Unit 5: Creative Commons for Educators

Creative Commons powers the open education movement with tools that help create better, more flexible and sustainable open educational resources (OER), practices, and policies.

Creative Commons licenses are the most popular open licenses among education projects around the world. This unit will introduce you to the specifics of using CC licenses and CC licensed content for education purposes.

This unit has five sections:

6.1 OER, Open Textbooks, Open Courses
6.2 Finding, Evaluating, and Adapting Resources
6.3 Creating and Sharing OER
6.4 Open Pedagogy / Practices
6.5 Opening Up Your Institution

There are also additional resources if you are interested in learning more about any of the topics covered in this unit.

Sidebar: Before you jump in, consider joining the Creative Commons Open Education Platform. Your input can help us identify, plan, and coordinate multi-national open education content, practices, and policy projects to collaboratively solve education challenges around the world. Be sure to briefly tell us (a) why you'd like to join and (b) who you are - this helps CC avoid accepting spammers.

6.1 OER, Open Textbooks, Open Courses

Open education is an idea, as well as a set of content, practices, policy, and community which, properly leveraged, can help everyone in the world access free, effective, open learning materials for the marginal cost of zero. For the first time in history, educators around the world can create, open, and share high quality, effective learning materials with everyone who wants to learn. The key to this transformational shift in learning is Open Educational Resources (OER). OER are education materials that are shared at no cost with legal permissions for the public to freely use, share, and build upon the content.

OER are possible because:

- education resources are (mostly) born digital[1] and digital resources can be stored, copied, and distributed for near zero cost;
- the internet makes it simple for the public to share digital content; and
- Creative Commons licenses make it simple and legal to retain copyright and legally share educational resources with the world.

Because we can share effective education materials with the world for near zero cost[2], many people argue that educators and governments who support public education have a moral and ethical obligation to do so. This argument roots in the premise that education is fundamentally about sharing knowledge and ideas. Creative Commons believes OER will replace much of the expensive, proprietary content used in academic courses. Shifting to this model will generate more equitable economic opportunities and social benefits globally without sacrificing quality of education content.

Big Question / Why It Matters

Does it seem reasonable that education in the age of the internet should be more expensive and less flexible than it was in previous generations? As people and knowledge are increasingly networked and available online, what will it mean for learning, work, and society?

As economies become increasingly global and networked, the skills and knowledge required to successfully acquire and keep good jobs require a higher education. All national governments invest in and have strategic goals for how their public education systems can support individuals, families, and the broader society.

[1] Most OER are “born” digital, though OER can be made available to learners in both digital and printed formats. Of course, digital OER are easier to share, modify, and redistribute, but being digital is not what makes something an OER or not.

[2] While in many countries (like in many EU member states), cost may not be a problem, restrictive copyright and narrow fair use / fair dealing rights can limit new teaching methods.

While many interesting and useful experiments are occurring outside formal education, the degrees, certificates, and other credentials awarded by formal institutions are still critically important to the quality of life of many people around the world.

Open Educational Resources: The Education Ecosystem Comes to Life by *opensourceway* *CC BY-SA 2.0*

As noted, formal education, even in the age of the internet, can be more expensive and less flexible than ever. In many countries, publishers of education materials overcharge for textbooks and other resources. As part of their transition from print to digital, these same companies have largely moved away from a model where learners purchase and own books to a "streaming" model where they have access for a limited time.

Further, publishers are constantly developing restrictive technologies that limit what learners and faculty can do with the resources they have temporary access to, including inventing novel ways to prohibit printing, prevent cutting and pasting, and restrict the sharing of materials between friends.

Learning Outcomes

- Define "open" in the context of open educational resources (OER)
- Differentiate between OER, open textbooks, open courses, and MOOCs

Personal Reflection / Why it Matters To You

What impacts have the rising costs and decreased flexibility of education materials had on you and those you know? What role do you imagine all-rights-reserved copyright and related laws have played in driving up costs and driving down flexibility for learners and teachers?

Acquiring Essential Knowledge

OER and Open Textbooks

To begin, watch this video Why OER? (time 03:48)

Open Educational Resources (OER) are: teaching, learning and research materials in any medium that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others[3].

Or you could use this less technical definition to describe OER to someone:

> OER are education materials that can be freely downloaded, edited, and shared to better serve all students[4].

In contrast to traditional education materials, which are constantly becoming more expensive and less flexible, OER provide everyone, everywhere, free permission to download, edit, and share them with others. David Wiley provides another popular definition, stating that only education materials licensed in a manner that provide the public with permission to engage in the 5R activities can be considered OER.

The 5Rs include:

1. **Retain** - permission to make, own, and control copies of the content (e.g., download, duplicate, store, and manage)
2. **Reuse** - permission 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)
3. **Revise** - permission to adapt, adjust, modify, or alter the content itself (e.g., translate the content into another language)
4. **Remix** - permission to combine the original or revised content with other material to create something new (e.g., incorporate the content into a mashup)
5. **Redistribute** - permission to share copies of the original content, your revisions, or your remixes with others (e.g., give a copy of to a friend)

The easiest way to confirm that an education resource is an *open* education resource that provides you with the 5R permissions is to determine that the resource is either in the public domain or has been licensed under a Creative Commons license that permits the creation of derivative works - CC BY, CC BY-SA, CC BY-NC, or CC BY-NC-SA.

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[3] Creative Commons adaptation of the UNESCO OER definition: http://www.unesco.org/new/en/communication-and-information/access-to-knowledge/open-educational-resources

[4] Drafted by OER Communications: a coalition of North American open education advocates working on OER communication: oer-comms@googlegroups.com

OER comes in all shapes and sizes. A piece of OER can be as small as a single video or simulation, and can be as large as an entire degree program. It can be difficult, or at least time consuming for teachers to assemble OER into a collection comprehensive enough to replace an all rights reserved copyright textbook. For this reason, OER are often collected and presented in ways that resemble a traditional textbook in order to make them easier for instructors to understand and adopt.

The term "open textbook" simply means a collection of OER that have been organized to look like a traditional textbook in order to ease the adoption process. To see examples of open textbooks in a number of disciplines, visit OpenStax,the Open Textbook Library or the BC Open Textbook Project.

Other times, OER are aggregated and presented as digital courseware. To see examples of open courseware, visit the Open Education Consortium and MIT OCW.

In addition to demonstrating that learners save money when their teachers adopt OER, research shows that learners can have better outcomes when their teachers choose OER instead of education materials available under all rights reserved copyright.

The idea of OER is strongly advocated by a broad range of individuals, organizations, and governments, as evidenced by documents like the Cape Town Open Education Declaration (2007) and Cape Town +10 (2017), the UNESCO Paris OER Declaration (2012), UNESCO Ljubljana OER Action Plan (2017), and the UNESCO OER Recommendation (in draft, as of December, 2018).

OER vs. Free Library Resources

Teachers and professors typically use a mix of all-rights-reserved commercial content, free library resources, and OER in their courses. While the library resources are “free” to the learners and faculty at that institution, they are (a) not “free” as the institution library has to pay to purchase or subscribe to them, and (b) not available to the general public. This chart describes the cost to learners and the legal permissions available to teachers and learners for each of these types of educational resources.

	Cost to Students	Permissions to Teachers and Students
Commercial Textbooks	Expensive	Restrictive
Library Resources	Free	Restrictive
Open Educational Resources	Free	5Rs

David Wiley. Slide. CC BY 4.0

OER in Primary / Secondary (K-12) vs. Tertiary (Higher Education)

OER is used in all sectors of education. How OER is produced and adopted, however, is often different depending on the level of education in which you work.

In general, tertiary (higher education) faculty are **more** likely to:

- have time, resources and support to produce and revise educational resources,
- own the copyright to content they create (though it depends on their contract with the college / university), and
- make unilateral decisions (see academic freedom) regarding what content is used in their courses.

As such, tertiary (higher education) faculty are often OER producers and can decide whether or not to adopt OER in their courses. OER adoption in tertiary (higher education) tends to occur one faculty member at a time. Given this opportunity, it is critical faculty be given time, resources and support for the creation and adoption of open education content and a shift to

open education practices / pedagogy. Example: British Columbia Faculty wrote an Open Textbook

In general, primary / secondary (K-12) teachers are **less** likely to:

- have time, resources and support to produce and revise educational resources,
- own the copyright to content they create (though it depends on their contract with the school / district), and
- make unilateral decisions regarding what content is used in their curriculum.

As such, OER adoption in primary and secondary (K-12) schools tends to occur at the district or school, rather than the individual teacher level. Example: Open policies in New Zealand schools

Open Educational Resources (a very brief timeline)

While there isn't enough space in this Certificate give a comprehensive overview of the "History of Open Education," here are several of the pivotal events that contributed to the growth of the open education movement. *(If you know of additional critical events to include, please tell us and we will update the timeline. Thanks!)*

- 1969 - UK Open University opens
- 1983 - Free software movement founded with launch of GNU
- 1989 - World Wide Web
- 1997 - MERLOT
- 1998 - U.S. Copyright Term Extension Act
- 1998 - "Open content" term is coined and Open Content License released
- 1999 - Open Publication License released
- 1999 - Connexions launches (renamed OpenStax in 2012)
- 2001 - Wikipedia
- 2001 - Creative Commons founded
- 2001 - MIT Courseware
- 2002 - Budapest Open Access Initiative
- 2002 - Creative Commons licenses launched
- 2002 - UNESCO coined the name Open Educational Resources
- 2004 - First annual Open Education Conference

- 2005 - OpenCourseWare Consortium formed (renamed the Open Education Consortium in 2014)
- 2006 - WikiEducator
- 2007 - Cape Town OER Declaration
- 2007 - OER Commons
- 2007 - Wiley and Couros experiment with "open courses"
- 2008 - Opening Up Education published
- 2008 - Connectivism and Connected Knowledge
    - > 2000 learners participated, leading to the term "massive open online course" or MOOC. Watch this video describing MOOCs:"What is a MOOC?" video (4:26) by Dave Cormier, CC BY 3.0
- 2012 - OpenStax releases first open textbook
- 2012 - UNESCO OER Paris Declaration
- 2013 - OERu launched
- 2017 - UNESCO 2nd World OER Congress
- 2018 - UNESCO drafting an OER Recommendation

Final remarks

OER, whether organized as open textbooks or opencourseware, provide teachers, learners, and others with a broad range of permissions that make education more affordable and more flexible. These permissions also enable rapid, low-cost experimentation and innovation, as educators seek to maximize access to effective educational resources for all.

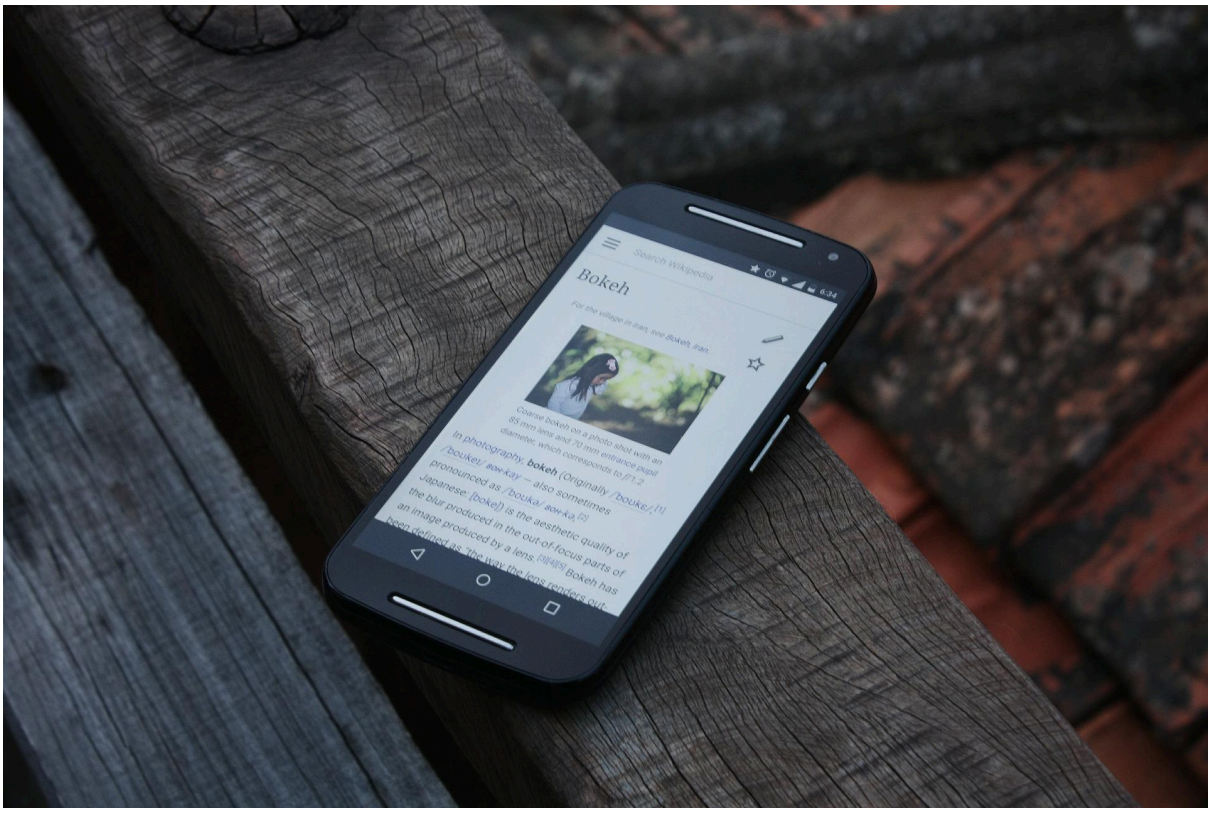
6.2 Finding, Evaluating, and Adapting Resources

We live in a visual and vibrant culture that requires educators to provide relevant learning resources in the classroom, though finding and reusing others' great works is not always simple. This unit will teach you how to find others' OER and adapt them for use in your own classrooms.

Big Question / Why It Matters

What skills and knowledge are needed to find the OER you and your learners need? If you are going to join the global open education community, find the best open resources for your course, and share your good work as OER, you need to know - and know how to teach others - how to find, evaluate, and adapt openly licensed resources. What if we want to think bigger… what effect might open education have globally?

How is the openness, the opportunity to revise, remix and share, of content potentially impactful on a global scale? If the public had access to and could creatively remix the world's knowledge, what new opportunities might we find to address global challenges (e.g. United Nations Sustainable Development Goals)?



Cell phone by Tiago Aguiar. Public domain: CC0

Learning Outcomes

- Find OER in open repositories, Google, CC Search, and other platforms
- Evaluate how to reuse / revise / remix the OER you find
- Demonstrate how different OER can be used together, paying attention to license compatibility.

Personal Reflection / Why it Matters To You

Where do you currently find your learning resources? Do you seek open alternatives for materials you currently use? How do you evaluate your existing learning resources, and how can you apply those measures to openly licensed content?

Once you identify the learning resources you currently use, ask yourself the following questions:

- Is this resource available to all of my learners at no cost?
- Can my learners and I keep a copy of this resource forever?
- Does my class have the legal rights to fix errors, update old or inaccurate content, improve the work, and share it with other educators around the world?
- Can my learners contribute to and improve our learning resources as part of their course work?

If the answer to these questions is “No” - you’re likely using learning resources that don’t provide the legal permissions you and your learners need to do what you want to do. Conversely, if you answered “Yes” to all of the questions - you are likely using OER.

Acquiring Essential Knowledge

Finding resources

Not everything on the internet is OER, and some works labeled as “open” may not have the legal permissions to exercise the 5Rs. So how do you recognize OER and how do you choose which OER will work best in your class? Remember: for a resource to be an OER - it has to (a) be available to everyone at no cost and (b) be in the public domain or under an open license that gives everyone 5 Rs legal permissions to modify the resource.

Finding the resources you want to use is the first step to bringing OER into your classroom. Discovery is one of the primary barriers to educators using OER. Fortunately, there are many established ways to search for OER.

First, for a short introduction on how to find OER, watch this video “How can I find OER?” (1:31).

Do a quick review of OER projects and people on the OER World Map to get a sense of global OER activities.

There are many websites that host large collections of OER (e.g., Wikimedia Commons), but some universities host their own OER repositories and services. A good first step is to do a general OER search using Google Advanced Search and filter your results by “Usage Rights” (pull-down menu at the bottom of the screen). See Google’s post on how to use the tool effectively.

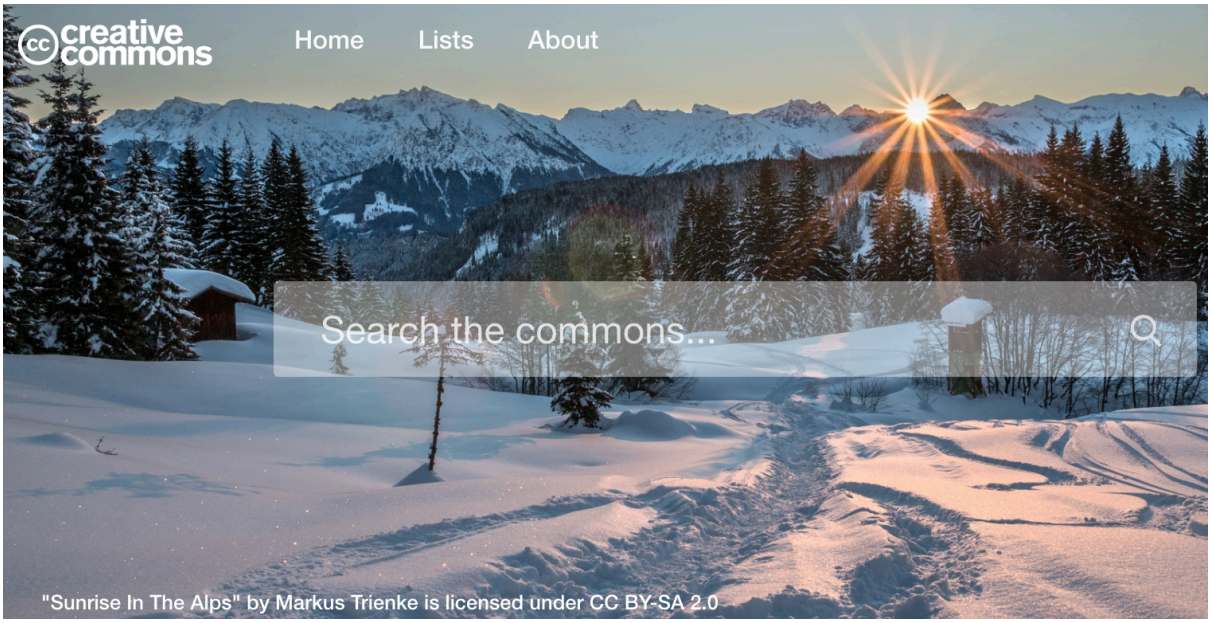
In addition to sharing your OER on your website or blog, there are hundreds of online platforms on which you can share your openly licensed content. Creative Commons maintains a directory of some of the most popular OER platforms used by educators organized by content type (photos, video, audio, textbooks, courses, etc).

Open educators often ask each other for help when looking for OER on open edu listservs. Here are a few you might want to join:

- **CC Open Education Platform (invitation)**
    - please tell us who you are and why you would like to join.
- OER Forum
- International OER Advocacy
- OER Discuss
- Open Knowledge Open Edu
- Open Edu SIG
- Wikimedia Education
- US OER Advocacy
- SPARC: Library OER
- Educause Openness

If you want to know more about most popular general options for searching for OER, read this Open Washington course module.

COMING SOON! Creative Commons is redesigning its CC Search.[5] You can play with the beta (images only) at: https://ccsearch.creativecommons.org When the new CC Search is done, it will search the entire Commons - all of the public domain and CC licensed works on the Internet… including OER.



[5] CC's existing Search tool: https://search.creativecommons.org

Evaluating resources

As with all education resources, OER need to be evaluated before use. Educators who are new to OER may have concerns about quality because OER are available for free and may have been remixed by other educators. The process of using and evaluating OER is not that different from evaluating traditional all-rights-reserved copyright resources. Whether education materials are openly licensed or closed, you are the best judge of quality because you know what your learners need and what your curriculum demands.

Subject specialists (educators and librarians) assess the quality and suitability of learning resources, often along the following criteria:

- Accuracy
- Reputation of author/institution
- Standard of technical production
- Accessibility
- Fitness for purpose

And be careful not to let anyone tell you OER are “low quality” because they are free. As the SPARC OER Mythbusting Guide points out:

- In this increasingly digital and internet connected world, the old adage of “you get what you pay for” is growing outdated. New models are developing across all aspects of society that dramatically reduce or eliminate costs to users, and this kind of innovation has spread to education resources.

- OER publishers have worked to ensure the quality of their resources. Many open textbooks are created within rigorous editorial and peer-review guidelines, and many OER repositories allow faculty to review (and see others’ reviews of) the material. There is also a growing body of evidence that demonstrates that OER can be both free of cost and high quality—and more importantly, support positive student learning outcomes.

Also, be careful not to get pulled into a debate about “high or low quality education resources,” when what educators should really be concerned about is “effectiveness.” Read these two posts from David Wiley: Stop Saying “High Quality” and No, Really – Stop Saying “High Quality.”

Remixing & adapting resources

Openly licensing learning materials enables educators to use the materials more effectively, which can lead to better learning and student outcomes. OER can be remixed and adapted: updated, tailored and improved locally to fit the needs of learners - translating the OER into a local language, adapting a biology open textbook to align it with local science standards, or modifying an OER simulation to make it accessible for a student who cannot hear.

The ideas of remix and adaptation are fundamental to education. Creative reuse of materials created by other educators and authors is about more than just seeking inspiration; we copy, adapt, and combine different materials to craft education resources for our learners.

Photo by José Carlos Cortizo Pérez. CC BY 2.0

Incorporating materials created by others and combining materials from different sources can be tricky, not only from a pedagogical perspective, but also from a copyright perspective.

Online digital education resources have different legal permissions that empower (or not) the public to use, remix and share those resources. Here are a few of those legal categories:

- Public domain works (not restricted by copyright) can be remixed with any work.
    - example: Anyone can remix the Adventures of Huckleberry Finn by Mark Twain with Alice's Adventures in Wonderland by Lewis Carroll.

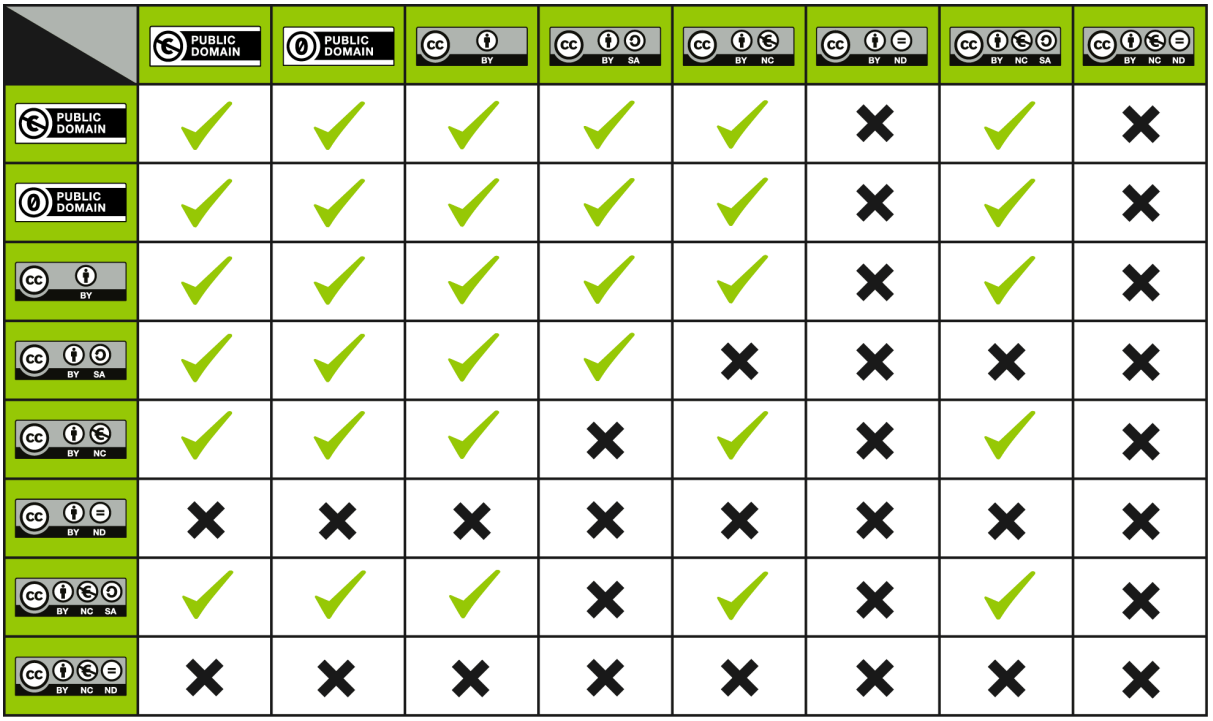
- All-rights-reserved copyrighted works, available for free online, which you can only use under the project terms of service, or using an exception or limitation to copyright, such as fair use or fair dealing.
    - example: many MOOCs allow free reuse of their content, but do not allow copying, revise, remix, or redistribution.

- All-rights-reserved copyrighted works in closed formats do not allow the public to remix or adapt a work.

    - example: a blockbuster movie available only in streaming service that you cannot use or even link to.

- Creative Commons licensed works (and other free licenses) that have various permissions and restrictions.
    - example: Wikipedia (BY-SA) allows you to reuse their content for commercial purposes, while WikiHow (BY-NC-SA) does not. A Wikipedia article cannot be remixed with a WikiHow article.

If you want to know which CC licensed works can be remixed with other CC licensed works, revisit the CC Remix Chart we studied in Section 4.4. Where there is a green check at the intersection of two CC licensed works, you can remix those two works. Where you see a black X, you cannot remix those two CC licensed works.



CC License Compatibility Chart / CC BY 4.0

Final remarks

We live in a world of information abundance, and an increasing percentage of our digital knowledge is openly licensed. Finding the right open resources that fit the needs of your learning spaces and your learners can be a challenge. One of the major motivations for using OER is the ability to revise, remix, and share these works to best suit the needs of your learners. Search engines, OER repositories and platform services with built-in tools for using Creative Commons licenses help, but finding the right OER still takes time.

6.3 Creating and Sharing OER

Much of this course focused on how to create openly licensed materials, by sharing the legal perspective and the practical steps needed. In this unit we will explore and practice how to create OER so they can have the biggest impact and be used without any legal or technical barriers.

shared by: hansol. CC BY 2.0

Big Question / Why It Matters

A big part of any educator's work is preparing, updating, and combining learning materials. Making those materials open requires just a few additional steps, and it's easier than you think. What are those steps? What should you consider and expect when you want to create and publish your resources in the open?

When we share our education resources as OER, we share our best practices, our expertise, our challenges and solutions. Education is about sharing. When we share our work with more people - we become better educators.

Learning Outcomes

- Imagine how your OER will work in practice.
- Understand how to select a CC license(s) for your resources.
- Examine your open license decision for compatibility (i.e., can it be remixed) with other OER.
- Identify needs and challenges to improving OER accessibility for everyone.

Personal Reflection / Why it Matters To You

What kind of learning resources do you create now? Do you publish or share these resources with other people for feedback? Which of your resources do you think could benefit fellow educators, learners, libraries or scientists? If you choose to share, how much freedom do you want to give to others; what permissions will you allow for others to reuse your work?

Acquiring Essential Knowledge

Why share?

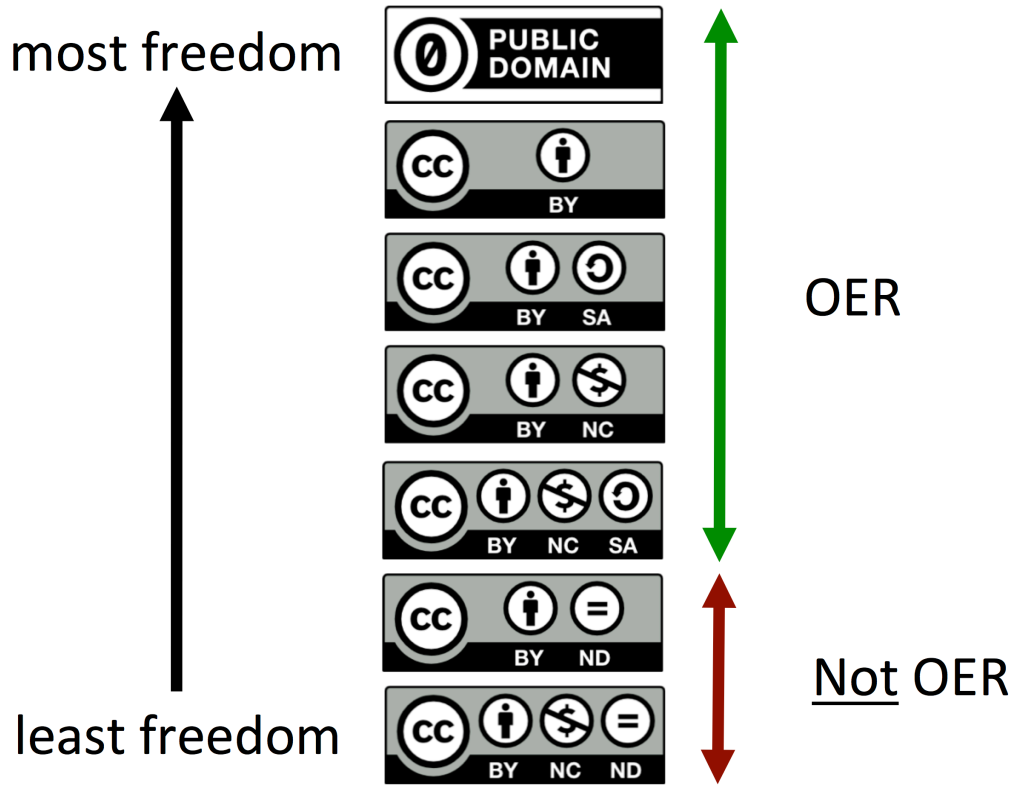
For an introduction on why it is important to share your work as OER, watch this video: Open Education Matters: Why is it important to share content? (time 03:51)

Because educators and librarians can share OER with everyone for near zero cost[6], we should. After all, education is fundamentally about sharing knowledge and ideas. Libraries are about archiving, sharing and helping learners find the knowledge they seek. When we CC license our work, we are sharing that work with the public under simple, legal permissions. Sharing your work is a gift to the world.

Choosing a CC license for OER

Creative Commons has a suite of six open copyright licenses - and fully support authors' selection and use of any of the CC licenses or public domain tools. However, not all education materials available under a CC license are OER. Review this chart that details which CC licenses work well for education resources and which do not.

[6] While in many other countries (like in many EU member states), cost may not be a problem, restrictive copyright and narrow fair use / fair dealing rights can limit new teaching methods.



The two CC NoDerivatives (ND) licenses are not OER-compatible licenses because they do not allow the public to revise or remix the education resource. Because the ND licenses do not meet the 5Rs or any of the major OER definitions, the open education movement does not consider ND-licensed education resources "OER."

Choosing the right license for your OER requires you to think about which permissions you want to give to other users - and which permissions you want to retain for yourself. Read the "Open Textbook Community Advocates CC BY License for Open Textbooks" and think about why they recommend the Creative Commons Attribution License (CC BY) for education. You can find similar text with more arguments made about this same license for publishing scientific research in "Why CC BY?" from Open Access Scholarly Publishers Association.

For basic information about the licenses, how to choose and apply one to your work or combined works from other people and sources, revisit Section 4.1

CC license legal cases in open education

For a detailed analysis of Creative Commons case law, see Section 3.4 "License Enforceability." Creative Commons maintains a listing of court decisions and case law from jurisdictions around the world on its wiki.

In 2017-2018 there were two legal cases concerning OER: Great Minds vs. FedEx Office and Great Minds vs. Office Depot. Both cases involved OER used by schools for non commercial purposes. Different school districts asked FedEx and/or Office Depot to print the

OER materials for use in their classrooms. The OER in question were created by Great Minds using public funds and licensed by Great Minds under CC BY-NC-SA 4.0. Great Minds claimed that the school districts were not allowed to engage FedEx to reproduce the materials, and that because FedEx made profit while producing the requested copies, they were violating the license. Importantly, Great Minds never alleged that the school districts' use of the reproduced materials violated the non commercial restriction of the license. The central question in the case was whether a licensee – a school district – that is properly using the work for non commercial purposes may outsource the reproduction of the works to another who makes a profit doing so.

At the time of publication, in the FedEx case the U.S. Court of Appeals for the 2nd Circuit ruled that a commercial copyshop may reproduce educational materials at the request of a school district that is using them under a CC BY-NC-SA license. The Office Depot case is still pending appeal.

Other considerations

Other than choosing the right CC license, what other aspects of openness and pedagogy are worth considering? Here is a list of best practices to include in your work when building OER.

The Open Washington Module 8 on "Sharing OER" will give you practical advice on how to share OER online and prepare them to be used offline as well.

Encyclopedia and e-book reader on green grass by papirontul. Public domain: CC0

Ensuring OER is Accessible to Everyone

At its core, OER is about making sure everyone has access. Not just rich people, not just people who can see or hear, not just people who can read English, not just people who have digital devices with access to high speed internet - everyone.

As authors and institutions build and share OER, best practices in accessibility need to be part of the instructional and technical design from the start. Educators have legal and ethical responsibilities to ensure our learning resources are fully accessible to all learners, including those with disabilities.

Watch "Simply Said: Understanding Accessibility in Digital Learning Materials" by the National Center on Accessible Educational Materials (6:42)

Best practices to ensure your OER is accessible to all include:

- putting your work into the public domain (CC0) or adding a non-ND CC license to your work,
- make it simple to download your work in editable file formats, so others can modify and/or translate it to meet local needs and make it accessible, and
- most important - design your work to be accessible from the start.

Final remarks

Openness in education means more than just access or legal certainty over what you are able to use, modify, and share with your learners. Open education means designing content and practices that ensure everyone can actively participate and contribute to the sum of all human knowledge. As educators and learners revise others' OER and create and share new OER, accessibility should always be on your design checklist.

6.4 Open Pedagogy / Practices

Openness in education brings potential for co-creation and learning through active participation in how knowledge is produced.

Learning Outcomes

- Explain how copyright restricts pedagogy
- Learn the differences between open pedagogy, open practices and OER enabled pedagogy, and describe how open licensing enables each

- List examples of open pedagogy in practice

Big Question / Why It Matters

Do you remember when smartphones were first released? They were full of infinite possibilities compared to earlier phones. Before smartphones, we could only call and text. After smartphones, we can now take videos and pictures, play movies and music, surf the web and read email, and call and text. It was difficult for long-time users of older phones to take advantage of all the capabilities offered by new phones. They were too accustomed to the limitations of older phones. For months - sometimes years - they only used their smartphones only to call and text (maybe you know someone like this!)

Many educators have the same problem with OER. They've spent so long using education materials published under restrictive licenses that they struggle to take advantage of the new pedagogical capabilities offered by OER. Open pedagogy / open practices / OER enabled pedagogy are all about the teaching and learning practice and tools that empower learners and teachers to create and share knowledge openly and learn deeply.

Three Definitions

The open education movement is still discussing and debating what it means to think about teaching and learning practices in a more inclusive, diverse and open manner. At least three major definitions have emerged from this discussion.

- **Open Education Practices** (from Cronin's 2018 Open Edu Global presentation):
    - Use / reuse / creation of OER and collaborative, pedagogical practices employing social and participatory technologies for interaction, peer-learning, knowledge creation and sharing, and empowerment of learners.

- **Open Pedagogy** (from DeRosa & Jhangiani's chapter in the 2017 Guide to Making Open Textbooks with Students):
    - An access-oriented commitment to learner-driven education and a process of designing architectures and using tools for learning that enable learners to shape the public knowledge commons of which they are a part.
    - More at: http://openpedagogy.org/open-pedagogy

- **OER-enabled Pedagogy**: (from Wiley, 2017 blog post)
    - A set of teaching and learning practices only possible or practical when you have permission to engage in the 5R activities.

Personal Reflection / Why It Matters to You

When you've used OER in the past, have you taken advantage of the permissions offered by their open licenses, or did you use OER just like you used your previous, traditionally

copyrighted materials? In other words, did you do anything with the OER that was impossible to do with traditionally copyrighted materials? Why or why not?

Acquiring Essential Knowledge

It's well established that people learn through activity. It's equally well established that copyright restricts people from engaging in a range of activities. When juxtaposed like this, it becomes clear that copyright restricts pedagogy by contracting the universe of things learners and teachers can do with education materials. If there are things learners aren't allowed to do, there are ways learners aren't allowed to learn. If there are things teachers aren't allowed to do, there are ways teachers aren't allowed to teach.

You can learn about how this restriction on what teachers and learners can do impacts teaching and learning by reading this metaphor / blog post about driving airplanes on roads.

Fly away in a Robinson r22 beta by Archangel12 / CC BY 2.0

OER enabled pedagogy is the set of teaching and learning practices that are only possible or practical in the context of the 5R permissions that come with OER. "OER enabled pedagogy" describes all the new ways that Creative Commons licenses allow learners to learn and all the new ways they allow teachers to teach.

Disposable and Renewable Assignments

Do you remember doing homework for school that felt utterly pointless? A "disposable assignment" is an assignment that supports an individual student's learning but adds no other value to the world – the student spends hours working on it, the teacher spends time grading it, and the student gets it back and then throws it away. While disposable assignments may promote learning by an individual student, these assignments can be

demoralizing for people who want to feel like their work matters beyond the immediate moment.

OER enabled pedagogy can be used to create “renewable assignments” - assignments that both support individual student learning and add value to the broader world. With renewable assignments, learners are asked to create and openly license valuable artifacts that, in addition to supporting their own learning, will be useful to other learners both inside and outside the classroom. For example, classic renewable assignments include collaborating with learners to write new case studies for textbooks, create “explainer” videos, and modify learning materials to speak more directly to learners’ local cultures and needs.

Explore examples of OER enabled pedagogy in action, including David Wiley and Robin DeRosa’s examples of learners adapting existing materials to create new textbooks. In both of these cases, teachers had learners create their own textbooks, which then had Creative Commons licenses applied to them. Other examples of OER enabled pedagogy in action include Murray and Azzam’s assignments that had learners significantly improve articles on Wikipedia. When they completed these assignments, learners created open artifacts useful to both in supporting their own learning and the learning of other learners and educators. These examples of OER enabled pedagogy have learners creating assignments that allow them to interact with the greater community and ensure that the assignments are renewable, not disposable artifacts.

A couple of other interesting examples of renewable assignments are a remixed explainer video that a student made about Blogs and Wikis, and the DS106 assignment bank, which is a hub for student created, CC licensed content. Additional examples of open pedagogy are available on the Open Pedagogy website: http://openpedagogy.org/examples

Final remarks

If you’re just going to use your new smartphone the same way you used your old flip phone, there wasn’t much point in getting a new phone! Likewise, when we use OER to support learning in exactly the same ways we used old all rights reserved materials, we may save learners money but miss out on the transformative power of open. As you prepare to use OER in your teaching, think about new things that are possible in the context of permission to engage in the 5R activities.

6.5 Opening Up Your Institution

How education institutions can support open education content, practices, and community with policy.

Photo by Stories of change, CC BY 2.0

Big Question / Why It Matters

Education institutions around the world are trying to figure out how to support their educators, staff, and learners in using, revising, and sharing OER, with new open education practices, and the communities that sustain them. How can education leaders use various policy tools to support and promote open education?

Learning Outcomes

- Consider if and why you need a policy to accomplish your open education goals
- Understand the menu of open education policy options
- Assess your existing institutional policies

- Understand how to develop an institutional open policy

Personal Reflection / Why it Matters To You

What if there were institutional policies that supported your open education work? What if money and time were available to educators who wanted to redesign their courses to make them open? What if promotion and tenure guidelines rewarded sharing your educational resources and/or research? What effect might pro-open education policies have on you and your learners?

Acquiring Essential Knowledge

Education institutions have a broad menu of open education policy options from which to choose.

- Raise awareness of the existence of OER and the benefits for your learners and faculty.
    - Action: Host an annual “open education” day at your school or university.

- Empower stakeholders to drive your institution’s open education strategy.
    - Action: Create an Open Education Task Force comprised of learners, faculty, accessibility experts, deans, bookstore, financial aid, library, instructional designers, eLearning, etc.

- Ensure all of the content you fund is OER.
    - Action: Draft, adopt, and implement an open licensing policy requiring university / school funded resources to be openly licensed. Use the OER Policy Development Tool to build an open policy for your institution. You can find examples of open policies others have created at the OER Policy Registry (global) and North American OER policies and projects

- Issue a call-to-action to solve an education challenge.
    - Action: Create an OER Grant Program. Appropriate funds for supporting faculty and staff to shift your 50 highest enrolled courses from closed content to OER.
        - Example: The Maricopa County Community College started an open textbook initiative to lower costs of teaching materials. They provided grants to create open courses and train faculty on OER. Learn more about their process here.

- Leverage existing strategic documents to support open education.
    - Action: Add open education goals to key institutional strategy documents.

    - Action: Identify and track key performance indicators that improve when courses / degrees adopt OER.
        - Example: Increasing student outcomes, increasing the percentage of learners who can access 100% of the learning resources on day 1, reducing dropouts during add/drop periods, increasing credits taken per semester, decreasing student debt,, decreasing time to degree.

- Make it easy to share OER.
    - Action: Join a global OER repository and make it simple for your educators and learners to find others' OER and share their OER. Provide professional development.

- Ensure educators have the legal rights to share.
    - Action: Change the contract between the institution and the faculty / teachers so the educator has the legal rights to CC license their work.
        - Example: A Creative Commons policy in New Zealand gives teachers advance permission to disseminate their resources online for sharing and reuse. The policy also ensures that both the school and the teacher — as well as teachers from around the country and around the world — can continue to use and adapt resources produced by New Zealand teachers in the course of their employment. Creative Commons NZ have developed an annotated policy template for schools to adapt.

- Provide OER information to learners.
    - Action: Require OER Course designations in course catalogs so learners can see whether (or not) a course uses OER or an open textbook. Example: CUNY labels OER in their catalog (video).

- Reward sharing.
    - Action: Adjust promotion and tenure policies to reward the creation / adoption / maintenance of OER and publishing in Open Access journals. The creation and adaptation of OER should be appropriately recognized as curricular innovation and service to the academic profession during promotion and tenure review.

Enforcing Open Education Policies

The point of most open education policies is to ensure the publicly (or foundation) funded educational resources are available to the public with 5Rs permissions. When it comes to enforcing open education policies, many people play important roles.

The funder and its program officers need to understand the open policy, communicate the importance of it to grantees verbally and in writing, and follow-up by checking to ensure the public has full access to the openly licensed content under the terms of the policy.

The university / college administration should provide support (e.g., hire a full-time OER / OA librarian) to faculty creating, remixing, sharing and adopting OER, and/or redesigning their courses toward open pedagogy / practices. Institutions can also review and modify (as needed) promotion and tenure policies to ensure faculty engaged in open education work are rewarded (not punished) during promotion and tenure review.

Final remarks

When education institutions support their educators, staff, and learners in moving from closed to open content and practices, open education thrives. Educators want to design the best courses, adjust their practices and pedagogy to empower learners to co-create knowledge, and push the limits of knowledge by openly sharing their ideas and resources with a global audience. But educators can’t do it alone. They need political, financial, time, staff, and policy support to shift to, and fully realize, the benefits of open education.

Additional Resources

More information about remixing and adapting resources

Distinguishing Between OER and All that Other Stuff on the Internet and *Works Within Works, and Collections* by Maricopa Community College Faculty OER course. CC BY-SA 4.0

Course materials if you have any concerns about the copyright status of works you want to remix. These two modules from the Maricopa Community College Faculty OER course will help you understand differences between free, open access, and OER, as well as citations and collections.

https://maricopa.instructure.com/courses/805732/pages/distinguishing-between-oer-and-all-that-other-stuff-on-the-internet?module_item_id=5096076
https://maricopa.instructure.com/courses/805732/pages/works-within-works-and-collections?module_item_id=5220365

BC Open Education Technology Collaborative by BCCampus. CC BY 4.0

If you are looking for inspiration on how to bring remixing and adapting resources to your classroom as an instructor, this group is a resource for you and the goals and group chat can be informative

https://edtech.bccampus.ca/bc-open-educational-technology-collaborative/

Tricky Copyright Scenarios: OER Style by Maricopa Community College Faculty OER course. CC BY-SA 4.0

If you want to test yourself, this quiz about tricky copyright scenarios that apply to OER will help you understand better how to remix and adapt educational materials safely

https://maricopa.instructure.com/courses/805732/quizzes/821784?module_item_id=5179463

More information about creating and sharing OER

CK12 OER. CC BY-NC 3.0

To create an open textbook with existing OER for K-12 education visit this site, login as a teacher and click create new https://www.ck12.org/

OER Faculty Workshop by Maricopa Community College Faculty OER course. CC BY-SA 4.0

For a deeper dive into the process of choosing the appropriate licenses for educational resources, visit this OER course in full

https://maricopa.instructure.com/courses/805732

Creating Open Educational Resources by the University of British Columbia. CC BY-SA 4.0

A video and information on considerations to make when licensing and sharing OER at higher education institutions

https://open.ubc.ca/find/creating-open-educational-resources/

More information about accessibility

Module 9: Accessibility by Open Washington: Open Educational Resources Network. CC BY 4.0

This module will help you design resources in a way that they will be accessible to all learners.

http://www.openwa.org/module-9/

Web Content Accessibility Guidelines (WCAG) 2.0 by the World Wide Web Consortium

The WCAG 2.0 is a stable, referenceable technical standard that helps developers of any kind of online content (from websites to text and PDF files), create or check their materials for accessibility. Many grant givers or governments (like the European Union) even require institutions to follow those guidelines when publishing public sector information or education resources.

https://www.w3.org/TR/WCAG20/https://www.w3.org/TR/WCAG20/

Accessibility and Open Educational Resources by CAST Universal Design for Learning in Higher Education. CC BY-SA 4.0

The CAST project (Center for Applied Special Technology that promotes universal design for learning) has a helpful overview and checklist for things to consider when designing educational resources, especially for postsecondary education.

http://udloncampus.cast.org/page/media_oer#.Wj2aNhOPJmB

More information about open policies

CC Pukeko by Creative Commons New Zealand. CC BY 4.0

Take a look at this video about schools in New Zealand implementing Creative Commons licenses (time 3:48)

https://vimeo.com/147551334

CC in Schools by Creative Commons New Zealand. CC BY 4.0

More information on implementation of Creative Commons licenses used in schools at the institutional level.

https://creativecommons.org.nz/ccinschools/

Institutional Guide by BCCampus. CC BY 4.0

A guide for institutional adoption with resources for those at all levels of the institution and resources to accompany adoption initiatives.

https://open.bccampus.ca/institutional-guide/

OER Policy Development Tool by Amanda Coolidge and Daniel DeMarte, Institute for Open Leadership Fellows. CC BY 4.0

An interactive tool for institutional policy development.

http://policy.lumenlearning.com/

Participant Recommended Resources

CC Certificate participants' recommended many additional resources through Hypothes.is annotations on the Certificate website. While Creative Commons has not vetted these resources, we wanted to highlight participant's contributions here: https://certificates.creativecommons.org/cccerteducomments/chapter/additional-resources-6/