best integrate and mainstream the curation, organization, and use of open access research and educational resources into the workflows and services of their libraries. Below is a set of recommendations that seek to support libraries in elevating the conversation within their institutions and across the profession, in order to address key areas for building open curation and collection development practice in the post-secondary academic library.

Leverage existing and emerging public policy. To frame the advantages of building open access practices in the post-secondary academic library, libraries may choose to articulate the institution’s role in meeting emerging public policies that support the adoption and dissemination of OA and OER as an investment in sustainable human development at local, national, and international levels. Particularly among educational and governmental institutions, recent years have witnessed proposals and enactments of policies that propel widespread integration of OA and OER within the public sphere. For instance, the U.S. government recently issued a mandate requiring large federal agencies to develop plans for improving the public’s ability to locate and access the results of federally funded research—from scholarly publications, to digital scientific data—by making them freely available. Internationally, UNESCO’s Education 2030 Framework for Action calls for OER to be an integral part of achieving goals for equal access to affordable, high-quality tertiary education. Leveraging these existing and emerging public policies will allow libraries to convey the timeliness and urgency of their conversations.

Build shared values and understandings. Toward achieving greater alignment of purpose and vision, it is vital that institutions provide forums for discussions to identify and clarify values

shared among core stakeholders who influence the formation of library policies. These core stakeholders include college administration, faculty, library administrators, and collection development officers, as well as scholarly communication and instructional librarians. Such forums allow stakeholders to discover and build their understanding of shared values around open access research and educational resources, as a consequence of the alignment of OA and OER with the mission and core functions of the academic library.

Include “open” in strategic planning. As shared values and existing national and state-level policies indicate the necessity of integrating and mainstreaming the curation, organization, and use of open resources into the workflows and services of libraries, institutional leadership will need to ensure that open resources are included in strategic planning. As part of that planning process, it will be important to consider how open curation practices may be included in collection development policies. For instance, in order to build OA collections, it may be prudent to redirect local collections funds specifically toward supporting curation of open resources. Strategic policy development will benefit from careful examination of library workflows, with attention to areas in the library where traditional library workflows and the work of the collection development officer, scholarly communication librarian, and instructional librarian may be more closely aligned.

Advocate for increased indexing of open access material. Concomitant with strategic planning and policy development, librarians and collection development officers may advocate for increased indexing of open access material. Specifically, they may request or even require transparency from commercial bibliographic services around the extent of their OA indexing, and suggest that they increase the percentage of open access resources provided. Furthermore, they may engage collaboratively to ensure open resources are included in the work of consortium level bibliographers.

Discover a starting point. At a tactical level, a significant step for libraries is connecting with faculty and scholars to identify gaps in information resources within the library, in order to better meet their information needs. However, it is important to note that the breadth and depth of OA and OER is not yet evenly distributed across disciplines, so it will be necessary to identify a topical collection rich in OA and/or OER as a place to begin new practices by prioritizing the integration and mainstreaming of high-quality open resources in these targeted areas.

Share as you learn. In order to advance both thought and practice that extends access to OA and OER through the academic library, professional organizations may be leveraged as seedbeds for sharing what is being learned, with a goal of collaboratively building best practice in open curation and collection development practices across the profession. More locally, strategic outreach efforts will help to ensure that researchers, instructional faculty, students and administrators on campus are aware of how to best access and share open resources through the library. Among these constituents, seek to cultivate open access leaders across campus, as well as to provide opportunity through an array of communicative channels for their voices to speak of the value of open to their work.

Conclusion

Until open access research and educational resources are integrated into the collection development and curation workflow of academic libraries, the discovery of these valuable resources

will remain largely limited to repositories outside of library catalogs, generating a silo effect that diminishes the ability of libraries to perform their core collection development functions. Importantly, this limits opportunities for users of the library to contribute to and advance scholarship and practice through the use of open resources. As emergent public policy seeks to cultivate the systematic integration of OA and OER in support of sustainable human development within and across educational and governmental institutions, proactive library collection development strategies can leverage these inroads toward the creation of meaningful, well-organized pathways for discovery and use of open access research and educational resources.

About the Special Issue: Models of Open Education in Higher Education

Higher education is witnessing the emergence of new paradigms for teaching and learning through the advent of open educational resources (OER) and open access (OA) research. While the practice of education has always sprung from the foundational concept of leading students to greater knowledge and skills, the introduction of digital resources and Internet technology into everyday life on a global scale has profoundly transformed how institutions and faculty understand and approach teaching materials, curricula, and research. OER and OA have significantly advanced this paradigmatic transformation by empowering faculty, staff, and students alike in discovering, creating, and sharing new knowledge through channels that facilitate new modes of independent and interactive learning and scholarship.

As OER enable free access to high quality teaching materials that can be modified and localized, educators from a broad range of academic disciplines are crafting OER-rich curricula to better support student success. Many institutions of higher education have also leveraged digital repositories to establish OA collections to provide ways for faculty and students to easily discover and contribute to digital materials and research.

At the same time, the potential for increasing access to high-quality education continues to motivate inroads for supporting OER and OA through public policy. Recognizing OER as an investment in sustainable human development, policy makers at local, national, and international levels have proposed and enacted policies and support systems that incentivize and cultivate systematic implementation and integration of OER. For instance, the municipality of São Paulo, Brazil, issued a decree that educational works produced within public schools must be openly licensed and publicly accessible on the Internet. In a similar vein, the U.S. Open Government Partnership is expanding access to educational resources through open licensing and technology. At an international scale, UNESCO's Education 2030 Framework for Action calls for OER to be an integral part of achieving goals for equal access to affordable, high-quality tertiary education.

Although the benefits afforded by OER and OA are increasingly evident, the higher education sector continues to evolve in its knowledge and understanding of the real and potential impacts of their integration on curriculum, pedagogy, and policy, and with respect to the discovery of best practices in utilizing open resources to advance educational goals.

This special issue aims to further collective understanding of the advantages and the potential impact of OER and OA integration by bringing together a set of articles that discuss policy and practice shaping open education in the global context of higher education. Focusing on strategies derived from examples in research and practice, the series illustrates the diverse methods by which higher education stakeholders are currently addressing the challenges to adopting and implementing OER, as well as frameworks to support enhanced integration of OER and OA more systemically, within and across institutions.

After the present authors’ article that addresses the role of open in strategic library planning, the special issue turns to an article that surveys efforts in India to increase access to education through OER, and to develop skills for educators to use and implement OER in their teaching. In describing the government-endorsed programs and initiatives that seek to address geographical disparities in access to education and shortages of qualified faculty, authors Archana Thakran and Ramesh Sharma highlight the advantages conferred by OER in supporting current efforts to achieve quality and equity in educating India’s large and growing population.

The third article continues the theme of access to higher education through a discussion of MOOCs and policies related to their credentialing in the United States. In particular, Jason Stone examines Arizona State University’s recent innovative Global Freshman Academy (GFA) pilot, in partnership with the non-profit MOOC provider edX. The partnership is examined against the backdrop of an announcement by the American Council on Education (ACE) recommending college credit for a set of approved MOOCs provided by two for-profit edX competitors. Stone suggests that the ACE announcement, coupled with the GFA pilot, signals the growing acceptance of MOOCs as a viable pedagogical format. He also notes that the GFA pilot, undertaken by an authoritative and prestigious institution, may function as a potential test case for the question of expanded credentialing and pathway flexibility in higher education.

The fourth article turns to the level of individual OER use, and specifically to a discussion of the ways to support uptake and adoption of OER at the faculty level. Authors Martin Ebner, Sandra Schön, and Swapna Kumar discuss how OER implementation brings with it a unique set of challenges in German-speaking higher education contexts, stemming in part from copyright laws that make sharing and reuse of educational materials less prevalent (and less familiar) for faculty in these countries. The authors offer a revision of the UNESCO-COL (2011) *Guidelines for Open Educational Resources in Higher Education* to include the crucial role of instructional support services (*hochschuldidaktische Zentren*, or “didactics centers”) for increasing faculty uptake and development of OER. Their revision proposes a set of supplementary guidelines for leveraging the expertise of instructional support staff to establish institution-wide strategies for OER implementation.

The fifth article offers a discussion of course-level implementation of OER, and specifically consideration of the ways in which OER can enhance teaching and learning in foreign language courses. Based on their experiences as practitioners in the UK and Australia, authors Teresa MacKinnon and Sarah Pasfield-Neofitou argue for the pedagogical advantages made possible by “produsage,” whereby passive users become active producers of content through modifying, adapting, and sharing resources with authentic audiences. Making a case for produsage as a way to engage the “soft power” of popular culture through YouTube videos as authentic learning materials, the authors subsequently propose a model for grassroots OER, including a discussion of policies and practices to support the dissemination and modification of open content for language learning.

The sixth article in the series offers empirical research that demonstrates the benefits of OER for student learning more broadly, and a financial sustainability model to enable OER adoption across institutions of higher education. The authors, David Wiley, Linda Williams, Daniel DeMarte, and John Hilton III, propose a financial sustainability model known as the Increased Tuition Revenue through OER, or the INTRO model. Piloted through a set of courses in the business administration Z-Degree program at Tidewater Community College, this model demonstrates that faculty adoption of OER results in higher student enrollment, lower student attrition, and a concomitant increase in tuition revenue--some of which, the authors argue, could then be used to cover the cost of providing ongoing OER adoption services in a climate of shrinking budgets. According to this model, OER adoption generates sustainability funding as a function of increased student success.

The final article offers a framework to assist policy makers and practitioners in evaluating strategies for addressing many of the OER adoption and uptake challenges identified in the special issue's preceding articles. Based on a review of literature addressing OER implementation efforts across higher education programs globally, authors Kate Judith and David Bull identify five common areas of challenge involved in implementing OER at the course level. The authors identify strategies gleaned from the literature, which they categorize according to an ontological continuum that assesses the types and degrees of support involved, as well as the degrees of control and risk. The authors discuss the resultant continuum in terms of the gains and losses entailed in applying diverse strategies toward implementing OER and cultivating open practices in higher education.

Ultimately, increased student and faculty success is the motivating core of the transformations currently underway in higher education. With that common goal in sight, this collection of articles highlights a number of specific policies and support systems that are enabling higher education stakeholders to influence the uptake and impact of OER. It is our hope that this special issue will strengthen the momentum and forward the progress of OER integration in the context of higher education, so that institutions can continue to effectively teach and engage the students that they have, in the world that they live in.

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