

**Open Access** **Workshop**

# Opening Up Education: Engaging with Open Education and Open Education Resources

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**Abstract:** Open education and the use of Open Educational Resources (OER) have almost become buzz words in the educational sector. OER have been cited to improve equality in education by improving access and decreasing costs, and therefore, having an improved economic redistribution. The current research shows many gaps in this hoped for result. So, how can we as educators improve the access, development, utilization, and sharing of OER more effectively? This interactive workshop will begin with a brief review of the current literature on the issues related to the use and development of OER. It will explore the use of Creative Commons Licenses in the development of OER to assist in increasing access to these resources as well as the “5 Rs” of OER (reuse, revise, remix, retain, and redistribute). Using hands on exercises, participants will learn strategies to find and curate OER to illustrate how they may be used in the classroom to engage students as open knowledge creators. The workshop will model the use of the open strategy by delivering the workshop, in part, using a Pressbook (Srivastava, 2021) and interactive H5p activities (Srivastava, 2023), which were developed as part of a capstone project for the University of British Columbia’s (UBC) Program for Open Scholarship and Education (POSE).



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**Keywords:** Open Education, Open Education Resources, Creative Commons License, Global North, Global South.

## Introduction

I am currently a communications professor at Conestoga College in Southern Ontario. The last few years have seen a dramatic shift in how education has been delivered and personally, I remain teaching mainly via Zoom, with a few hybrid courses through the academic year. During the initial stages of the pandemic, there was a real need to understand this shift, which today seems quite normal. I spent the pandemic improving my digital literacy and taking advantage of the online learning that was available including completing the eCampus Ontario Empowered Educator program (eCampus Ontario, 2021) and the UBC's POSE (UBC, 2023). This program really inspired me to delve further into the world of "Open" and as I did, I found a strong fit for combining my love of education with my desire to help and to promote education to those who have limited or no access to resources. I also started to think about my students in the context of equity and education. In the 2021/2022 academic year, Conestoga College (2023) had a total of 31,599 full time students of which 18,904 were international. I have some classes that are 100% comprised of international students and others which have a high percentage of this population. These students represent the global south and I looked upon this professional development opportunity to better understand the issues and inequalities they face both here in Canada but also in their home countries. In completing the UBC POSE program, I decided to use the opportunity to learn how to create a Pressbook (Srivastava, 2021) with the viewpoint of developing others with content that may be more accessible and practical to all my students, but particularly the international students who often struggle with the different academic demands placed on them and the cultural differences they must adapt to.

This workshop has been developed using the knowledge gained by completing the two certifications mentioned above, and by conducting a preliminary literature review into the social justice aspect of open education, specifically, the differences, successes, and challenges for the global north and the global south. A quote that influenced my process is from Tom Woodward (2014), who noted "Open is a purposeful path towards connection and community, and the values of inclusion, social impact, and participation are integral to the practice of open" (para. 4). Let me provide a few necessary definitions to increase understanding. *Open scholarship* is an umbrella term that encompasses all aspects of the open approach including open access, open research, open science, open data, open education, open pedagogy, and all other forms of openness in the scholarly and research environment. For my current literature review, I am focusing on open education, specifically open education resources and open access. Open access is documented as being first used as part of the [Budapest Open Access Initiative](#) (2002) and initially was created to address the inequalities in the academic research and publishing sectors.

The emphasis was for the public good, but the initiative also highlights another important aspect of the open movement—the development of the Internet—which is the main way that the open movement has grown in the global north. Now over twenty years later, this idealistic viewpoint still exists, but the research is starting to show the reality as being quite different.

Open education includes practices which are involved in the process and the making of products of education more transparent, understandable, and available to all people. The seminal [Cape Town Open Education Declaration](#) (2007) stated that open education and the use of OER contribute “to making education more accessible, especially where money for learning materials is scarce. They also nourish the kind of participatory culture of learning, creating, sharing and cooperation that rapidly changing knowledge societies need” (para. 3). In 2012, The [UNESCO Paris OER Declaration \(2012\)](#) recommended that governments “promote and use OER to widen access to education at all levels, both formal and non-formal, in a perspective of lifelong learning, thus contributing to social inclusion, gender equity and special needs education” (p. 2).

OER include, teaching, learning, and research resources that are free of cost and access barriers, and which also carry legal permission for open use. Generally, this reuse permission is granted by use of an open license (for example, a Creative Commons License) which allows anyone to freely use, adapt and share the resource—anytime, anywhere.” (Scholarly Publishing and Academic Resources Coalition (SPARC), 2023, para. 6)

OER create accessible learning opportunities on a large scale by eliminating cost barriers to educational resources and providing opportunities to adopt, reuse, and adapt resources for sustainable use in classrooms.

From the above-noted quotes and definitions, very consistent themes are observed: *educational equity, access, internet access, participation, outcomes, social inclusion, globalization of formal education, and benefits*. The literature review highlighted the fact that while we in the global north think all these factors are being addressed by us and that we are helping the global south, the reality is quite different. Some considerations that stood out from the review include, a) the development of OER generally have first world or colonial examples which the students in the global south may not understand or find culturally insensitive, and b) the over dependence on the internet as a significant barrier to access, at best being intermittent or just unavailable.

While my focus during this literature review was about the inequities in the global south, upon reflection, I believe many of these inequities are present right here in Ontario and Canada at large. For example, there is research into the lack of internet access as a barrier to the development and/or use of OER in the global south. However, I would

argue the same can be claimed for large areas in Ontario, specifically rural and northern areas. Another example is closer to home (Conestoga College). International students often only have a cell phone to access online materials and they may not be able to open documents or access certain apps because of the limitations of their mobile phones. These are all important issues that should be considered when developing OER and when thinking about accessibility.

### **Creative Commons License**

Creative Commons License is an overriding factor that allows for the creation of OER. I will use a Pressbook that I developed as my capstone project for UBC's POSE, [Opening Up Education \(Srivastava, 2021\)](#). I believe by using this, I am modelling how OER can be developed and used to educate others on different topics. Creative Commons (CC) (n.d.) is a non-profit organization which "enables sharing and reuse of creativity and knowledge through the provision of free legal tools. Our legal tools help those who want to encourage reuse of their works by offering them for use under generous, standardized terms." CC was started in 2001 in the United States by Lawrence Lessig, a Stanford Law professor, Hal Abelson, a MIT Computer Science Professor, and Eric Eldred, a publisher dedicated to publishing works that had passed into the public domain.

The organization states its vision is to "help others realize the full potential of the internet" ([Creative Commons, n.d.](#)). CC commonly refers to a form of licensing which gives the creator a choice in how other people can use their work. Each type of creative license is composed of 4 elements (see Table 1).

**Table 1***Four Elements of Creative License*

Attribution (BY)	You must give attribution the author of the work. It is an element that is required by all CC licenses
Share Alike (SA)	If you create an adaptation of a work that has this license, the adaptation must be licensed under the same or a compatible license
<b>Non-Commercial (NC)</b>	The work may only be used for non-commercial purposes. In NC licenses, non-commercial is defined as “not primarily intended for or directed towards commercial advantage or monetary compensation” (creative commons, n.d., para. 14). The main point to remember in this category that the emphasis is on what the work is used for and not if the re-user is a commercial entity. This category is purposely flexible to allow for the many situations, commercial and non-commercial that may exist
<b>No Derivatives (ND)</b>	You cannot share an adaptation of the work, though you could use and share it in its original form. An example of an adaptation of an image would be changing its colour, blurring it, or adding another image on top of it. An example of an adaptation of a written work would be translating it to a different language

For a resource to be open, it is recommended they have the 5 Rs of Open. The 5 Rs are listed and defined below:

- Retain: The right to make, own, and control copies of the content (e.g., download and store). Copies can be kept for personal archives or reference.
- Reuse: The right to use the content in a wide range of ways (e.g., in a class, in a study group, on a website, in a video). Content can be reused in its unaltered original format.
- Revise: The right to adapt, adjust, modify, or alter the content itself (e.g., translate the content into another language). Content can be modified or altered to suit specific needs.
- Remix: The right to combine the original or revised content with other open content to create something new (e.g., incorporate the content into a mashup).
- Redistribute: The right to share copies of the original content, revisions, or remixes with others (e.g., give a copy of the content to a friend).

There are several ways to search for OER. Many people probably would start with a Google search, but with all the resources available, this might be overwhelming. A more effective strategy is to use OER repositories. They are effective because the resources have been assessed

and are included in the repository based on their findability, ease of use, and wide-ranging disciplinary materials. Readers are encouraged to check out the pressbook (Note1) for a list of various sources of OER.

### Steps For Developing OER

OER are basically a way of providing content to a student. When creating OER, it is important to ensure that the materials are accessible to all students or other teachers. This also means ensuring the materials are inclusive, and can be accessed in various forms, not just the internet. Table 2 lists some specific steps to follow.

**Table 2**

#### *Steps to Develop OER*

Step 1	Decide whether to create a new resource or to reuse a currently available resource
Step 2	Gather resources. This can be done using planning tools such as mind mapping to outline the project. Identify the gaps and the resources needed to complete the project
Step 3	<p>Choose a platform/tool. When developing OER, it is important to consider how you will make the content “open.” What tool will allow you to share the content appropriately? What license will you use? UBC PROSE suggests asking the following questions:</p> <p><b>What am I trying to achieve with this OER?</b> This will impact your tool decision because of the different features these platforms offer. For example, if you are writing a textbook and you want to achieve a higher level of student engagement, you might be better off choosing Pressbooks (which offers H5P capabilities) over the UBC Wiki, which has no interactive opportunities for students.</p> <p><b>What are the Learning Objectives?</b> This is a great question to consider if you’re involving students in creating OER. For example, if you want to have students contribute to the project through posting their assignments or papers, or have them help create content for your project, then a Blog or WordPress site is much better suited than Pressbooks where, for example, you would have to request permission to have extra accounts made.</p> <p><b>How will I evaluate my project?</b> If you are interested in metrics, then using a platform like Pressbooks would be useful since it provides some metrics tracking. If you are looking to easily keep track of the number of student assignments completed, then it is useful to bundle student work into a journal with the Open Journal System© (OJS) which is an end-to-end scholarly publishing platform.</p> <p><b>What are the tools used by other faculty in my department?</b> While this shouldn’t be used as the sole criterion for which tool to use, it is useful to talk to other faculty members creating similar OER to see what they are using. There might be a specific reason why a specific tool is being used and using the same tools consistently can be helpful. For example, if you choose to create a set of</p>

	questions using WebWork®, students who have used it in the past won't have to re-learn a new platform or software.
Step 4	Develop new content or reuse/adapt content. For <b>new content</b> , follow the usual content development process but keep in mind type of license, platform for sharing, and digitalization tool. <b>If reusing content</b> , consider the model from David Porter's OER workshop ( <a href="#">Porter, n.d.</a> ).
Step 5	Share OER. Sharing OER is not easy, mainly because there is no standardized way to do so.

UBC's POSE share some considerations. One, **what** do I want my OER to do for me? It may be that the intent for sharing OER is simply the use by others. This is a fine reason to share a resource. However, sharing can also connect educators, to gain metrics around the content being used, or to promote the work so others may improve upon it. Knowing your intent can help direct where the content should be shared. Two, **who** do I want to have primary access to my OER? Identifying your key audiences is crucial for developing a plan for sharing your OER. Different spaces may cater to specific audiences, age ranges, and subject expertise. Some spaces may provide functionality that allows you to network with other educators creating similar content. You may also need to develop separate marketing plans or different messages depending on the audience. Three, it would also be beneficial to consider developing a sharing workflow to "better understand where you are sharing content and how to collect data about those open resources [which] can mitigate some of these difficulties and increase the success of OER in the sharing economy" (UBC POSE, 2023). For more information on developing workflows, check out the UBC POSE (2023) page on [sharing OER](#).

### Key Takeaways

Developing OER can be challenging when first navigating the process and learning to use Creative Commons Licences. However, by following the steps and answering the questions discussed previously, it can be a very rewarding process, both for the creator and the user. There are some key points to remember:

1. The use of OER are fundamental to the open education movement.
2. OER is cost effective for both students and faculty.
3. It is recommended that OER allow for the 5 Rs: reuse, remix, retain, revise, and redistribute.
4. It is important to ensure that accessibility and equity issues are addressed when developing OER.
5. When using existing OER, it is important to evaluate them.
6. Curriculum planning and teaching approaches, including open pedagogy, should be a part of the OER development process.
7. When sharing OER, it is important to improve discoverability by selecting the appropriate OER repository.

**Note1:**

<https://ecampusontario.pressbooks.pub/openingupeducationaninteractivediscussion/chapter/open-education-resources/>

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**Conflict of Interest**

The author declares no conflict of interest.



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