

The Open Library at AU (Athabasca University): supporting open access and open educational resources

Colin Elliott & Elaine Fabbro
Athabasca University (Canada)
coline@athabascau.ca & elainef@athabascau.ca

Abstract

To address challenges that learners, course creators, librarians and academics involved with OER and MOOCs are facing when looking for scholarly materials, Athabasca University Library has initiated the development of *the Open Library at AU*. This open library is a full library website that provides easy access to open and free resources. Tools and information literacy tutorials are also included to enable learners, researchers, and others to find, evaluate, and use the information they need for their open learning course or research. Many of the challenges that those involved in open learning face are addressed by the open library and the potential impact it can have on open learning and knowledge sharing is tremendous.

Keywords: knowledge sharing; knowledge society; librarian; lifelong learning; Massive Open Online Courses; open access; Open Educational Resources; open information literacy tutorials; Open Library

Introduction

The shift toward ‘openness’ in higher education that is occurring with the growth of Open Access (OA) and Open Educational Resources (OER), and the advent of Massive Open Online Courses (MOOCs) presents a variety of unique challenges and opportunities for higher learning, and academic libraries. The role of the academic library, and indeed its value, is much discussed in the literature, and it is recognized that the library must participate in campus discussion about openness and scholarly communication. Athabasca University Library is participating in this discussion and exploring opportunities afforded to it by this change by creating *the Open Library at AU*—a Library website with only open and free content and the tools and resources necessary to support that content.

Literature review

In the last number of years, there has been a surge in interest in open access and open educational resources across the academy. Peer reviewed, open access journals are growing in number, and a variety of open textbook initiatives have emerged, including the Open Textbook Project at BCCampus (<http://bccampus.ca/open-textbook-project/>), Open SUNY Textbooks (<http://textbooks.opensuny.org/>), and Oregon State University’s (2014) open textbook initiative. The introduction of the MOOC has contributed to the conversation as well, and has resulted in an increase in open educational resources that go beyond the open textbook movement to include course syllabi, multimedia learning objects and other items.

Concern about the state of scholarly communication and scholarly publishing, and in particular the rising costs of scholarly resources, is rampant. Academic libraries struggle to make declining budgets stretch to cover the rising inflationary costs of journals and database subscriptions. Canadian libraries must also consider currency fluctuations in their budgets, because many journals and subscription resources are invoiced in US dollars. According to a position statement by the Canadian Association of Research Libraries (CARL), in addition to mitigating these rising costs, open access

allows for greater access to research by the public, and “maximize[s] the return on [taxpayer and funder] investment in research, advancing discovery and innovation, sound public policy, enhanced health and welfare, and other benefits important for society” (CARL, 2013). These rising costs, coupled with the issues outlined in the CARL position statement point to the need for increased library support and involvement in open access. A related issue is the high cost of textbooks, and the sometimes negative effect this has on student’s decisions to take certain courses (Billings, Hutton, Schafer, Schweik & Sheridan, 2012), or even enroll in post-secondary studies. This issue has contributed greatly to the growth of the open textbook movement.

Open access, open educational resources and libraries

For these and myriad other reasons, access to high quality, peer reviewed, open access, and open educational resources is viewed by many as a revolution in scholarly communication, through which the democratization of access to resources will occur. Indeed, the democratization of access to resources not only affects the higher education sector, but society as a whole. This access encourages the development of lifelong learners. When coupled with the development of strong information seeking, critical thinking and analysis skills through MOOCs, and open information literacy tutorials, the result is an informed global citizenry.

In most post-secondary institutions, academic libraries support the teaching, learning and research activities of the institution in a variety of ways. These activities include the collection of resources in curricular and research areas, and the provision of information literacy instruction to students, via discipline based sessions, more general course offerings and the creation of tutorials designed to teach the use of specific resources or specific information literacy skills. As the scholarly communication landscape evolves, and explores the creation and use of open resources, libraries can assist in shaping and furthering the discussions of these materials on their campuses. The careful collection, creation, and curation, of open access resources, and the subsequent marketing of these sources can aid in this work (Mitchell & Chu, 2014; Wu, 2013; Martin, 2010).

Collecting open resources can pose a challenge for academic librarians due to the wide variety of locations and sources of open access and open educational materials, including open textbooks (Martin, 2010). It can be a challenge to identify appropriate content, and librarians must be knowledgeable of the difference between various open access sources, and be aware of strategies for identifying relevant materials. Martin’s (2010) article notes that a number of existing library resources, such as link resolvers, and catalogues like WorldCat now index selected open access journals, and some open educational resources. In some cases, these materials are being incorporated into library catalogues and journal title lists. A good overview of discovery methods for each of these kinds of resources can be found in Martin’s (2010) article. According to Mitchell and Chu (2014), libraries are now providing access to supplemental resources, which are to be used in courses, and are collecting free, open and campus created content to make accessible via institutional repositories and library websites. This increasing openness presents a number of opportunities for librarians to collaborate with faculty, specifically in the creation, curation and management of open collections (Mitchell & Chu, 2014). Given the shrinking budgets and declining staffing levels in many academic libraries, it is crucial that library administration carefully considers what strategies are most appropriate in managing these resources, in order to ensure that these collections are both useful and valued by the academic community. Without an effective plan, it is simply too easy for the collection of open resources to become haphazard and ineffectual.

Library support for MOOCs

The introduction of MOOCs has had a significant impact on the online learning landscape (Bull, 2012). As freely available online courses that do not place restrictions upon the number of registrations, MOOCs have had up to 160,000 students enroll (Perez-Peña, 2012). It should also be noted that the majority of students who enroll in these courses do not actually complete them (Jordan, 2014). These courses present an unparalleled opportunity for access to high quality education for enormous numbers of people (Mahraj, 2012). Even several years after the beginning of the movement, the research and literature on the role of libraries and librarians in MOOCs continues to be sparse (Barnes, 2013). A search of the literature published in 2014 and early 2015, reveals that this continues to be the case. While there are questions about what the role of the library will be in this new environment (Hoy, 2014) there seem to be two main opinions about this role: first, that the library and librarians will not be needed in MOOCs, and second, that the work of librarians will be a variant of work currently being undertaken and that in fact they will continue to be integrated in some way into courses (Barnes, 2013; Mahraj, 2012). Ultimately, the role that librarians play in a MOOC may vary depending on context and content. They might provide assistance to faculty in transitioning to teaching online, and participate in course development teams and alerting course authors to relevant open sources. As libraries are often considered the experts in copyright and licensing, a librarian may be asked to provide insight into these areas, or be asked to secure permissions for use of a particular set of resources. S/he might also be asked to provide instruction on how to find relevant and accessible sources on a topic or on a specific aspect of the research process (Barnes, 2013; Wu, 2013).

Mahraj (2012) posits that librarian involvement in MOOCs follows logically from the work currently performed by librarians in the support of courses and students, and suggests that just as librarians are currently embedded in many online courses, they should also be embedded in MOOCs. Embedded librarians should work as a team with MOOC instructors, targeting specific information literacy skills to be focused on in a particular course (Barnes, 2013). Many question the practicality of a fully embedded librarian initiative (Hoy, 2014; Barnes, 2013), given that support for MOOCs is often in addition to the regular workload of academic librarians, but it is still recognized that librarians must be involved in some way, lest they be seen as no longer necessary to education (Hoy, 2014).

A number of other smaller ways for librarians to involve themselves in MOOCs have been suggested. Many information literacy tutorials created by librarians in recent years have been licensed with Creative Commons, so that they might be shared and reused if the creator is credited. These tutorials focus on a variety of topics and can be easily embedded directly into open courses as instructional aids for students. Likewise, the inclusion of information literacy self-assessment tools (Barnes, 2013) can assist students in determining the areas in which they are weak, and can point them to additional tutorials and resources to review to develop these skills. Barnes (2013) also emphasizes the importance of using a variety of media to deliver information literacy skills instruction, including screen-capture tools and audiovisual materials. Considering different ways of providing information literacy instruction is important in determining what will be effective (Pritchard, 2013).

The open library conceptually

The Open Library at AU is based on the same principle as open access and open educational resources, namely that cost is a barrier to learning and to reduce that barrier, materials should be made freely available to learners and researchers in order to promote and democratize knowledge

and learning (Yiotis, 2005). Open access tackles this issue by promoting the unfettered sharing of scholarly publications. This allows learners, researchers, and libraries to access this material free of charge and results in the easy dissemination of scholarly material; “OA articles are distributed much more widely and have equal or better likelihood of being cited by other scholars” (Anderson, 2013, p. 90). For the OER movement, the aim is to make learning materials freely available to “copy, use, adapt, and re-share” (UNESCO, n.d.). OER by definition, cannot incorporate materials that are behind a paywall or otherwise unavailable for reuse or adaption. *The Open Library at AU* is a library website that furthers the idea of content collection, creation, and curation, by gathering open access and free content together in one site and provides the seamless access to these materials. This gives learners and researchers the simplest access to resources that they can use without cost. Free access to resources encourages learning, research and knowledge sharing which are often considered the main pillars of the mission and mandate of libraries.

The Open Library at AU supports learners in many ways. This is especially true for students involved with open learning as well as informal learners who do not have access to scholarly resources through an educational institution. Open learning through courses like MOOCs is relatively new and the potential impact is already disrupting higher education (Gore, 2014). This disruption is somewhat tempered by the fact that library engagement in MOOCs is relatively low. As noted above, providing library services to the large numbers of students enrolled in MOOCs can be a challenge. However, in many cases learners do not have access to additional scholarly materials they need for independent research and learning outside their open course, and may also not have access to information literacy tutorials that can assist them in furthering this research. In addition, libraries can sometimes be difficult to navigate for learners unfamiliar with their structure. The lack of access to additional library resources, library information, and information literacy skills can be a major shortfall that leaves learners without an essential part of their learning experience (Mezick, 2007; Goodall & Pattern, 2011) and may pose a significant obstacle to their learning. Students enrolled in MOOCs who do not have access to an academic library whose mandate is to collect scholarly resources may also face a significant cost barrier. Finding content for research or to supplement course learning often leads to content behind expensive paywalls, or it may not be available at all. As Courtney states, “MOOC students are not traditional students of a college or university, therefore they do not have access to the multitudes of subscription databases” (2013, p. 515). As an open library that anyone can access, search, and use, *the Open Library at AU* will serve as a portal where students can expand their knowledge beyond what they learn in their courses, and create a more rounded learning experience.

Course creators and authors can also see a lot of benefit from collections of open resources. OER and MOOCs both require additional learning resources, including scholarly publications and other resources. Licensing materials for use in MOOCs is extremely problematic and the costs can be prohibitive (Barnes, 2013). Butler (2012) points out that due to the open nature of MOOCs, which make materials freely available online, there are many challenges, delays and costs which prevent the licensing of content for use in MOOCs. Course creators are then using disjointed strategies for finding resources for use in MOOCs and OER. Discussing resources for Harvardx/edX, Courtney (2013) points out that a variety of strategies are required and that MOOCs “suffer greatly” without access for learners. Course authors may or may not involve their library to find resources for the course. If they are using their home institution’s library, it likely does not have a comprehensive list of open and free resources or information on how best to search and access them. This leads to either a lot more effort on the part of course creators, the selection of lower quality material, or that important material is not made available to learners.

Cost savings is one of the ways that librarians benefit from *the Open Library at AU*. As previously mentioned, subscriptions to journal databases and other resources are constantly rising and are outpacing increases in library budgets. In the face of less purchasing power for scholarly materials, open access materials present one of the best opportunities to make resources available to students. Through the careful selection of open access resources, *the Open Library at AU* brings librarian vetted open access resources together through one site in a way that is easy for users to search and access. Librarians also benefit from the site because it allows them to point students and researchers to quality resources and then focus their interactions with students on the importance of evaluating and analyzing sources, as well as talking about the importance of ethical use of information. Yiotis reminds us that “OA signifies the democratization of knowledge and supports a socially responsible way to distribute knowledge” (2005, p. 160). *The Open Library at AU* also supports the democratization of knowledge by simplifying and facilitating access to open and free resources.

Information literacy skills development

A component of *the Open Library at AU* focuses on Information Literacy skill development. Strong critical thinking, evaluation and analysis skills are essential in navigating the plethora of information sources available, and given the wide range of locations that open resources can be found, so are strong searching skills. While the number of open resources is increasing substantially, there are still a large number of disciplines in which little open content can be found. The information seeking process involves being able to identify the gaps in the materials that have been found, and developing the skills necessary to know how to expand the search for other scholarly sources. This might mean determining alternate search terms that can be used, or locating alternate sources of information, including Library subscription resources if possible.

Understanding the ethical use of information is recognized as a crucial part of being information literate. The use of open educational resources licensed under Creative Commons requires an understanding of the different permissions granted by each license type. This concept is one that is a logical choice for inclusion in a tutorial about plagiarism and academic integrity. Instructional tutorials in *the Open Library at AU* will focus on key topics in information discovery, access and use, and will incorporate a variety of technologies. The emphasis will be on skill development, rather than on the use of specific databases. The tutorials that are included will be a combination of tutorials created at Athabasca University Library and selected open tutorials that complement them.

Site development

The development and maintenance of *the Open Library at AU* is framed within a context of limited resources. In the fall of 2014, Athabasca University Library staff completed a re-design of the University Library’s main website, completely overhauling the site architecture. This re-design provided an opportunity to add functionality to the site and led to the development of *the Open Library at AU*. The structure of the site was built so that content could be re-purposed for separate, dynamic sub-sites based on different ‘views’ of the data contained in a shared database.

As a result of the limited resources available for developing and maintaining the sites and content, it was not possible for Athabasca University Library to develop and manage separate sites and content. Instead, an in-house system was developed that accesses a single database, but can render the content to different site layouts depending on what data is requested. This is possible because of a simple, clear, and extensive tagging system that was applied to all site content. Content

has been tagged as open or free, when applicable, as well as being broken down by subject area. For content like tools and tutorials, additional tagging was done by purpose (research, writing, etc.) to encourage discoverability. One of the overall strengths of this approach is that *the Open Library at AU* has all of the system features that the main Library site does. For learners and researchers accessing the Open Library, they do not receive a 'scaled down' version but a site that has all of the functionality of the main library site and is limited to open and free content.

The end result of the modular, layout driven system and extensive tagging, is that much of the content for *the Open Library at AU* is automatically rendered for a specific layout based on a few selected tags. The previous version of Athabasca University Library's website already provided access to significant open access and free resources, and the decision to increase this content both populates and improves both sites. Information literacy tutorials and other components are both re-used when appropriate, so that both sites benefit from new content. Very little bespoke content is required for *the Open Library at AU* helping to minimize maintenance requirements.

Content

Athabasca University and Athabasca University Library have long been strong supporters of open access, and reducing barriers to learning is part of the Athabasca University mission (Athabasca University, 2013). As the first university in Canada to have an Open Access Research Policy (eMundus, 2013), open access materials have long been an important part of Athabasca University Library's online collection and this content has been continually expanding.

The *Open Library at AU* is in the early stages of development. The first open content added to the site was that which had previously been tagged as "open" on the Library's main website. Adding resources to *the Open Library at AU* is being done in three phases: firstly, open access content, followed by free content, and finally hybrid content. The addition of open access content is the most important phase because this is the material that has the biggest potential use, impact, and cost savings to learners and researchers. The goal of this phase is to create a comprehensive collection of open access content and have it appropriately tagged, described, and curated by librarians. In order to ensure that the collection of resources is meaningful to course authors and developers at Athabasca University, the current focus is on subject areas that are being covered in open educational courses currently in development, and on disciplines taught at AU. This phase involves combing library websites across the world looking for links and information on accessing OA resources. Faculty suggestions and input are also valued in populating the site, as this has proven to be an effective way of gathering content in specific disciplines. All of the resources added to the site to date have been checked for appropriateness, including using Beall's list of publishers (<http://scholarlyoa.com/publishers/>).

Free content is more difficult to include because it may require more analysis of whether or not it is suitable for inclusion. Again, faculty suggestions as well as a thorough review of what others have used are two of the approaches being used to create the listing of free resources. Tagging is applied to these resources as well in order to ensure that they are made available appropriately. Free content remains a very challenging issue as it taps into the huge potential of all of the content available on the web but also comes with all of associated pitfalls of quality, and reliability.

A third, hybrid type of content that has been added to the site fits somewhere between open access and paid content. An example of this is JSTOR's *Register and Read* program (<http://about.jstor.org/rr>). This program gives you access to read three articles every fourteen days. While this content is not Open Access, it does make scholarly content freely available for use. Databases with trials may also be included in this third content type.

The content that *the Open Library at AU* provides is available to students without cost and allows learners and researchers to find the material they need to support their courses, course work and research.

Conclusion

Open access, OER, and MOOCs have all changed the learning landscape for libraries. Learners taking advantage of these disruptive learning technologies have typically been underserved by libraries that struggle to remain relevant and to provide content access to users that cannot access traditionally licensed content. *The Open Library at AU* will tackle these issues by only containing open and free content, supporting tools, and skill development tutorials which support learners, course creators, librarians, and academics involved in OER and MOOCs. By providing a comprehensive open library website, Athabasca University Library is supporting the sharing, creation, and growth of knowledge.

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