

Know Your Audience(s): Collaborating for Copyright Education

Kris Joseph

York University

Julia Guy, Amanda Wakaruk, Adrian Sheppard, Michael B. McNally

University of Alberta



ABSTRACT

This paper reflects on the experiences of a collaborative open educational resources (OER) project on the topic of copyright literacy, with content development led by librarians and aimed at multiple primary audiences. With these audiences in mind, the project team aimed to create engaging instructional material that communicates complex concepts clearly and concisely, models the effective and flexible use of copyright-protected materials in OER, and maximizes the potential for future re-use and re-mixing by other people or institutions. The authors propose that these generalizable OER goals form an “iron triangle” of precision, engagement, and re-usability, and share lessons and recommendations for future OER development through project reflections and examples. Key reflections involve challenges arising from an intentional reliance on openly-licensed content, creating concise material that adheres to best practices for online video creation, crafting inclusive and acces-

sible narratives, and working as much as possible with open source software to reduce barriers for content re-use. Maximizing all five of David Wiley's "Rs of OER" (retain, revise, re-mix, re-use, and re-distribute) requires an ongoing and reflexive approach. While limited generalizations can be drawn from a single case, it is clear that librarians have a substantive role to play as co-creators of OER.

Keywords: open educational resources, case study, re-usability, copyright, engagement

Conozca a su(s) audiencia(s): Colaborando para la educación en derechos de autor

RESUMEN

Este documento reflexiona sobre las experiencias de un proyecto colaborativo de recursos educativos abiertos (REA) sobre el tema de la alfabetización de derechos de autor, con desarrollo de contenido dirigido por bibliotecarios y dirigido a múltiples audiencias primarias. Con estas audiencias en mente, el equipo del proyecto tuvo como objetivo crear material didáctico atractivo que comunique conceptos complejos de manera clara y concisa, modele el uso efectivo y flexible de materiales protegidos por derechos de autor en REA y maximice el potencial para la reutilización y el re-mezclado futuro por otras personas o instituciones. Los autores proponen que estos objetivos de REA generalizables forman un "triángulo de hierro" de precisión, compromiso y reutilización, y comparten lecciones y recomendaciones para el desarrollo futuro de REA a través de reflexiones y ejemplos de proyectos. Las reflexiones clave involucran desafíos que surgen de una dependencia intencional en contenido con licencia abierta, creando material conciso que se adhiera a las mejores prácticas para la creación de videos en línea, elaborando narrativas inclusivas y accesibles, y trabajando lo más posible con software de código abierto para reducir las barreras para el contenido. -utilizar. Maximizar las cinco "Rs de REA" de David Wiley (retener, revisar, mezclar, reutilizar y redistribuir) requiere un enfoque continuo y reflexivo. Aunque se pueden extraer generalizaciones limitadas de un solo caso, está claro que los bibliotecarios tienen un papel sustantivo que desempeñar como co-creadores de REA.

Palabras clave: Recursos Educativos Abiertos, estudio de caso, re-utilización, derechos de autor, participación activa

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摘要

本文就一项针对版权素养主题的协作式开放教育资源（OER）计划得出的经验进行了反思，这项计划的内容开发由图书管理员完成，并以多个主要受众为目标。考虑到这些受众，该计划小组旨在创造有趣的教育材料，后者能清晰准确地传播复杂概念，对“OER中拥有版权保护的材料进行有效且灵活的使用”进行建模，并将未来由其他人或机构对材料进行重复使用和重新混合的可能性最大化。作者表示，这些概括性的OER目标形成了一个由精准、参与和再利用性组成的“铁三角”，同时通过项目反思和实例为未来OER开发提供了经验和建议。关键的反思包括：因有意依赖开放许可内容而产生的挑战，创造能遵守在线视频制作最佳实践的简洁材料，制作具备包容性和可获取性的叙事，以及尽可能地使用开源软件，以减少内容重复使用方面存在的阻碍。将戴维·威利（David Wiley）提出的五个“OER流程”（重新保存、重新改编、重新混搭、重新使用、重新分发）最大化，需要一种不断发展的反思方法。尽管从一个单一案例中仅能进行有限的归纳，但清晰的是，图书管理员作为OER的共同创造者发挥着相当大的作用。

关键词：开放教育资源，案例研究，再利用性，版权，参与

Introduction

The rhetoric on open educational resources (OER) often extols the range of benefits of making teaching and learning materials openly available. Two commonly stressed advantages are the ability for collaboration (whether between institutions, students, and faculty or among various academic staff) and enabling resour-

es to reach vast audiences. For example, the Cape Town Open Education Declaration (Open Society Institute and Shuttleworth Foundation, 2007) is replete with phrases that underscore OER's ability to reach "each and every person on earth" and the declaration emphasizes "the kind of participatory culture of learning, creating, sharing and cooperation" that characterize OER.

While statements such as the Cape Town declaration may intentionally overstate the case for OER (not every person on Earth will benefit), collaboration and broader audiences are certainly important factors in motivating OER creation and use. However, it is important to critically examine the interaction and potential tensions betwixt these two perceived benefits. What happens when different collaborators on an OER initiative have different motivations or want to reach different audiences?

This paper reviews the experiences of a multi-unit collaborative open education project to develop instructional copyright modules as OER. It aims to explicate the value, tensions, and limitations of collaborating to develop resources for multiple audiences. Specifically, these modules are used for in-class instruction in graduate courses, but are also deployed more generally as copyright instructional modules for staff, students, and faculty of the university and available to the general public. This paper's unique contribution is that it focuses on how collaboration can lead to the development of OER that can be used for in-class instruction, general copyright instruction across campus, and also serve as an informational resource for the general public.

The paper begins with a review of relevant literature, followed by a discussion of the case and project methodology. The paper focuses on exploring tensions created by collaboration and multiple audiences within the case by examining the themes of modelling

best practices, the tension between precision and engagement, how inclusivity is achieved, and the limits of maximizing design for re-use. The paper concludes by highlighting several general recommendations from the project.

Literature Review

The following analysis is informed by several related bodies of literature. First, we review the literature on multiple and secondary audiences in OER, followed by a discussion of engagement with respect to online videos. We then turn to focus on collaboration, highlight the literature on librarians' roles in OER creation, and finally the rise of librarians as content creators and their role in copyright literacy.

The OER literature often notes that two of the primary benefits of openness are the prospects for greater collaboration (among institutions, between faculty members and other university staff, and even among students and teachers) and the ability to reach broader audiences. Although the argument that openness allows for larger audiences than traditional resources is straightforward, there is only a small body of literature examining how OER creators should address multiple audiences. Several sources underscore the fact that considering secondary users or audiences must be an important element of OER design (Bates, 2011; Christiansen & McNutt, 2016; McNally & Christiansen, 2016; Ossiannilsson & Creelman, 2011). DeVries (2013) noted that faculty members must be prompted to consider

larger, secondary audiences comprised of an invisible group of learners studying in different modalities.

While the literature on developing OER for multiple audiences is limited, there is an extensive body of literature dealing with engaging primary audiences in relation to online videos (the medium employed in this case study). The extensive literature on online information literacy instruction is replete with best practices for the creation of online videos. Common considerations include: having learning objectives (Evans, 2014, p. 14; Lo & Dale, 2009, p. 151; Weeks & Davis, 2017, p. 185); keeping videos to a short length, with a common suggestion that the length be no longer than three minutes (Evans, 2014, p. 14; Martin & Martin, 2015, p. 48; Weeks & Davis, 2017, p. 186); using scripts (Clossen, 2014, p. 34; Weeks & Davis, 2017, p. 185); including interactivity (Lo & Dale, 2009, p. 151; Martin & Martin, 2015, p. 47; Smith, 2010, p. 151); minimizing cognitive overload through chunking and avoiding jargon (Clossen, 2014, p. 34; Lo & Dale, 2009, p. 151; Martin & Martin, 2015, p. 48; Smith, 2010, p. 154; Weeks & Davis, 2017, p. 186); ensuring narration is conversational (Martin & Martin, 2015, p. 52); avoiding large blocks of text on screen (Clossen, 2014, p. 34); making content available in multiple formats and ensuring accessibility (Courtney & Wilhoite-Mathews, 2015, p. 273; Martin & Martin, 2015, p. 50; Weeks & Davis, 2017, p. 186); and, where possible, forming collaborations that include librarians, faculty, and instructional designers (Lo & Dale, 2009, p. 152).

The recommendation for collaboration in developing instructional videos is congruent with the OER literature on the subject. Collaboration is often underscored as a superior approach to developing open resources (Arimoto, Barroca, & Barbosa, 2016; Casserly & Smith, 2008). Faculty subject matter expertise is a necessary, but often insufficient, element in the design of effective OER; other examples highlight the importance of iterative development processes, robust workflow management tools, and ongoing incorporation of feedback from user communities (ISKME, 2008). Instructional designers and educational developers are valuable OER collaborators given their expertise in ensuring learning objects adhere to the principles of sound instructional design (Camilleri et al., 2014). Librarians can contribute expertise that aids in developing content, particularly related to copyright and discoverability, in addition to being advocates for openness (Bueno-de-la-Fuente et al., 2012; Kazakoff-Lane, 2014). Librarianship's role in the OER movement is typically expressed through program leadership, facilitation, or dissemination, through liaison work or incentivized creation of OER like open textbooks (Salem, 2017; Smith & Lee, 2017; Walz, 2015). Information professionals often contribute to the development and delivery of OER by locating existing material, providing repositories for OER material, facilitating discovery and stewardship of OER, or providing guidance on issues of copyright. Indeed, in most cases librarians are cast in a supporting role, with faculty, who often create content, being

centred in discussions. Despite the literature emphasizing the importance of collaboration featuring a variety of skill sets beyond the subject expertise of faculty members, such fully collaborative projects are rare (Lane & McAndrew, 2010). One other important element of successful OER collaborations, beyond ensuring diverse skillsets, is positive relations among collaborators (Goodsett, Loomis, & Miles, 2016). Although the literature on librarian collaboration in OER tends to portray librarians in a supportive role, there is a growing body of literature on the role librarians can play as OER content creators. The open education/OER movement has been increasingly embraced within library and information studies, particularly by academic libraries, where it is commonly seen as an extension of concerns about open access and open scholarship more generally. For example, the Canadian Association of Research Libraries (2019), representing the 29 largest academic libraries in Canada, made advancing open scholarship, including OER, the first of its strategic priorities for 2019-2022. There is a role for librarians and other information professionals in the creation of OER when the subject matter bridges the field's core competencies (such as information literacy and digital literacy) (ALA, 2009). Intellectual property and copyright issues are pertinent here, since librarians often deal with patrons as users and creators of copyright-protected materials. Moreover, while materials like subject guides are freely available and typically created with specific audiences in mind, librarians are also called upon

to provide educational guidance on a broad range of topics. Other examples in this area include research data management, scholarly-led publishing, and the use of institutional repositories by both content creators and information seekers.

While librarians are often called upon to help facilitate awareness and use of OER and think of their contributions to larger academic communities as a form of open educational practice, it is rarer for librarians to be creators of dedicated OER content, as in the case study that follows.

Project Context and Description

The University of Alberta is one of the 10 largest research institutions in Canada, with nearly 400 undergraduate programs, over 500 graduate programs, and more than 40,000 students (University of Alberta, 2019a). Historically, the university, and in particular its Faculty of Extension, has had a clear mandate to bring higher education to all citizens in the province. One notable initiative was the creation of the Extension Library, a travelling library established in 1913 to serve all communities in the province. A year later, a trove of visual resources (in the form of projector slides) were made available to communities across the province through what was called the Magic Lantern program. Open Education in an early form emerged from the University of Alberta in the 1920s, when lectures were made available over the radio (University of Alberta, 2006).

Nearly a century later, however, creation of and advocacy for OER at the University of Alberta has been moderate. The Centre for Teaching and Learning provides some program support (Centre for Teaching and Learning, 2019a) and operates a modestly funded (\$75,000 in both 2018/2019 and 2019/2020) OER Awards program designed to encourage OER creation and adoption. This support has funded several small OER projects (Centre for Teaching and Learning, 2019b). In addition, two advocacy groups—one driven by the undergraduate student union, and the other comprised of interested staff and faculty from the university—were developed following a grassroots and short-lived interest group. Overall, existing resources are aimed more at university faculty and staff than at students and members of the general public. This modest interest and support for OER stands in contrast to the university administrations' more active effort to establish the university as a leader in MOOC development. For example, the university has partnered with Coursera to create and deliver over a dozen MOOCs in the past decade (University of Alberta, 2019b).

The University of Alberta is increasingly embracing OER, with several OER projects emanating from the university, including the case at the focus of this paper. The OER project under examination is a multi-year, grant-funded project focused on developing copyright OER: the Opening Up Copyright (OUC) project. OUC was created with three goals in mind: enhance the quality of copyright instruction provided to students at the University of Alberta;

strengthen copyright education for faculty, staff, and students in the broader University of Alberta community; and develop resources that can be used and adapted by members of the public and other Canadian institutions.

The project, which was initially funded by the university's Teaching and Learning Enhancement Fund (Centre for Teaching and Learning, 2019c), is a collaboration among several University of Alberta units, including the Copyright Office, the School of Library and Information Studies (which is the source of the sole faculty member on the project), the Centre for Teaching and Learning, the Libraries, and Technologies in Education. Within this partnership, the majority of the work is centred between the Copyright Office and the library school. The diverse team of collaborators, following the recommendations laid out in Lo and Dale (2009), include an Open Education Program manager, a Digital Projects librarian, the Copyright Librarian, the Director of the Copyright Office, a learning facilitator, multiple graduate research assistants, two educational developers, and an associate professor. While the overall group involved in the project is large, most of the work is carried out by a smaller content team comprised of the Copyright Librarian, Director of the Copyright Office, the associate professor, and the graduate research assistants. Collaboration has been facilitated by regular weekly meetings of the professor and the graduate students and biweekly meetings of the content team. Full team meetings are a less frequent occurrence.

The OUC project has also attempted to facilitate input with those outside of the University of Alberta. The primary mechanism for enabling such feedback is through a series of publicly editable Google Docs that allow anyone to contribute to the development or evolution of the educational materials. However, use of these interactive documents by those outside of the university has been limited.

Since its inception, OUC has released 16 freely available, video-based modules between six and 10 minutes in length, with as many as 50 other topics planned for coverage. All of the project's content has been released under the Creative Commons Attribution 4.0 International License and is available at <https://sites.library.ualberta.ca/copyright/>. Since January 2019, content has been linked to, re-used, or repurposed by a number of other post-secondary institutions, including St Mary's University, Mount Allison University, Northern Lakes College, Tyndale University College & Seminary, and Dalhousie University.

What is notable about this case is that while many OER projects have their genesis in a specific course, the OUC project modules have, from the outset, been designed for both an academic class-based audience and broader communities of interest. To manage these varied audiences, the project has focused on modular design and accessibility and has categorized modules at various levels depending on the depth of subject matter. Close collaboration among individuals working in the Copy-

right Office and the faculty member has led to a broader range of subjects being covered, including modules focused on practical or "on the ground" copyright literacy issues (e.g., Finding and Choosing Open Content) and more academic analyses of copyright (e.g., Theoretical Foundations for Copyright). The dual emphasis on theoretical elements of copyright and more "practice-based" copyright instruction is a reflection of the breadth of the material's audience, resulting in higher resource and time demands from the project's numerous contributors.

Subsequent events of national significance have increased the project's relevance and applicability to a more general audience. Changes to the Canadian *Copyright Act* (R.S.C. 1985, c. C-42) that limit the access to and use of technologically-protected materials (s. 41) and a recent federal court ruling against York University over its reliance on fair dealing guidelines for the use of copyright-protected material (Loriggio, 2017) have created a "copyright chill" in Canada: individuals are discouraged from exercising their legal rights for fear of potential sanction. The OUC project is now becoming an instrument for battling this chill, since accessible education on issues of copyright, aimed at a wide range of audiences, may improve users' understanding of their rights under the *Copyright Act*—especially in the context of its fair dealing provisions (s. 29)—and minimize risk avoidance on the part of institutions that use copyright-protected materials (Wakaruk, 2018).

Method

This paper expands on the existing literature through a critical reflection on the University of Alberta's OUC project. Defined by Fook (2012) as a "way of learning from and reworking experience" (p. 56), critical reflections are a means of improving the effectiveness and quality of professional practice. Drawn from Duncan (2004), the approach used in this reflection can be seen as auto-ethnographic, since it embraces the subjective experiences of the people directly involved with the project.

While this approach is not without limitations and the proximity to the work by the authors is a source of bias (Flyvberg, 2004), such closeness facilitates a more intimate understanding of the technology and processes involved in the creation of the materials necessary for the analysis that follows. The reflections presented in this paper should transfer well to any OER project that uses video and related interactive features to provide educational material to multiple audiences with differing needs and interests.

Key Reflections: An "OER Triangle"

While the multi-unit collaborative approach has many advantages, there are also some important challenges in designing for multiple audiences, including minimizing domain-specific language for highly legalistic subject matter, and balancing accessibility and comprehensiveness. These challenges must, in turn, be

balanced against the project's emphasis on the re-usability and adaptability of material. Taken together, these factors form a triangle of occasionally competing interests, with "precision," "engagement," and "re-usability" at each apex.

The analog to project management's "iron triangle" of scope, schedule, and cost (Atkinson, 1999) is intentional, based on recurring themes that arose in discussions about the design and implementation of each OER module. Maximizing precision, engagement, and re-usability equally during the OER development process is nearly impossible, since overemphasis on any one interest comes at a cost to one or both of the other two when the project has an over-arching goal of creating content for multiple audiences.

The recognition of trade-offs in OER design stems from one of the project members' ongoing scholarship in this area (Christiansen & McNally, 2018; McNally, 2014; McNally & Christiansen, 2019), and a brief overview of the tensions created by these trade-offs illustrates their trilateral nature. First, there is the balance of precision and engagement. Here, high attention to the subject's connections to detailed legal language and jurisprudence—more appropriate and digestible for academic audiences—may hinder engagement for members of the general public. The second tension is inherent when reconciling engagement and reusability: an overreliance on advanced multimedia production techniques to foster interest in and engagement with the material can create barriers for other insti-

tutions who wish to adapt the content for their own purposes, since adaptation would require advanced skills or technical knowledge that the new user may not have. The tension between precision and reusability is the least direct of the three relationships but manifests itself in two ways. It first appears when considering the breadth of the intended audience for the resource. When the intended audience is narrow and specific (for example, “library and information science students in Canada”), the content can be precise and targeted. This limits the potential for re-use in other contexts (for example, “users of public

library makerspaces”) due to the level of additional customization required. The second manifestation of this tension is particularly thorny when considering “people who may want to reuse this resource” as an additional audience: generally focused (and therefore less precise) resources are more likely to be selected by downstream educators due to their broad applicability. The prevalence of trade-offs formed by triangle of precision, engagement, and reusability suggests it is a model that may be worth considering by others creating OER, and in particular those designing for multiple audiences.

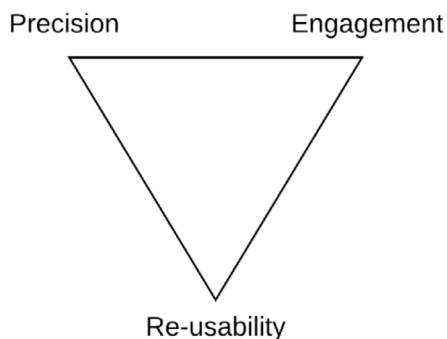


Figure 1: Precision, engagement and re-usability relationship.

The project team’s experience with content creation and development has revealed four key areas of influence associated with balancing the three sides of the “OER triangle.” Almost every module developed for the project faced the following pressures:

1. Capturing and modeling best practices for copyright compliance within the modules;
2. Delivering engaging, accurate and occasionally complex material in a way that doesn’t violate recommendations for module length (as advised in the literature);
3. Ensuring that narratives and examples employed within the modules are reflective of the diversity of their desired audiences; and,
4. Relying as much as possible on tools and materials that are themselves

open and accessible so that people who want to remix or adapt content have the freedom and flexibility to do so.

Modeling Use of Copyright-Protected Content

An OER on the topic of copyright not only serves as a resource for content creators and users, it also serves as a model for how copyright-protected materials can most flexibly be used and attributed as part of an OER. Since one of the project's goals is to maximize the ability for others to re-use or adapt the material, the team agreed on a scheme of using openly licensed content that would not hinder content re-use.

As part of the effort to effect maximum re-usability, the project team created guidelines for the selection and citation of openly-licensed works used in the modules. This follows the findings of Santos-Hermosa (2014), who noted that educators found OER more usable when no copyright clearances were required. To maximize the ability for downstream users to re-use and remix the material without having to acquire additional permissions from copyright holders, the team expressed a strong preference for images, videos, and other materials that were already in the public domain or were licensed under Creative Commons Attribution (CC-BY) terms. Citations for all sources were provided on slides at the end of each module, and in cases where slightly more restrictive forms of Creative Commons licences were used, the licence type was noted in context. For example, an image licensed

under an Attribution-NonCommercial (CC-BY-NC) licence would have its matching Creative Commons licence logo placed directly adjacent. Even for public domain material, attribution and source information was provided to facilitate future use of the same resources by other people.

A secondary objective of the project has been to combat copyright chill in Canada by advocating for users' rights under exceptions such as fair dealing (similar to "fair use" in some other jurisdictions); however, the project did not want to rely heavily on fair dealing exceptions in its own use of copyright-protected material. Though the modules themselves advocate for the value of users' rights in the Canadian *Copyright Act*, the project does not seek to force downstream users of the material to shoulder the risks or responsibilities associated with such choices. The decision to avoid reliance on fair dealing (or similar) exceptions has a significant consequence: it reduces the amount of copyright-protected material that can be reasonably incorporated into the modules for the sake of increasing engagement. As a result, the decision to forgo fair dealing is one point where concerns over re-usability have trumped engagement concerns in the OER triangle.

Additionally, the team's desire to maximize the quality and engagement potential of the modules has led to painstaking selection of visually- and thematically-coherent imagery, diagrams, and icons for video presentations. This preference was not solely

aesthetic: in order for ideas to be clearly understood, it is important that related concepts be visualized in consistent ways, following recommendations in the literature (Plumb, 2010).

For example, one module about the rights afforded to copyright holders used 10 different symbols to represent those rights, and a learner's ability to "mentally group" these rights was judged to be negatively impacted when a draft version of the visuals used a mix of black-and-white line drawings and photographic elements to represent all 10 rights on the same screen. To support visual coherence, designers chose an internally consistent set of images or icons for key concepts and then styled the rest of the visual presentation to match those choices. Moreover, the same icon or image was then used to represent the same concept across all of the modules developed for the project.

In general, more flexibility was afforded when central concepts or terms were represented with basic black-and-white icons; however, the lack of available and openly-licensed material appropriate for these purposes occasionally created dissonance between an envisioned module design and its practical implementation. Although the wide variety of openly licensed content in the Commons is notable, the desire to create a consistent look and feel within and across modules, without investing extensive time and effort in the customization of openly licensed material, occasionally limited material selection.

Balancing Precision and Engagement

A narrative-based approach to instruction has been shown to foster engagement and understanding of instructional material (Laurillard, 1998). Wherever possible, the project team framed each module from the perspective of a central character (often a proxy for one of the module's primary audience members) and used this frame to guide a story-based narrative. The team found that some topics lent themselves to this storytelling approach better than others. Modules associated with important court cases in Canada provided a good fit for narrative, since the presentation could trace the origins of the court case, key arguments made during trial, and details of the decision and (if present) subsequent appeals. Less suitable for narrative fit but still manageable were modules that provided guidance on working with copyright-protected materials. In these situations, the team could focus on the experiences of a content creator or user as they navigate the complexities of copyright jurisprudence. In some other situations—such as modules dedicated to the meaning and interpretation of specific sections of the *Copyright Act*—crafting a narrative is much more difficult, and designers would either invent a scenario to explain the section, discuss the origin of the section, or frame the discussion in terms of related court cases, judgments, or Copyright Board of Canada rulings.

The narrative focus of the OER modules creates tension between precision and engagement. For example,

as the project has evolved, the team has begun to employ humour as a component of the narrative in each video's visual presentation, narration, or both. This approach significantly enhances the enjoyment and engagement level of modules but runs the risk of creating vague or possibly even incorrect interpretations of nuanced and complex aspects of the Canadian *Copyright Act*. As a result, great care must be taken with the scripting of each module, with scripts and visual presentations subject to multiple reviews by the core content team. Modules were often reviewed by the full team, as works-in-progress, up to eight or 10 times. A conversational or colloquial approach to the visual presentation that emphasizes engagement for audiences such as graduate students and the broader public was invariably chosen. While this approach may reduce clarity, it was preferred over strict adherence to academic or legal-sounding narrative. Although a more academic or legal sounding narrative would have greater precision for audiences such as academic staff or legal scholars, it can sound "scripted" and unnatural in the final product. This balance is difficult to achieve on a module-by-module basis, and demands discussion in forums, where all members of the project team can be present to flag issues and resolve concerns.

Over time, the team developed two approaches to balancing precision and engagement. First, central or key copyright topics with the broadest interest (or multiple primary audiences) were identified as "flagship" modules, and these modules were used in novel

forms of visual presentation that received in-depth review and revision. For example, one module was created using Powtoons animation, and another module was created by filming puppets in a university library. These novel forms of presentation led to a second approach, which was the incorporation of team members with theatre or live performance backgrounds to serve as a counterbalance to more traditional, academic approaches. The value of skills contributed by students with theatre backgrounds to the development of engaging modules dramatically improved engagement quality of the modules.

Increasing engagement by using novel forms of visual representation has a negative impact on the re-usability of project content (the engagement vs. re-usability axis of the OER triangle), since the convention of making downloadable slides for the module is often broken with the use of different media. The team has discussed possible alternatives to address this concern, such as creating a parallel set of slides or making raw video and audio content available for download, but the value and effectiveness of these options has not yet been assessed. In one case, such as a Powtoons-based module on using images, the project team has decided that an updated version of the module will re-focus on re-usability by replacing the animated material with a more versatile PowerPoint plus narration approach.

Achieving Inclusivity

In order for the project material to be effective across multiple primary audi-

ences, it needs to be reflective of the diversity and scope of those audiences. A storytelling approach mandated the creation of a set of characters that could be used as first-person proxies for the audience, and so an array of personas was developed for the team to use within and across modules for the purpose of consistent and interconnected storytelling (in essence, “OUC world-building”). Examples of selected personas, which reflect the variable audiences for the content, included a librarian, a content creator, a graduate student, and an employer. Visual representations of these personas needed to embody non-normative facets of ethnicity and gender, and every effort has been made to question default assumptions of what (as an example) an “employer” looks like.

The project team’s interest in diverse visual representation has added another layer of complexity to the selection and use of openly licensed materials, affecting the OER triangle’s tension between precision and re-usability. The selection of representative icons and images requires considerable care, but freely-available icons and photos—much like their commercially-available counterparts—bias representation towards white, male, able-bodied depictions of people and situations (Model View Culture & Daniels, 2016; NPR, 2017). Though rigorous searches were often able to surface appropriate material for use by the project, such as a non-binary student named Sandy who appears in several modules, alternate sources of openly licensed content were eventually added to the team’s repertoire. These included *The Gender Spec-*

trum Collection (<https://broadlygenderphotos.vice.com/>), *Representation Matters* (<http://representationmatters.me/>), and the *Women of Color in Tech* photo collection on Flickr (<https://www.flickr.com/photos/wocintechchat/>).

Maximizing Availability for Re-Use, Revision and Re-Mixing

A critical focus for the project team, with a view towards animating all five of Wiley’s (2014) “R’s of OER”—especially re-mix and re-use, which form one apex of the OER triangle—was the desire to complement our preference for broad, openly-licensed content with the use of free open source software (FOSS) to write, produce, and distribute project modules. This commitment increases access to module content by making it easy for downstream users to adapt or re-use material without having to make additional investments in proprietary tools, software, or distribution platforms. This commitment to FOSS tools is not purely ideological or absolute, however. In an earlier phase of the project, the project team examined a wide range of open source tools for collaboration, scripting, video production, and interactivity. Though applicable tools exist for every step of the project team’s workflow, some proprietary software has still been used to balance the accessibility of material with the skills and knowledge required to adapt it to new contexts. For example, the team relies on Microsoft PowerPoint, which is not *gratis* but is widely viewed as a *de facto* standard for the creation of

presentations. Open alternatives such as OpenOffice Impress do exist, but its user interface is not as mature, and its feature set is not as robust. More importantly, it presents a learning curve to new users that may create a barrier to the downstream use of the content. While adopters who have no previous experience with Microsoft products face a similar learning curve learning to use OpenOffice vs. PowerPoint, given that the majority of adopters would likely be based in universities, a degree of familiarity with Microsoft products was assumed.

General Recommendations

The work of balancing precision, engagement, and re-usability across the project modules has resulted in one overarching recommendation for others who are trying to achieve similar goals in OER development: a reflective approach of examining material intentionally through all three lenses of balance is key. There is no one “answer” for resolving the tensions uncovered in the project, and decisions typically depend on the characteristics and learning objectives associated with the topic of each module.

Perhaps most importantly, a slavish adherence to the 5 Rs of OER, with a view towards maximizing re-usability, can have a limiting impact on the ability for OER content to achieve optimum levels of precision and engagement. Following the advice of McNally and Christiansen (2019), sometimes “open” has to mean “open enough.” The project team could, for example, make a

firm commitment to using purely open tools and purely open content, with no exceptions or risk tolerance as it pertains to fair dealing, but this ideological approach could easily get pushed too far, leaving other aspects out of balance and hampering the material’s ability to achieve its educational objectives. At some point, the commitment becomes ideological and dogmatic and may harm rather than help; accordingly, decisions such as using PowerPoint instead of OpenOffice Impress and not generally relying on fair dealing exceptions in the *Copyright Act* in challenging situations are, in our view, acceptable.

The second overall recommendation, aimed at providing the most flexibility in balancing all of the tensions outlined in this paper, is to use a “layered” approach to content creation that emphasizes openness at different levels. Since text transcripts, slides, videos, and interactive materials are all created separately and are each made available for re-use, it is possible to add precision, interactivity, elements of narrative, or local customization in one layer without creating complex dependencies in any other layer. Additional detail, emphasizing precision, can be added at any or all of these layers, and re-usability is emphasized by allowing materials to be downloaded and partially adapted, for any derivative purpose or context, as needs arise. Experience with occasional updates to existing material have resulted in only one layer-to-layer dependency that the project team has uncovered: leaving whitespace on presentation slides (following the advice of Clossen, 2014, pp. 34-35) provides

more flexibility for the addition and alteration of interactive H5P elements.

Conclusion

The University of Alberta's OUC project reveals that collaborative OER development for the benefit of multiple audiences highlights the role of openness for re-use as a balancing factor, ensuring that content is both accurate and engaging for the broadest possible range of audiences. Moreover, a stronger OER development focus on downstream re-use and content customization, which has been noted as a weakness in existing OER development practices, seems to serve as a synergistic means of improving both the appeal and reach of open educational content.

There are also some important limitations to note in drawing general recommendations from a single case study. This OER project is not necessarily comparable to others, particularly given the size of the project in terms of budget and team members involved. More importantly, one factor driving the success of the project has been the cordial and positive nature of the collaborations among the team members. Personal dynamics are a key aspect of any successful collaboration, and some degree of the project's success is reflective of the fact that several of the individuals involved had previously collaborated in various capacities. Such internal dynamics are not easily reproducible.

As indicated by this case study, there is a clear role for librarians as sub-

stantive collaborators on OER projects, particularly where those projects align with LIS subject expertise such as copyright in this case, or in areas including information and digital literacy, data management, and scholarly communications.

References

- American Library Association (ALA). (2009). *ALA's core competences of librarianship*. Retrieved from <http://www.ala.org/educationcareers/sites/ala.org/educationcareers/files/content/careers/corecomp/corecompetences/finalcorecompstat09.pdf>
- Arimoto, M. M., Barroca, L., & Barbosa, E. F. (2016). AM-OER: An Agile Method for the development of open educational resources. *Informatics in Education, 15*(2), 205-233. doi:10.15388/infedu.2016.11
- Atkinson, R. (1999, December). Project management: Cost, time and quality, two best guesses and a phenomenon, its time to accept other success criteria. *International Journal of Project Management, 17*(6), 337-342. doi:10.1016/S0263-7863(98)00069-6
- Christiansen, E., & McNally, M. B. (2018, April 4). Open enough? Eight factors to consider when transitioning from closed to open resources and courses: A conceptual framework. Presented at *Open Education Global*, Delft, Netherlands. doi:10.7939/R3TB0Z93T

- Bates, T. (2011, March 18). A reflection on the OER debate: Every which way but loose. *Online Learning and Distance Education Resources*. Retrieved from <https://www.tonybates.ca/2011/03/18/a-reflection-on-the-oer-debate-every-which-way-but-loose/>
- Bueno-de-la-Fuente, G., Robertson, J., & Boon, S. (2012). *The roles of libraries and information professionals in open educational resources (OER) initiatives*. CAPLE/JIS CETIS. Retrieved from <http://digital.library.wisc.edu/1793/63306>
- Camilleri, A. F., Ehlers, D., & Pawlowski, J. (2014). State of the art review of quality issues related to open educational resources. *JRC Scientific and Technical Reports*, 52. Retrieved from https://www.pedocs.de/volltexte/2014/9101/pdf/European_Commission_2014_OER.pdf
- Casserly, C. M., & Smith, M. S. (2008). Revolutionizing education through innovation: Can openness transform teaching and learning? In T. Iiyoshi & M. S. V. Kumar (Eds.), *Opening up education - The collective advancement of education through open technology, open content, and open knowledge* (pp. 261-275). Retrieved from <https://archive.org/details/OpeningUpEducation>
- Centre for Teaching and Learning. (2019a). *Teaching and learning enhancement fund (TLEF)*. Retrieved from <https://www.ualberta.ca/centre-for-teaching-and-learning/grants/tlef>
- Centre for Teaching and Learning. (2019b). *Open education*. Retrieved from <https://www.ualberta.ca/centre-for-teaching-and-learning/teaching-support/teaching-development/open-education>
- Centre for Teaching and Learning. (2019c). *University of Alberta OER awards*. Retrieved from: <https://www.ualberta.ca/centre-for-teaching-and-learning/grants/oer>
- Christiansen, E., & McNutt, K. (2016). *OER starter kit*. Alberta Open Educational Resources. Retrieved from https://docs.google.com/document/d/162y7HdY4Lsu0nKzUimeaCMY2M-zBC41cR6CgjV_biGo/view#heading=h.2qrn3avtvc93
- Clossen, A. S. (2014). Beyond the letter of the law: Accessibility, universal design, and human-centered design in video tutorials. *Pennsylvania Libraries: Research & Practice*, 2(1), 27-37. doi:10.5195/PALRAP.2014.43
- Courtney, M., & Wilhoite-Mathews, S. (2015). From distance education to online learning: Practical approaches to information literacy instruction and collaborative learning in online environments. *Journal of Library Administration*, 55, 261-277.
- DeVries, I. (2013). Evaluating open educational resources: Lessons learned. *Procedia—Social and Behavioral Sciences*, 83, 56-60.
- Duncan, M. (2004). Autoethnography

- : Critical appreciation of an emerging art. *International Journal of Qualitative Methods*, 3(4), 2839. doi:10.1177/160940690400300403
- Evans, R. (2014). Cooking up cauldrons of content: Recipes for video tutorials. *Articles, Chapters and Online Publications*, 32. Retrieved from https://digitalcommons.law.uga.edu/law_lib_artchop/32
- Flyvberg, Bent. (2004). Five misunderstandings about case-study research. In C. Seale et al. (Eds.), *Qualitative research practice* (pp. 390-404). London, England: Sage.
- Fook, J. (2012). Developing Critical Reflection as a Research Method. In J. Higgs, A. Titchen, & D. Horsfall (Eds.), *Creative spaces for qualitative researching: Living research* (pp. 55-64). Springer.
- Goodsett, M., Loomis, B., & Miles, M. (2016). Leading campus OER initiatives through library-faculty collaboration. *College and Undergraduate Libraries*, 23(3): 335-342. doi:10.1080/10691316.2016.1206328
- Institute for the Study of Knowledge Management in Education. (2008). *OER case study white paper—Creating, doing and sustaining OER: Lessons from six open educational resource projects*. Retrieved from <https://www.iskme.org/publications/oer-case-study-white-paper-creating-doing-and-sustaining-oer-lessons-six-open-educational-re>
- Kazakoff-Lane, C. (2014). *Environmental scan and assessment of OERs, MOOCs and Libraries*. Association of College and Research Libraries. Retrieved from <http://www.ala.org/acrl/sites/ala.org.acrl/files/content/publications/whitepapers/Environmental%20Scan%20and%20Assessment.pdf>
- Lane, A., & McAndrew, P. (2010). Are open educational resources systematic or systemic change agents for teaching practice? *British Journal of Educational Technology*, 41(6), 952-962. doi:10.1111/j.1467-8535.2010.01119.x
- Laurillard, D. (1998). Multimedia and the learner's experience of narrative. *Computers & Education*, 31(2), 229-242. doi:10.1016/S0360-1315(98)00041-4
- Lo, L. S., & Dale, J. M. (2009). Information literacy "learning" via online tutorials: A collaboration between subject specialist and instructional design librarian." *Journal of Library and Information Services in Distance Learning*, 3, 148-158.
- Loriggio, P. (2017, July 12). York University loses legal fight over copyright fees after federal court ruling. *The Star*. Retrieved from <https://www.thestar.com/news/gta/2017/07/12/york-university-loses-legal-fight-over-copyright-fees-after-federal-court-ruling.html>
- Martin, N. A., & Martin, R. (2015). Would you watch it? Creating effective and engaging video tutorials. *Journal of Library and Information Services in Distance Learning*, 9, 40-56.

- McNally, M. B. (2014, April 4). Design vs. pedagogical considerations for OERs. Paper presented at *IL-Palooza*, MacEwan University, Edmonton, AB. doi:10.7939/R31R14
- McNally, M. B., & Christiansen, E. (2016, December 7). Choices and consequences in transitioning from closed to open resources. Paper presented at *Open Education in Action*, Maskwacis Cultural College, Maskwacis, AB. Retrieved from <http://v1-irepo-p1.mtroyal.ca:8080/xmlui/handle/11205/307>
- McNally, M. B., & Christiansen, E. G. (2019). Open enough? Eight factors to consider when transitioning from closed to open resources and courses: A conceptual framework. *First Monday*, 24(6). doi:10.5210/fm.v24i6.9180
- Model View Culture & Daniels, J. (2016, November 14). Diversifying stock photography: An interview with Jenifer Daniels, founder and CEO of Colorstock. *Model View Culture*, 43. Retrieved from <https://modelviewculture.com/pieces/diversifying-stock-photography-an-interview-with-jenifer-daniels-founder-and-ceo-of-colorstock>
- National Public Radio. (2017, June 17). *Diversifying stock photography*. Retrieved from <https://www.npr.org/2017/06/17/533327542/diversify-ing-stock-photography>
- Open Society Institute & Shuttleworth Foundation. (2007). *The Cape Town open education declaration*. Retrieved from <https://www.capetowndeclaration.org/read-the-declaration>
- Ossiannilsson, E., & Creelman, A. (2011). Quality indicators within the use of open educational resources in higher education. In A. Mendez-Vilas (Ed.), *Education in a technological world: Communicating current and emerging research and technological efforts* (pp. 372-382). <http://www.diva-portal.org/smash/get/diva2:478601/FULLTEXT01.pdf>
- Plumb, T. K. (2010). Creating electronic tutorials: On your mark, get set, go! *Journal of Electronic Resources Librarianship*, 22(1-2), 49-64. doi:10.1080/1941126X.2010.486729
- Salem, J. A. (2017). Open pathways to student success: Academic library partnerships for open educational resource and affordable course content creation and adoption. *The Journal of Academic Librarianship*, 43(1), 34-38. doi:10.1016/j.acalib.2016.10.003
- Santos-Hermosa, G. (2014). ORIOLE, in the search for evidence of OER in teaching. Experiences in the use, reuse and the sharing and influence of repositories. *Qualitative Research in Education*, 3(1), 232-268. doi:10.4471/qre.2014.46
- Smith, B., & Lee, L. (2017). Librarians and OER: Cultivating a community of practice to be more effective advocates. *Journal of Library & Information Services in Distance Learning*, 11(1-2), 106-122. doi:10.1080/1533290X.2016.1226592
- Smith, S. S. (2010). *Web-based instruction: A guide for libraries* (3rd ed.). Chi-

- Chicago, IL: American Library Association.
- University of Alberta. (2006). *University by extension: The University of Alberta faculty of extension—Since 1912*. Retrieved from https://web.archive.org/web/20110110095723/http://www.extension.ualberta.ca/faculty/ext_history.pdf
- University of Alberta. (2019a). *About U of A*. Retrieved from <https://www.ualberta.ca/about>
- University of Alberta. (2019b). *Massive open online courses*. Retrieved from <https://www.ualberta.ca/admissions-programs/online-courses>
- Wakaruk, A. (2018, February). Fighting copyright chill in Canada: Using OER to educate and empower librarians. Paper presented at the *OLA Super Conference 2018*, Toronto, ON. doi:10.7939/R3CF9JM8Q
- Walz, A. R. (2015). Exploring library engagement in open educational resource adoption, adaptation and authoring. *Virginia Libraries*, 61, 23-31.
- Weeks, T., & Davis, J. P. (2017). Evaluating best practices for video tutorials: A case study. *Journal of Library and Information Services in Distance Learning*, 11(1-2), 183-195.
- Wiley, D. (2014, March 5). The access compromise and the 5th R [Blog]. *Iterating toward openness*. Retrieved from <https://opencontent.org/blog/archives/3221>