Mastering Open Ed: Licensing, Accessibility, Creation, and Publishing OER

MASTERING OPEN ED: LICENSING, ACCESSIBILITY, CREATION, AND PUBLISHING OER

ECAMPUSONTARIO

MÉLANIE BRUNET; TRICIA BONNER; JOANNE KEHOE; AND SHAUNA ROCH

eCampusOntario Toronto, Ontario, Canada



Mastering Open Ed: Licensing, Accessibility, Creation, and Publishing OER Copyright © 2023 by eCampusOntario is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License, except where otherwise noted.

CONTENTS

Acknowledgements	ix
Introduction	1

Part I. Open Education and OER

Introduction	5
OER - The What and Why	7
Finding Open Educational Resources	12
Free vs Open	18
Student Engagement	20
Conclusion	25

Part II. Open Licensing

31
32
34
41
45

Part III. Accessibility

Introduction	49
The AODA	50

WCAG Standards	52
Creating and Using Accessible OER	58
Conclusion	65

Part IV. H5P

Introduction	69
Explore H5P	71
When to use H5P	73
Getting started with H5P Studio	77
Embedding H5P Content into Learning Management Systems	85
Conclusion	89

Part V. Pressbooks

Introduction	93
Getting Started	95
Pressbook Building Blocks	102
Adding Multimedia	108
Adding Contributors	114
Conclusion	116

Part VI. Building Open Education Initiatives

Introduction	121
Benefits of Sharing	122
Types of Open Institutional Initiatives	125
Strategies & Steps for Growing OER Initiatives	129

Strategies & Steps for Growing OER Initiatives (continued)	136
Conclusion	145

Acknowledgements

In the summer of 2023, eCampusOntario's Open Library team joined forces with subject matter experts from Ontario's colleges and universities, including both English and French speakers. Together, they developed comprehensive, bilingual-by-design training materials on open educational resources (OER). This project was possible due to funding by the Government of Ontario.

The dedicated team, listed in the table below, aimed to provide educators with materials that would not only enhance their understanding and use of OER, but also empower them to contribute actively by creating and adapting these resources. To enrich the educational experience, interactive activities utilizing H5P and Padlet were incorporated.

We would like to extend our gratitude to Artha Learning for their exceptional contribution as instructional and graphic designers, and to Jolene Hurtubise, for her contribution on accessibility. Additionally, a heartfelt thanks to the Open Library and the eCampusOntario teams for their unwavering support.

The Team

Tricia Bonner	Loyalist College
Mélanie Brunet	University of Ottawa
Joanne Kehoe	McMaster University
Shauna Roch	Fanshawe College
Leo Heck	eCampusOntario

Share

If you adopt this book, as a core or supplemental resource, please report your adoption in order for us to celebrate your support of students' savings. Report your commitment using our Share an Adoption page.

We invite you to adapt this book further to meet your and your students' needs. Please let us know if you do! If you would like to use Pressbooks, the platform used to make this book, access the eCampusOntario Pressbooks account.

If this text does not meet your needs, please check out our full library. If you still cannot find what you

X | ACKNOWLEDGEMENTS

are looking for, connect with colleagues and eCampusOntario to explore creating your own open educational resource (OER).

You can also send questions or information about the book to us at the following email address: open@ecampusontario.ca.

Accessibility Statement

eCampusOntario believes that education should be readily available to everyone, which means supporting the creation of accessible, open, and free educational resources. Wherever possible, the Mastering Open Ed: Licensing, Accessibility, Creation, and Publishing OER adheres to levels A and AA of the Web Content Accessibility Guidelines (WCAG 2.0, 2.1) of perceivable, operable, understandable, robust, and conformance (https://www.w3.org/TR/WCAG21/).

If you are having problems accessing this resource, please contact us at open@ecampusontario.ca. Please include the following information:

- The location of the problem by providing a web address or page description
- A description of the problem
- The computer, software, browser, and any assistive technology you are using that can help us diagnose and solve your issue (e.g., Windows 10, Google Chrome (Version 119.0.6045.105), NVDA screen reader)

Pressbooks was chosen for its commitment to built-in accessibility, outlined at https://pressbooks.com/ accessibility/.

About eCampusOntario

eCampusOntario is a provincially-funded non-profit organization that leads a consortium of the province's publicly-funded colleges, universities and indigenous institutes to develop and test online learning tools to advance the use of education technology and digital learning environments. It serves as a centre of excellence in online and technology-enabled learning for all publicly funded colleges and universities in Ontario and has embarked on a bold mission to widen access to post-secondary education and training in Ontario. This textbook is part of eCampusOntario's Open Library, which provides free learning resources in a wide range of subject areas. These open textbooks can be assigned by instructors for their classes and can be downloaded by learners to electronic devices or printed for a low cost by our printing partner, The University of Waterloo. These free and open educational resources are customizable to meet a wide range of learning needs, and we invite instructors to review and adopt the resources for use in their courses.

Funding Acknowledgement

This resource was produced by eCampusOntario, and funded by the Government of Ontario. The views expressed in this publication are the views of the author(s) and do not necessarily reflect those of the Government of Ontario.





XII | ACKNOWLEDGEMENTS

Welcome!

If you are an educator aiming to innovate your teaching approach, alleviate the financial challenges faced by your students, and become part of a worldwide initiative for accessible education, this is the resource for you.



In today's fast-paced educational landscape, traditional textbooks and resources can be costly, limiting access for many students. Open Educational Resources (OER) offer a revolutionary alternative, providing educators like you with the tools and knowledge to revolutionize your teaching practice. This pressbook is your starter guide to harnessing the full potential of OER. Whether you are looking to adopt existing open resources, create your own customized materials, or share your expertise with a global audience, this resource will walk you through each step of the process.

Throughout these pages, you will explore the principles of open education, discover the world of open licensing, and learn how to locate high-quality OER for your subject and level. You will gain hands-on experience with publishing tools such as Pressbooks and H5P, empowering you to design engaging, interactive, and adaptable learning materials.

By the end of this journey, you will be well-equipped to not only enhance your teaching materials but also contribute to the global OER movement. Let's work together to create a more accessible, affordable, and equitable educational landscape. Welcome to the world of Open Educational Resources, where the possibilities are endless, and the impact is profound!





Unsure of where to get started? Navigate with ease using the module map to chart your course!



An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://ecampusontario.pressbooks.pub/masteringopened/?p=4#h5p-15

PART I OPEN EDUCATION AND OER

4 | OPEN EDUCATION AND OER

INTRODUCTION

The open education movement is not new. Terms such as learning objects, open educational resources and digital educational learning materials have been around and used in educational settings for twenty-plus years or more. Open education can trace its roots to the Universal Declaration of Human Rights (UDHR), adopted by the United Nations in 1948, which states "everyone has a right to education."

The 2007 Cape Town Open Education Declaration states that open education and the use of open educational resources (OER) contribute "to making education more accessible, especially where the 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."

In 2012, the UNESCO Paris OER Declaration [pdf] 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."



Open education encompasses a set of practices directed at making the process and products of education more transparent, understandable and available to all. Open education seeks to make education more accessible, affordable, and inclusive through the use of open educational resources. Throughout this module participants will gain an understanding of open educational resources and the impact they have when producing, sharing and building knowledge.¹

1. This introduction is an adaptation from Open UBC and is licensed under a Creative Commons Attribution 4.0 International License



- 1. Describe the role of OER within open education, including the principles and implications for promoting accessible and inclusive learning
- 2. Identify where and how to find open educational resources in various repositories
- 3. Recognize the difference between "free" and open
- 4. Identify how to enhance student engagement and academic success through the integration of open educational resources

OER - THE WHAT AND WHY



Open Educational Resources

"Open Educational Resources (OER) are learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others."

– UNESCO



Consider this short video to learn more about OER.



One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/masteringopened/?p=29#oembed-1

(UNESCO) Open Educational Resources Concept: What is an OER? (0:58) [CC BY]

Video Transcript

To build sustainable, strong, and resilient societies, we need to be able to access and share knowledge openly. Open educational resources allow us to do so. Open educational resources (OER) are teaching, learning, and research materials in any medium, digital or otherwise, 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. An open license respects the intellectual property rights of the copyright owner. It provides permissions granting the public the rights to access, reuse, repurpose, adapt, and redistribute educational materials. Open educational resources support quality education that is equitable, inclusive, open, and participatory.

Benefits of OER

- 1. Free (or low-cost if printed) and thus affordable
- 2. Can be used and shared with an unlimited number of students without fear of copyright infringement 1
- 3. Customizable and adaptable with few restrictions to meet student needs, teaching methods, curriculum, and recent developments
- 4. Can be combined with other content and interactive or multimedia elements to provide richer teaching and learning opportunities
- 5. Offer first-day, remote and continued access since most OER are digital, do not require an access code, and do not expire
- 6. Contribute to success and completion by easing students' financial burden without having a negative impact on their learning²
- 7. Can be an opportunity for engagement and participation by co-creating knowledge with students in the form of renewable assignments rather than limiting their role to that of consumers of information³

The adaptation of existing OER and the creation of new resources are also opportunities to make course

^{1.} BCcampus, (2020), "The New Normal: Using OER to re-open education," CC BY 4.0.

^{2.} C. Hendricks et al., (2017), "The Adoption of an Open Textbook in a Large Physics Course: An Analysis of Cost, Outcomes, Use, and Perceptions," *The International Review of Research in Open and Distributed Learning* 18(4), CC BY 4.0; R.S. Jhangiani et al., (2018), "As Good or Better than Commercial Textbooks: Students' Perceptions and Outcomes from Using Open Digital and Open Print Textbooks," *The Canadian Journal for the Scholarship of Teaching and Learning* 9(1); H.M. Ross et al., (2018), "Open Textbooks in an Introductory Sociology Course in Canada: Student Views and Completion Rates," *Open Praxis* 10(4), CC BY 4.0; V. Clinton & S. Khan, (2019), "Efficacy of Open Textbook Adoption on Learning Performance and Course Withdrawal Rates: A Meta-Analysis," *AERA Open*, CC BY-NC 4.0.

^{3.} Canadian Association of Research Libraries, (2020), "The Time is Now for Open Educational Resources," CC BY-NC-SA 4.0.

materials more accessible, inclusive, and representative for learners. This kind of flexibility rarely exists in traditional textbooks. Because OER are not created to satisfy a commercial market, they can address topics and include perspectives that would otherwise be neglected.



Consider this short video to learn more about the benefits of OER.



One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/masteringopened/?p=29#oembed-2

(UNESCO) Open Educational Resources and Innovation: Why OER (1:17) [CC BY]

Video Transcript

Open educational resources are central for the development of inclusive knowledge societies and to help achieve the 2030 agenda for sustainable development, especially to reach SDG4, SDG5, STG9, SDG10, SDG16, and SDG17. To support universal access to information and knowledge and to transform economies and societies, it is important to innovate. To foster innovation, one of the major challenges is to create the conditions for access to and use of quality knowledge. Because open educational resources are free to access, reuse, repurpose, adapt, and to redistribute, they can reduce the cost for the development of educational materials, be adapted easily to different learning contexts, and help to develop gender sensitive materials and alternative and accessible formats for learners with special needs. Governmental and institutional investments can be enhanced for socioeconomic growth by accessing a variety of innovative pedagogical options.

Open educational resources are somewhat different from open learning, in that they are primarily content, while open learning includes both content and educational services, such as specially designed online materials, built-in learner support and assessment.

David Wiley is one of the pioneers of OER. He suggests that there are five core principles of open publishing, better known as the 5Rs:

10 | OER - THE WHAT AND WHY

- **Reuse:** The most basic level of openness. People are allowed to use all or part of the work for their own purposes (for example, download an educational video to watch at a later time);
- **Redistribute**: People can share the work with others (for example, send a digital article by-email to a colleague);
- **Revise**: People can adapt, modify, translate, or change the work (for example, take a book written in English and turn it into a Spanish audio book);
- **Remix**: People can take two or more existing resources and combine them to create a new resource (for example, take audio lectures from one course and combine them with slides from another course to create a new derivative work);
- **Retain**: No digital rights management restrictions (DRM); the content is yours to keep, whether you're the author, an instructor using the material, or a student.



Review the following Principles of OER as they expand on the original 5R's as described by David Wiley.



An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://ecampusontario.pressbooks.pub/masteringopened/?p=29#h5p-1

Promoting Accessible and Inclusive Learning

As mentioned above, OER reduce and in many cases eliminate the cost of expensive commercial textbooks and other learning materials. This makes education more affordable for learners who might otherwise struggle to access post-secondary education.

"Adaptability and affordability are two major aspects of what makes an open educational resource

attractive to students, but there is another facet that should be considered when you are developing or adapting an OER for your course: perspective. In particular, you should ask yourself how the perspectives being represented in your OER might affect the inclusivity of your course environment."

– Ariana Santiago

Indeed, educators who embrace OER can adapt and modify the content so they can accommodate a variety of cultural backgrounds and principles of universal design for learning (UDL). OER offers the opportunity to provide flexible and customizable resources to address the needs of all students. OER that incorporate UDL principles makes it possible to designing resources that benefit people of various learning backgrounds and abilities. With open licenses, OER provide access to editable files for the development of multiple formats which can be difficult to obtain for proprietary materials. While OER benefits all students by reducing educational cost barriers, they can especially benefit students with disabilities who often face greater financial difficulties. Finally, OER offers the opportunity for collaborative creation across institutions, countries, and the world to ensure the OER developed incorporates the expertise and experiences of people both creating and using the resources.

Module 3: Accessibility focuses on measures you should take to make OER accessible.



Reflection – Think about how these OER benefits might apply at your institution and share your thoughts in a Padlet.



One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/masteringopened/?p=29

FINDING OPEN EDUCATIONAL RESOURCES

Searching for and finding open educational resources is not that different from searching for any other type of resource. It is a good idea to know what you are looking for and why. You will also find that there are many repositories and federated search engines but as you become more familiar with them you will develop your favourites.



Searching for OER — Tips to Get you Started

- 1. Look at the table of contents in commercial textbooks for inspiration
- 2. Look for smaller pieces of content (topics, chapters, ancillary materials, etc.).
- 3. OER repositories are often multidisciplinary, and resources come in a variety of types and formats
- 4. If searching by keyword, start with broader concepts and then narrow down using discipline-specific terms and/or limiters available on the platform
- 5. Use Boolean Operators (the words "and," "or" and "not" can boost the power of your search). Check out the "Adopting a Savvy Search System" in the Ontario Extend "Curator" module for more information.
- 6. Use the repository filters (i.e. filter for licence and/or material type, etc.). Remember though that not all repositories are organized the same way: some offer filters and reviews to help refine search results, while others do not have these features.
- 7. Some repositories include resources that are "free" but not necessarily "open", therefore take the time to verify the copyright or licence terms of each item to confirm if it is an OER
- 8. Pay attention to the open licence (remember, you can always ask for permissions beyond the licence).
- 9. Keep track of information. Some OER's are catalogued in more than one repository so there may be duplication
- 10. If you can't find an OER in the repositories, try searching Google! If available, use the "advanced search" function
- 11. May not find an exact replacement for a commercial resource: some adaptations and using more than one OER may be required

- 12. Ask a librarian and/or the person responsible for OER at your institution to help!
- 13. Shop around and keep coming back! There is no "one-stop shop" for OER. Access different repositories (and continue checking because they are always growing and being updated).



The following video demonstrates some of the suggested search tips.



One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/masteringopened/?p=31#oembed-1

Searching for OERs: Where to Start (2:12) [CC BY]

Video Transcript

This video will help you get specific with your search for OER. We'll talk about: Narrowing your search by looking for weekly topics, using synonyms to improve results, and starting your search with OER repositories There are 2 billion openly licensed resources out there – finding one that works perfectly for your unique course and student population can be tricky. One strategy is to break your course down by topic or week and search for material for just one week instead of looking for a single textbook for the entire course. When you are looking at your weekly topics, remember that you can look for teaching materials other than a reading... a video or interactive experience might work equally well. If I am teaching a course on information literacy, my topic for week two might be "Evaluate Authority" – teaching to this would be great with a video and interactivity. Week three might be Fake News with a reading. You can mix different material to replace a single textbook. Your step after that is to look at some open educational resource repositories for your topic and material type. OER Commons, eCampus Ontario, and MERLOT are good places to start. If you aren't finding good results – try changing your search terms. I am using the term "information literacy" but if I were in the UK I would use the term "information fluency." Sometimes switching up your search terms makes a big difference and can help capture international perspectives on your topic. Keep in mind – you can start small. Pick one or two weeks to start. And do another two weeks the following semester. I will also recommend keeping

track of your weekly topics, search terms, and materials in a spreadsheet so you don't retrace your steps. To review: You can use multiple OERs to replace a single textbook, look for resources to match your weekly topic, look for materials other than readings, and start small with one or two weeks to keep track of your searches and results. The next video in the series will demonstrate a search in an OER repository.

This second video provides an introduction to OER repositories and how to navigate them.



One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/masteringopened/?p=31#oembed-2

OER Repositories: Search Tips (2:54) [CC BY]

Video Transcript

This video will introduce you to OER repositories and some strategies to search them for openly licensed material. There are lots of OER repositories out there, but the one people think of most is an Open Textbook library. The open textbook library that I will use as a demo is BC Campus – this is a great choice if you are looking for Canadian content. I'm going to look for a textbook on "information literacy." I am using quotation marks so that it searches for those two words right next to each other. I have my course outline ready with my weekly topic list. You can see some results have information about reviews or supplementary material. When I click on a title – I get a description of the textbook, and it's going to tell you the license terms. This resource is licensed CC BY, so I know I can use it, and adapt it as long as I attribute the creator. And here are the different formats where I can download it. I can also read a bit more about the author and the institutional affiliation. This is all great information for evaluating the work, click into the content and look at the chapter headings. You might find perfect chapters in an imperfect textbook. And because these resources are open, you can choose to remix several sources into something new. Some repositories collect OER material beyond textbooks. You can find tutorials, case studies, presentations, and rubrics. These repositories will offer extra options and filters for streamlining your search. OER Commons, for example, will let you search by subject or education level and your search results can be limited by material type or media format. Looking for resources in a repository

with multiple materials is a great option if you want to remix material into a new work. All repositories will make license restrictions clear, just click into the license or terms of use to clarify. If you have too many results, you might need to get more specific with your search terms or material type. And if you aren't finding what you're looking for, try changing your search terms, search a different repository, or try Google Advanced and limit by usage rights. Some other tips to remember: Use quotation marks to get specific. Search for your weekly topics instead of your course title, Ask for help at the library. If you still aren't having any luck, this is an opportunity to think about creating a new resource. Contact your department Chair or library to find out about supports at your institution for creating OERs.

Suggested OER Repositories and Sources

These repositories are a good starting point to find a wide variety of open educational resources.

B.C. Open Collection (BCcampus)

https://collection.bccampus.ca/ – Multidisciplinary eCampusOntario Open Library

https://openlibrary.ecampusontario.ca/ - Multidisciplinary

Some recent resources created as part of the Virtual Learning Strategy (VLS) have an Ontario Commons license, which is more restrictive than a Creative Commons license.

LibreCommons by LibreTexts

https://commons.libretexts.org/ – Multidisciplinary Lumen Learning

https://lumenlearning.com/courses/ – Multidisciplinary Mason OER Metafinder

https://oer.deepwebaccess.com/oer/desktop/en/search.html - Federated searching

This tool makes it possible to search two types of collections: OER repositories and "Deeper Search", i.e. archives and other content in the public domain.

MERLOT

https://www.merlot.org/merlot/index.htm - Multidisciplinary, federated searching

MERLOT includes copyright-protected content. Search results are presented in three categories: "MERLOT Collection" (mostly OER), "Other Libraries" (pointing to other open collections), and "The Web" (including education and government sites).

Milne Open Textbooks

https://milneopentextbooks.org/ – Multidisciplinary OASIS (Openly Available Sources Integrated Search)

https://oasis.geneseo.edu/ – Federated searching **OER Commons**

https://www.oercommons.org/ – Multidisciplinary OpenStax

https://openstax.org/ – Multidisciplinary **Open Textbook Library**

https://open.umn.edu/opentextbooks/ – Multidisciplinary PennState University Libraries ROAM

https://roam.libraries.psu.edu/ – Multidisciplinary Pressbooks Directory

https://pressbooks.directory/ - Multidisciplinary

This directory includes copyright-protected content. **Teaching Commons**

http://teachingcommons.us/ - Multidisciplinary



Pick a topic that you are knowledgeable about. Find two different resources from any of the OER repositories and sources suggested above that would be useful in the field. Share in a Padlet.



One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/masteringopened/?p=31

FREE VS OPEN

"If all that was meant by open was free, we wouldn't need a new word. We'd just call it free." – David Wiley¹



Free materials serve a meaningful purpose in education by providing tools to support teaching and learning, but free resources are not necessarily open resources. "Free" means that there is no required cost to access materials. It does not mean that users may also reuse, modify, or share the materials. When a resource is open, users know they can reuse and share the resource widely, so long as they abide by the terms of its creator. Open materials also allow users to revise and remix them with other open resources or self-generated content to produce new material. These terms and permissions are typically established in the open license applied to the work.

You will learn how to identify and apply open licenses in the Open Licensing module.

Resources that are free but not open:

- Web-based resources that are fully copyright-protected: All available resources on the Web that you may have access to, but that are not in the public domain or do not carry an open license, may be free but they are not OER.
- **Subscription-based library collections:** A library's subscription-based resources (journals, e-books, videos, and other materials), while accessible to students and faculty at no cost, are not OER. Their use for education and research is limited by license agreement with vendors.

^{1.} Cited from University of Buffalo Center for Educational Innovation. "High Impact Practices for Integrating Open Educational Resources (OER) into University Courses," 2016. https://www.youtube.com/watch?v=x3CY6RR4uns&feature=youtu.be.



Assess your ability to differentiate between "free" and "open" with the follow scenarios.



STUDENT ENGAGEMENT

Creating, adapting and ultimately integrating OER into courses are ways to improve student engagement and academic success. For instance, an OER can be adapted to be more representative of learners and their contexts, for example, with more relevant examples. In fact, co-creation with students contributes to their representation in learning materials and active participation in knowledge creation.As the following videos explain, OER and the active participation of learners and their own learning are examples of open educational practices.





The following video discusses how open education is about more than OER and encompasses open educational practices.



One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/masteringopened/?p=35#oembed-1

Open Teaching (3:55) [CC BY-NC-SA]

Video Transcript

Open educational practices while having multiple definitions revolve around the use or inclusion of open educational resources. These resources are free to use adaptable and licensed under the Creative Commons. Open education also encompasses more than just materials. There is a whole

ecosystem of open which enable a shift toward open practices. What are the benefits of including more openness into the classroom? Imagine this your students are submitting an assignment, project or essay. Once the project is completed, graded and returned, then what? What is the next step for that project? While there is definitely value in this work to achieve learning, the ultimate end for most of them is akin to putting up drawings on a refrigerator. They are displayed and enjoyed by a few people along the way, but that's pretty much it. But what if there is a shift, a shift to include more openness? This will aid not only in making education more accessible, but shine the spotlight on open education and its practices. Using openly accessible platforms is a connected way to bring students to the foreground of education. It's a beginning to draw on our students learned experiences and connect the class material to today's reality. For example, Hypothesis is an open source online site that lets you annotate the Internet. It is a way to make digital annotations in the margins of online texts. Students will share, update and discuss the assigned online text in real time. It differs from a discussion thread or a Google doc because the annotations are right there in black and white on the website. Other open source websites such as Pressbooks can give students the ability to create their own collection of their works essays or even create an open source textbook.

If this textbook is made open, then it can contribute to others learning around the globe who then in turn can adapt it, remix it, and share it with their students or colleagues. There is a never ending cycle of knowledge sharing. The simplest of all is opening up a class or public networking, whether that be a live stream or using a social media hashtag to get other insights and to create a dialogue. Gaining perspectives and insight from people out in the world who have lived or different experiences than in a controlled conversation in the classroom is a true form of openness and inclusivity. Creating a class textbook that will be published and sold differs from the open textbook because the open textbook is almost a living, breathing, evolving entity. While the publisher created content is static until the next planned update. It doesn't have the immediate opportunity to evolve. What inclusive and open practices can you begin to incorporate? There are wonderful resources to launch from online. There is a link below in the description. You can also contact the library. They have resources available and can also assist in searching for open access textbooks for your area of teaching. Remember, implementing openness is not an all or nothing approach, nor is it as simple as flicking on a light switch. It is a journey and not a destination. The more people who begin on this journey, the more there will be to talk and share experiences and the more enjoyable and informative it will be for those to come. To find out how you can add more openness to your teaching. Visit us at Vertica or send an email to at Vertica.

22 | STUDENT ENGAGEMENT

This second video elaborates on what happens when students are engaged in their own learning, which is a core principle of open education.



One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/masteringopened/?p=35#oembed-2

Seven Things That Happen When Students Own Their Learning (1:41)

Video Transcript

We know that it's important to move from compliance to student engagement. But what happens when you take it another step and empower your students to own their learning? Here are seven ideas: #1: They fall in love with learning by finding joy in pursuing their passions and geeky interests. In the process, they learn how to research and curate and communicate. #2: They embrace a maker mindset as they work through a design process and launch their work to the world. #3: They develop iterative thinking, viewing mistakes as a chance to learn. This leads to a shift from a fixed to a growth mindset. #4: They become self-starters, exploring new frontiers, asking hard questions, and trying new things. #5: They become problem-solvers and systems thinkers #6: They also challenge the system as hackers who think divergently and rewrite the rules. #7: They become architects of their own learning, engaging in project management and collaboration. A.J. Juliani puts it this way: Our job is not to prepare students for something. Our job is to help students prepare themselves for anything. In other words, when we empower our students, they are able to own their learning forever.

Renewable, Not Disposable Assignments

Renewable assignments, unlike assignments that are only reviewed by the teacher and then discarded, encourage learners to become more engaged in the knowledge that future students will not only benefit but also contribute to it.

Many assignments given in post-secondary institutions are what David Wiley calls "disposable." Renewable assignments, on the other hand, add value beyond earning a mark — they provide resources that are useful and usable by others, whether other students in the course or the public. Examples include students creating notes or demonstrations for other students in the same course (and possibly also posted publicly for others), students

editing articles on Wikipedia or an institutional wiki site like the UBC Wiki, and students producing research that can be used by a community group. Even those assignments that might otherwise be "disposable" can be made renewable by sharing them with other students in a course and, if the student agrees, publicly.

For such work to be truly "renewable" though, it should be openly licensed to allow others to not only view it, but to revise and reuse it for their own purposes.

Open Teaching (Teacher-Student Lens)

Open teaching implies that teachers will implement teaching methodologies that allow learners to actively contribute to the co-creation of knowledge and be self-regulated. Teachers can approach open teaching through connectivist learning practice — which is grounded in connectivism, a student-centred teaching and learning approach where learners share and co-create knowledge by making connections that can extend beyond the duration of the course.

Open Collaboration (Student-OER Lens)

Open collaboration implies that teachers will work with their students to build open communities to foster teamwork and social interaction (i.e., editing a blog, creating a Wikipedia page). Students work together through the co-creation or adaptation of OER and digital artifacts — and are encouraged to share openly with others. This can happen through social media platforms, Pressbooks, websites, ePortfolios, etc.

Open Assessment (Teacher-OER Lens)

Open assessment implies that teachers will redesign learning tasks to support both teacher — and peer — assessment and a strategy like this emphasizes reflective practice and improved learning outcomes. Indeed, adjusting and redesigning assessments to support OEP is essential. There are several technologies that can be used to support open assessment like OER authoring tools, OER repositories, social networks and collaborative editing tools. In these cases, students are assessed on collaborative, renewable assignments that are the result of the creation of supplemental learning resources that all students can benefit from (and that future students can build upon). Take for example open-class discussion forums that are established to create a space for students to discuss the feedback and answers to assessments and, by extension, to learn from each other.

Here are two examples of OER co-created with students:

- Decolonizing and Justice: An Introductory Overview: https://opentextbooks.uregina.ca/ decolonizingjustice/
- Ethical Use of Technology in Digital Learning Environments: Graduate Student Perspectives: https://openeducationalberta.ca/educationaltechnologyethics/



Reflect on how you could change one of your assessments to make it renewable. Share your thoughts in a Padlet.



One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/masteringopened/?p=35

CONCLUSION

G Key Takeaways

- 1. The principles of cooperation, sharing and accessibility are at the heart of open education.
- 2. Open educational resources (OER) support open education by not only being free, and therefore affordable, but also because they can be modified to be accessible, inclusive and representative.
- 3. The openness of OER allows for their reuse, retention, revision, remixing and redistribution (the 5Rs).
- 4. A free resource is not necessarily an OER.
- 5. Co-creation and renewable homework are examples of open educational practices that promote inclusion and representation.

C Video

This video demonstrates how opening and sharing one resource can have a global impact.



One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/masteringopened/?p=38#oembed-1

Open Education Matters: Why is it important to share content? (3:10)

Video Transcript

A few years ago... a professor taught a Climate Change course, reaching about one hundred students per semester. One day he thought "If I could upload this course online, then not only would my 100 students have access to it, but others as well." So he did. And this is what happened... Ana sent the course 's content across the country to Alex, who was studying Climate

Change. Alex found it so interesting that he forwarded a copy to his friend Lulu in Africa. Lulu was organizing some peer-to-peer courses with Phillip, so they remixed the content with other resources and created a new course about the impacts of climate change in Africa. Alan, a participant in the course, shared the content with Gaby, who was studying environmental policy in Latin America. Gaby brought the content to her class, and together, they translated it into Spanish. After that, Gaby's professor shared it with his other classes. Mayra, another student, shared the content with her father, who passed it on to his colleagues. Gaby's professor also forwarded the content to David, a colleague in the UK, who was researching climate change. He updated some of the data, adapted it to his study and published an article in an open journal. Researchers from all over the world were able to read the article. David sent the updated content back to the original professor. By then, his course had reached so many more people than his one hundred students! Years later... many schools had begun to follow the example and opened access to their content. Governments began promoting the use of open textbooks and students began saving money on books. Other innovative universities began to open access to entire courses, making them available to participants from all around the world. These are Open Educational Resources (OER): Teaching, learning, and research resources that can be reused, redistributed, remixed, and revised. OER are accessible to everyone—learners, teachers, researchers, parents, workers, citizens... to you. This is Open Education: knowledge as a public good. Everyone has the right to be educated, yet only a few have access to school. OER increase access to, improve quality of, and reduce costs of education. Sharing knowledge is important. Now you know. OER. Give everyone the opportunity to learn.

Useful Resources

- Open Education Network, Open Pedagogy Portal. This portal contains case studies, student work products and renewable assignments.
- Open UBC, Open Pedagogy Toolkit
- Cindy Underhill, Spectrum of Open Practice (CC BY-SA 3.0)



Unsure of where to go from here? Navigate with ease using the module map to chart your course!



An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://ecampusontario.pressbooks.pub/masteringopened/?p=38#h5p-15



- Ontario Extend: Teaching in the Open, CC BY-NC-SA
- University of Ottawa Library, Open Educational Resources, CC BY
- Bates, William (Tony), Open Educational Resources (OER), Teaching in a Digital Age CC BY-NC
- Santiago, Ariana, Diversity and Inclusion, OER Creation Toolkit CC BY
- McNally, Michael and Ann Ludbrook, A National Advocacy Framework for Open Educational Resources in Canada (p. 22-23), CC BY
- Ontario Extend, Open Content, CC BY-NC-SA
- University of Ottawa Library, Finding OER, CC BY
- Petrich, Marisa, The Difference Between Free and Open, *Building Infrastructure for Open Educational Resources at UW Tacoma*, CC BY
- College Libraries Ontario, About Open Educational Resources, *The Learning Portal*, CC BY-NC
- Ontario Extend, Open Course Design & Assessment, CC BY-NC-SA

28 | CONCLUSION

OPEN LICENSING | 29

PART II OPEN LICENSING

30 | OPEN LICENSING

INTRODUCTION

Without an open license, an educational resource can be freely accessible without being "open". Indeed, the concept of openness goes far beyond price. As we saw in the previous module, an open educational resource can not only be used free of charge, but it can also be reproduced, revised, remixed and redistributed without asking permission from the copyright holders (see the 5Rs of OER).

It is therefore essential to understand how open licenses work, to recognize them on existing resources, and to apply them correctly on your own content to encourage sharing and reuse.

Learning Outcomes

- 1. Explain the concept of open licensing and its role in providing legal permission for using and sharing educational content.
- 2. Differentiate between Creative Commons and Ontario Commons licenses and understand their specific terms and conditions.
- 3. Apply appropriate open licenses to your original educational materials, allowing for widespread sharing and reuse.

UNDERSTANDING OPEN LICENSING

Let's delve into some basic notions of copyright to understand how open licensing works. Discover what is protected by copyright and how licenses play an essential role in how content is protected but also openly shared in today's digital landscape.

What is copyright?

Copyright protects the original expression of an idea or fact fixed in a tangible medium (physical or digital). It exists automatically at the time of fixation and gives its holder economic rights (e.g. right of publication and reproduction) and moral rights (e.g. right of attribution). These rights usually belong to the author but the economic rights can be transferred, which is often the case during the publication process.

An educational resource can therefore be protected by copyright, regardless of whether it is free or accessible for a fee.

What is a license?

A license is essentially a permission. It does not replace copyright but complements it to clarify how a resource can be used without having to seek permission from the copyright holder. It is not a transfer of copyright, but rather an authorization from the copyright holder that "allows someone else to use a work for certain purposes and under certain conditions."

What is an Open License?

An open license is an alternative to the restrictive nature of copyright and offer students a more economical solution for accessing educational materials.

Open licensing, sometimes called "copyleft" as opposed to "copyright", allows creators to decide to what extent they want to authorize others to use their creations, be it text, images, songs or any other kind of works. They are found in open access publications, open data, open-source codes and open educational resources.

In this module, we focus on Creative Commons and Ontario Commons licenses in particular. We will see how they allow the reuse and remix of OER that can replace commercial educational resources in courses.



Assess your understanding of copyright and licenses basics by completing this H5P.



An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://ecampusontario.pressbooks.pub/masteringopened/?p=47#h5p-3

NAVIGATING LICENSES

Creative Commons Licenses

To use and create open content, it is important to develop an understanding of Creative Commons (CC) and Ontario Commons (OCL) licenses to support searching, adapting, remixing, and sharing resources.

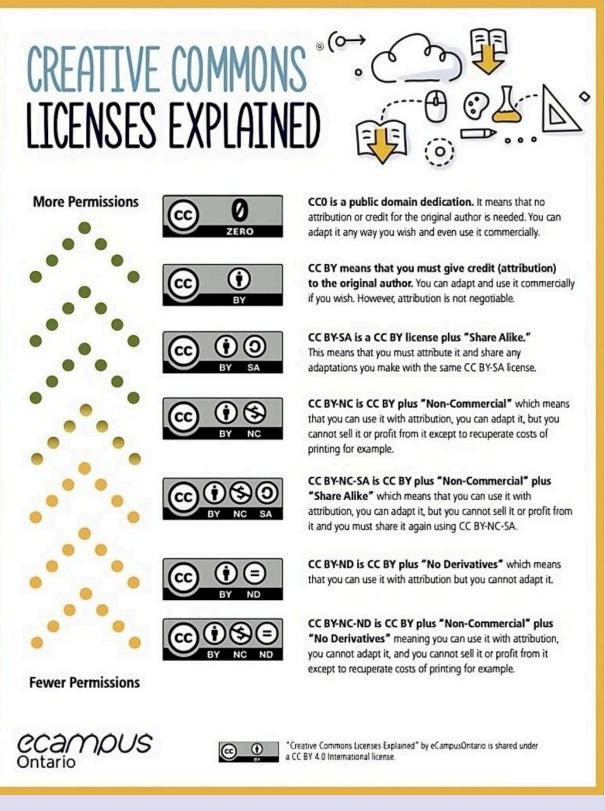
Creative Commons (CC) is an international non-profit organization that promotes the sharing and reuse of works by providing free legal tools. Its main product are the six open licenses.

A Creative Commons license consist of three elements:

- 1. CC logo or initials
- 2. icons representing a combination of conditions
- 3. version (4.0 International is the most recent).

The six Creative Commons licenses are a combination of four conditions. These are represented by two letters – CC BY-SA – or written out in long form – Creative Commons Attribution-ShareAlike.

- 1. Attribution (BY)
- 2. ShareAlike (SA)
- 3. NonCommercial (NC)
- 4. NoDerivatives (ND)



Infographic Long Description

The Creative Commons Licenses are ordered from those that require little or no attribution, to those that have more restrictions.

CCO is a public domain dedication. It means that no attribution or credit for the original author is needed. You can adapt it any way you wish and even use it commercially.

CC BY means that you must give credit (attribution) to the original author. You can adapt and use it commercially if you wish. However, attribution is not negotiable.

CC BY-SA is a CC BY license plus "Share Alike." This means that you must attribute it and share any adaptations you make with the same CC BY-SA license.

CC BY-NC is CC BY plus "Non-Commercial" which means that you can use it with attribution, you can adapt it, but you cannot sell it or profit from it except to recuperate costs of printing for example.

CC BY-NC-SA is CC BY plus "Non-Commercial" plus "Share Alike," which means that you can use it with attribution, you can adapt it, but you cannot sell it or profit from it and you must share it again using CC BY-NC-SA.

CC BY-ND is CC BY plus "No Derivatives" which means that you can use it with attribution but you cannot adapt it.

CC BY-NC-ND is CC BY plus "Non-Commercial" plus "No Derivatives" meaning you can use it with attribution, you cannot adapt it, and you cannot sell it or profit from it except to recuperate costs of printing for example.



For a quick review of the six CC licenses, we invite you to watch this short video produced by the University of Guelph.

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/masteringopened/?p=50#oembed-1

What are Creative Commons Licenses (1:14) [CC BY-NC-SA]

Video Transcript

This video will introduce you to Creative Commons licenses, which make copyright easier to understand. Let's say you create something. This thing could be creative, like a picture of your cat, or scholarly, like an essay about cats. Because you are the creator of this picture or essay, copyright allows you to decide what people can do with your creation. When you are the copyright holder, people have to ask you for permission before putting your cat picture into a PowerPoint or adapting your cat essay into a movie. Getting permission can be time consuming and complicated for both the creator and the user. This is where Creative Commons can help. Creative Commons exists to make permissions explicit and straightforward. Creative Commons licenses use icons and simple language so that creators can make their intentions clear and users can be certain that their use of a work is legal. These different licenses help people understand if and how they can use, share, or build on a work. This icon means that only non-commercial uses are permitted, so no one can profit from using your picture. This icon means that no one can make changes to the original work, such as photoshopping a dog into your cat picture. This icon means that someone can change your work but their version must be shared under the same license as yours. All Creative Commons licenses give credit to the original creator, preserving your reputation as a creative genius while the world engages with your work. Licenses can be attached to most things, including blog posts, images, artworks, journal articles, and more! To learn more about Creative Commons licenses, visit the Creative Commons website or check out some of the other videos in our series.

The most open of these licenses is CC BY, requiring attribution only. The most restrictive (but still more open than copyright's "all rights reserved" approach) is CC BY-NC-ND, which requires attribution but does not allow for commercial use and adaptations.

Resources with the ND condition are technically not OER. ND indicates that the user cannot make changes to the original version to incorporate into a new resource. This condition goes against two of the five Rs: revising and remixing. For disciplines with few OER, using non-modifiable resources is still a viable option. If no modifications are made, they can be assigned without having to request additional permission.

Creative Commons also makes available to creators the CC0 designation. It is not a license, but rather a tool

38 | NAVIGATING LICENSES

that allows creators to waive their rights and transfer their recent works directly into the public domain. A work in the public domain has no copyright restrictions and can therefore be used freely and openly, even without attribution.

Generally, CC licenses are easy to find when you search for resources in an OER repository. However, sometimes the licenses are not as obvious on resources you find on the open web (blogs, websites, videos, etc).



The following video will help you find and interpret open licenses associated with blogs, websites and videos.



One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/masteringopened/?p=50#oembed-2

Finding and Interpreting Open Licences (2:12) [CC BY]

Video Transcript

In this video you will learn about finding open licenses. How to find them on different websites and how to interpret them. In addition to searching for resources in OER repositories, you can find millions of OERs on the open web. Blogs, websites, and videos can all have open licenses and they are easy to find through a Google search. What can be tricky on the open web is finding and interpreting the licenses and terms of use. Let's take a look at different examples. This article is on a blog. Let's say I want to post the text of this article in my online course. When looking for license information, I generally scroll to the bottom of the page. If the CC license is listed, I will click into it to read the terms to be sure of the use. This license clearly states that I can reproduce and remix the material as long as I do the following: provide attribution. There are also examples where the license for the item may be buried. This article on a web magazine has the license at the end of the article, rather than the bottom of the webpage. This example has both a copyright symbol and CC license. To understand this statement – think of a copyright statement that says "all rights reserved." The copyright statement that includes a CC license is saying explicitly who the copyright holder is and that they have chosen to only reserve "some rights". And they indicate the rights in the license that they have applied. So, as in the previous example, follow the CC license

guidelines. Let's also look at a video example. You will generally find YouTube Creative Commons licenses under the "Show More" link. You can also look for license information at the end of the video. If you don't see a Creative Commons license, look for other licenses or a "terms of use" link. Follow the links to learn about the terms for the site. And if you don't see any license information you assume it is copyright with all rights reserved. If you still aren't sure, email the creator or check in with the copyright office at your institution.

Ontario Commons Licenses

Some OER created with the financial support of eCampusOntario's Virtual Learning Strategy (VLS) have an Ontario Commons license: OCL 1.0 or OCL-ND 1.0. The former is comparable to CC BY-NC while the latter is like CC BY-NC-ND, but with additional restrictions.

The main difference with Creative Commons is that they apply only to educators and students in the Ontario post-secondary sector. Other users may need permission from the copyright holder to use resources with an Ontario Commons license. They are more restrictive than Creative Commons licenses.

Traditional Knowledge (TK) Labels

There is a long history of appropriation of Indigenous and traditional knowledge resulting from the application of copyright law. For example, the criteria of fixation in a tangible medium is especially problematic for cultures heavily based on oral traditions. This has led to non-Indigenous researchers owning the copyright on songs performed by Indigenous peoples simply by recording them.

Because open licenses work with these notions of copyright, they may not be the appropriate tool to manage, share and protect Indigenous knowledge.

Local Contexts offers a set of Traditional Knowledge (TK) Labels that "allow [Indigenous] communities to express local and specific conditions for sharing and engaging in future research and relationships in ways

40 | NAVIGATING LICENSES

that are consistent with already existing community rules, governance and protocols for using, sharing and circulating knowledge and data."

The TK Labels fall into three categories:

- 1. Provenance Labels
- 2. Protocol Labels
- 3. Permission Labels

Find out more about each label on the Local Contexts website.

If you plan on incorporating Indigenous knowledge in an open educational resource, please review The 6Rs of Indigenous OER to find out how to respect community protocols and ethical considerations.



Assess your understanding of open licenses by completing this H5P activity.



An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://ecampusontario.pressbooks.pub/masteringopened/?p=50#h5p-4

OPEN LICENSING FOR EDUCATION

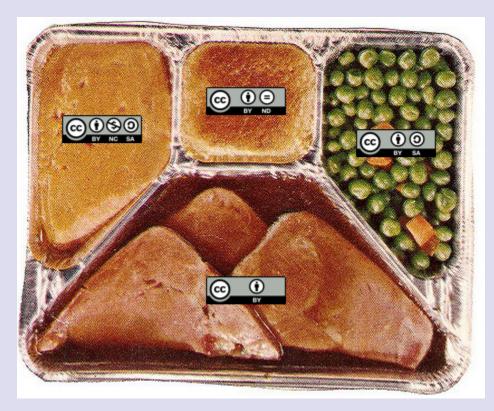
First, if you have reproduced content for which you do not own the copyright or used content for which the license does not allow the use you wish to make, be sure to ask permission from the copyright holder. Then, if your course material combines contents under different licenses, here are some basic principles to keep in mind:

- 1. Applying an open license to a project does not change the original copyright status of third-party content (even when reproduced with permission or under an exception)
- 2. It is possible to apply an open license to an entire resource while individual elements have a different license or copyright status. However, it will depend on whether it is a **collection** or an **adaptation**.





Collection



CC TV Dinnerby Nate Angell is licensed under CC BY 4.0, and is a derivative of tv dinner 1by adrigu used under CC BY 2.0, and various Creative Commons license buttons by Creative Commons used under CC BY 4.0.

A **collection** is a selection of existing materials still distinguishable once brought together (e.g. TV dinner).

With collections, existing content does not acquire a new license or copyright. There could be a new copyright or license on the addition of new content only (e.g. introduction, conclusion, commentary, cover).

Adaptation



CC Smoothieby Nate Angell is licensed under CC BY 4.0, and is a derivative of Strawberry Smoothie On Glass Jarby Element5 Digital under a Pexels License, and various Creative Commons license buttons by Creative Commonsused under CC BY 4.0.

An **adaptation** is a combination of existing materials that are not easily distinguishable once combined (e.g. smoothie).

To acquire a new license or copyright, the new creation based on existing content needs to be original enough (i.e. involve skills, effort or judgement on the part of the creator of the adaptation). The new creation will then take the most restrictive license from the contents that were combined.

The CC License Chooser can help you decide on the appropriate license.

Add an Open License to Your Course Material

Where you add your chosen open license depends on the platform hosting the material and its format. For example:

- 1. For a presentation, you will add the license on the first slide
- 2. On a website, you will add it to the bottom of the page or on the page describing the site's terms of use
- 3. In a video or audio file, you will add the license in the description on the hosting platform and in the credits



Assess your understanding of applying open licenses by completing this H5P.



An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://ecampusontario.pressbooks.pub/masteringopened/?p=52#h5p-5

CONCLUSION

Solution Key Takeaways

- 1. Open licenses do not replace copyright. Instead, they work with copyright to allow creators to facilitate the reuse of their work by reducing the usual restrictions.
- 2. A license functions like a permission from the copyright holder.
- 3. Attribution is the basic condition of all Creative Commons licenses.
- 4. Be mindful that the ND condition (NoDerivatives) runs counter to two of the 5Rs (revising and remixing).
- 5. Without an open license, an educational resource can be free, but not necessarily "open".
- 6. The Canadian *Copyright Act*, as it is currently structured, does not adequately account for traditional knowledge. Therefore, open licenses may not be the appropriate tool to manage, share and protect Indigenous knowledge.

Useful Resources

- Creative Commons, About The Licenses
- Creative Commons, Licenses icons
- Creative Commons, Combining and adapting CC material
- Local Contexts, TK Labels
- Mélanie Brunet and Catherine Lachaîne, How to Attribute Creative Commons-Licensed Content: Best Practices (CC BY 4.0)



Unsure of where to go from here? Navigate with ease using the module map to chart your course!



An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://ecampusontario.pressbooks.pub/masteringopened/?p=55#h5p-15

T Attributions

- Canadian Intellectual Property Office (CIPO), A Guide to Copyright (Assignments and Licences)
- Ontario Extend, Creative Commons and Copyright, *Curator Module*, CC BY-NC-SA
- Ontario Extend, Open Licences Refresher, Open Content, CC BY-NC-SA
- fabriqueREL, Licences, CC BY
- University of Ottawa Library, Open Licences and Copyright, CC BY
- TK Labels, Local Contexts
- Brunet, Mélanie, Copyright and Licensing for Open Educational Resources (OER) CC BY

ACCESSIBILITY | 47

PART III ACCESSIBILITY

48 | ACCESSIBILITY

INTRODUCTION

One of the underlying principles of open education is to promote accessible and inclusive learning. However, accessibility and inclusion go far beyond the affordability of open educational resources. To ensure that all students can benefit from their full potential, OER should also be adapted to a variety of disabilities and learning abilities.

This module focuses particularly on the accessibility of web content and practices to follow to ensure the creation and use of accessible OER.

Learning Outcomes

- 1. Comprehend the importance of accessibility, and compliance with the AODA legislation in Ontario in OER
- 2. Explain web accessibility requirements of AODA and WCAG
- 3. Apply appropriate web accessibility requirements when using and authoring OER, using Pressbooks as an example.

THE AODA

The number of Ontarians living with a disability is climbing – with an average of one in four people facing accessibility challenges every day¹. Providing an accessible built environment is key to reaching our shared goal in providing all individuals with the opportunity to participate actively and fully – without barriers. Often when we think about providing an accessible environment, we do envision the physically built environment – for example, curb cuts in sidewalks to facilitate ease of movement for wheelchairs, walkers, and other assistive devices. In addition to accessing physical spaces, we also need to provide barrier free access to virtual spaces. Digital – or web accessibility is critical to ensure we all have access to the same online information, support and services that are available to all. Increasing recognition of the value and importance of accessibility has led to the development of various laws, guidelines, standards, and recommendations. Let's look into these a bit further.

Ontario has adopted the *Accessibility for Ontarians with Disabilities Act, 2005* (also known as the AODA) that requires organizations to use accessible practices to better meet the needs of people with disabilities. The purpose of the AODA is to develop and implement accessibility standards for use in the public, private and not-for-profit sectors to make services, programs, spaces, and employment accessible to all Ontarians.

Although there are currently no AODA standards specific to the education sector, two committees were established to draft accessibility standards with this focus. The Post-Secondary Education Standards Development Committee has been specifically tasked with developing recommended guidelines for the university and college communities. Their final recommendations are due to be implemented by January 1, 2025, and address barriers such as attitudes, behaviors, instruction, as well as social, physical and financial barriers.

For now, we'll turn to the AODA's information and communication standards, which has

a requirement that organizations make their websites and online materials accessible. Web Content Accessibility Guidelines, often referred to as WCAG, are international guidelines created with the aim of providing common web accessibility standards worldwide. These guidelines apply to all web content, whatever

^{1.} Government of Ontario, Accessibility for Ontarians with Disabilities Act annual report 2019, https://www.ontario.ca/page/accessibilityontarians-disabilities-act-annual-report-2019

the sector. To ensure that an appropriate level of web accessibility has been achieved, the AODA requires all organizations to comply with and respect the Web Content Accessibility Guidelines (WCAG) 2.0, Level AA.

What is meant by "web content"?

In the context of this module, web content refers to all content found online, including information (such as text, photos, and sound), as well as the code that defines the structure.

At the time of developing this module, the most recent version of WCAG is version 2.1, while version 2.2 is scheduled for Fall 2023. We encourage you to keep on top of the updated requirements and legislation when it comes to web accessibility. The "Useful Resources" section at the end of this module points to some of the organizations and groups we recommend tapping into.



Assess your basic understanding of the AODA by completing this H5P activity.



An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://ecampusontario.pressbooks.pub/masteringopened/?p=63#h5p-6

WCAG STANDARDS

The WCAG standards are divided into four main principles: Perceivable, Operable, Understandable and Robust – or POUR.

Perceivable, Operable, Understandable and Robust (POUR)

- 1. **Perceivable**: involves making information and the interface presentable to users in ways that they can perceive. A user must be able to perceive the content being presented and it cannot be invisible to all of their senses. One example of this is including alternative text for an image so a person who is blind can listen to its description.
- 2. **Operable**: means ensuring that all user interface components and navigation can be operated by the user. There cannot be any interaction or navigation that a user cannot perform. Making the web content accessible by keyboard is an example of this.
- 3. **Understandable**: involves making certain that the information and use of the interface are clear and easy to understand. Both the content and the operation of the interface must not be beyond the user's level of understanding.
- 4. **Robust**: refers to the ability of content to be interpreted and understood by various means. One example is ensuring that content and interface are compatible with assistive technologies.



WCAG standards also include three different levels of compliance: A, AA and AAA. Level A indicates a minimum level of compliance, while level AAA indicates the highest level of compliance. As mentioned above, the AODA requires all organizations to comply with the WCAG guidelines at level AA.

The following section provides detailed explanations of some of the WCAG standard requirements for elements commonly used in OER. Each explanation will provide a brief description of the requirement, why it is necessary and how it can be implemented.

Core Principles of Digital Accessibility in OER

The following section provides an overview of explanations of some of the WCAG standard requirements for elements commonly used in digital OER content. Each explanation will provide a brief description of the requirement, why it is necessary and how it can be implemented.

Structure

What: Clear content organized through chapters, headings, subheadings, and lists helps users see how different ideas relate to each other and provides a hierarchical structure to the document.

Why: Adding semantic structure to your documents is useful for everyone, including people with learning disabilities or visual impairments. Sighted users will be able to navigate quickly through the document to find the specific information they need, and people using assistive technologies such as screen readers will be able to navigate sections efficiently and identify when a list is included.

How: Use heading levels in sequential order to represent the structure of a page, rather than making the text appear as a heading by applying visual elements such as bold text and a larger font size. Headings can be easily created in web authoring platforms (such as Pressbooks and WordPress) as well as most word-processing programs. Similarly, create lists using bulleted and numbered options in various platforms.

Font Styles

What: Selecting the appropriate font style and size ensures that text is legible for users.

Why: Ensuring an appropriate font style and size is useful for all users, especially those with disabilities requiring the use of assistive technologies.

How: For text to be easy understood, it's important to ensure that font style is sans serif (e.g., Calibri, Arial and Open Sans) and that the size is not too small and that text can be enlarged. The WCAG standard recommends a font size of 12 points or more (with 9 points or more for footnotes), as well as the ability to zoom the text up to 200%.

Hyperlinks

What: All links (to other web pages or to non-web content) must be included in a meaningful way. Make sure the link text is descriptive.

Why: Descriptive link text is helpful for everyone to understand, but it's particularly useful for people with

54 | WCAG STANDARDS

physical, cognitive, hearing, or visual disabilities. It helps people understand links, even when they're out of context. For example, students using screen readers can set the software to read all the links on a page.

How: Descriptive link text that describes the content of the link and doesn't just say "click here" is very useful. For example, hyperlink the text, "information on open education at the University of Ottawa is available online". It's a good idea to open external links in a new tab. Indicate in the descriptive text of the link that it is not another web page (e.g. [PDF]).

Tables

What: Use simple tables to present information and data that can be easily navigated.

Why: Tables can be helpful to present and categorize information but can be complex and difficult for learners with disabilities to navigate – and for screen readers to read. See this example from WebAIM which demonstrates why presenting information in a table can be confusing.

How: There are many items to consider when wanting to create and use accessible tables. A few key items are to use tables for data only and not page layout, to not have merged or split cells, use header rows and break large complex tables into smaller tables. More comprehensive guidance can be found in the Creating Accessible Tables resource from WebAIM.

Alternative Text

What: Providing alternative information on an image in a text format can help ensure that users will be able to access and use the information in a way that best suits their accessibility needs.

Why: Providing information in various accessible formats helps ensure that all users can easily understand and access the information. Any purposeful (non-decorative) images should also include textual information describing them to non-sighted learners.

How: If the images you are using are purposeful (i.e. they convey non-textual content), you need to provide an alternative text that would convey the same information as the image. This can be a description in the surrounding text (a good option for complex images, as the description of the image content is provided for everyone), alt tags (useful for simple images – include a one- or two-sentence description of the image) or long descriptions (an option for complex images that can't be described in the surrounding text – provide a link to a separate, longer image description). Make sure that your alternative text conveys content and functionality and is not simply a literal description of the image. A decorative image that doesn't convey content does not require alt text, and screen readers will ignore it.

Here is an example on how to write poor, good and better alt-text:



Attribution: Arctic Beach Life by Vidar Nordli-Mathisen on Unsplash, Unsplash License.

Poor: People swimming at the beach

Good: People running into the water at the beach to go swimming

Better: A group of eight adult men and women dressed in swimsuits running into the water at the beach on a sunny day with cliffs and mountains in the background.

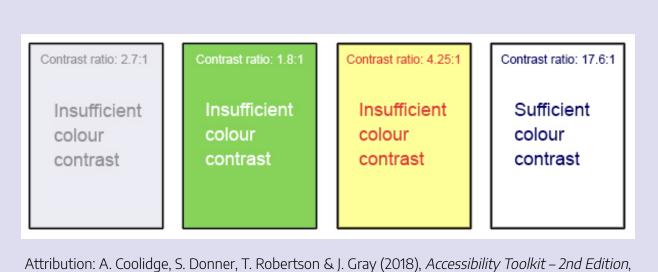
Colour Contrast

What: Colour contrast refers to the contrast of two adjacent colours.

Why: There must be sufficient contrast between the two adjacent colours. The most common example of this is text and background colours. This is important to ensure text legibility for all people, but especially for people with visual impairments, low contrast visual acuity, colour blindness or who use monochromatic devices.

How: Ensure that colour is not the only means of conveying important information (such as essential information in images or links in text). WCAG 2.0 level AA requires that the visual presentation of text and

text images have a contrast ratio of at least 4.5:1 while to meet level AAA, the contrast ratio should be at least $7:1^{1}$.



BCcampus, CC BY 4.0.

Captions and Transcripts

What: Captions and transcripts are text versions of the spoken words in audio, videos, and multimedia presentations.

Why: Providing video captions and audio transcriptions details what is being said and broadens the ability for all users to understand what is being said. This is particularly important for deaf or hard of hearing students, students for whom English is not their first language, as well as students with other learning disabilities better understand the content of the media.

How: Most video hosting platforms (e.g., YouTube, Kaltura, Vimeo, Yuja, Microsoft, etc.) offer machinegenerated captions which can and should be edited for accuracy. Transcripts can also be added as a document under videos embedded in a website or learning management system. They can also be easily added to most video platforms. A good practice to follow for accurate transcripts is to generate a script ahead of time to use when recording.

^{1.} W3C, Web Content Accessibility Guidelines (WCAG) 2.0, 1.4.3 Contrast (Minimum) and 1.4.6 Contrast (Enhanced), https://www.w3.org/TR/WCAG20/



Assess your understanding of the core principles of digital accessibility by completing this H5P activity.

https://	An interactive H5P element has been excluded from this version of the text. You can view it online here: /ecampusontario.pressbooks.pub/masteringopened/?p=65#h5p-7
παρς.//	יפכמוווףעצטוונמווט.ףופּגצעטטאָג.ףעט/ווומגנפווווַקטאָפוופּטַ/ ?אָ־סּאָאוואָאָי-י

CREATING AND USING ACCESSIBLE OER

As many open educational resources are created or hosted on websites, the requirements and practices already presented for the Web apply to OER in general.

A core principle of open education is widening participation through easily accessible learning materials. Ensuring an OER is accessible taps into this by opening up usability for learners with diverse needs. We want to remove as many barriers as possible to participating in use of OER and ensuring your OER is readable and understood by more users is critical.

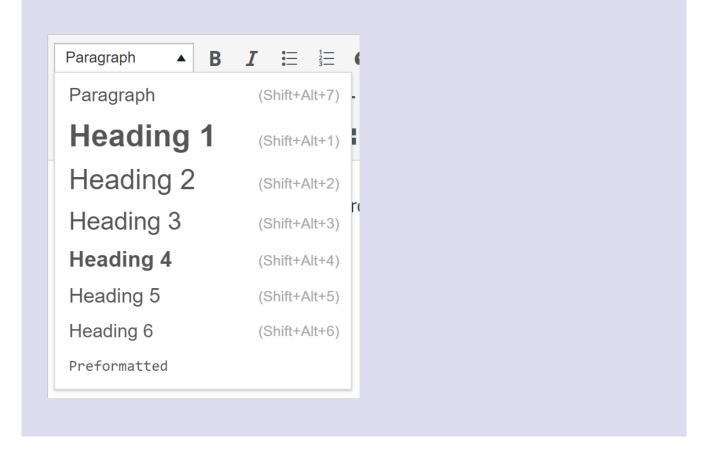
The previous section provides specifics and the recommendation to explore this reference guide by WebAIM, which provides quick tipsthat are helpful when creating resources. As Pressbooks is a leading platform for creating and adapting OER in the Ontario postsecondary sector, we will focus on that platform in this section.

Accessibility in Pressbooks

According to assessments completed in February 2023, Pressbooks' author and reader interfaces meet the requirements of WCAG 2.0 and 2.1, level AA. Of course, it is also up to authors to follow best practices for accessibility when adding content to Pressbooks to ensure that their resource is truly accessible. In general, we recommend using features already available in Pressbooks to ensure accessibility rather than editing the CSS (Cascading Style Sheets) if you wish to customize the look of your resource.

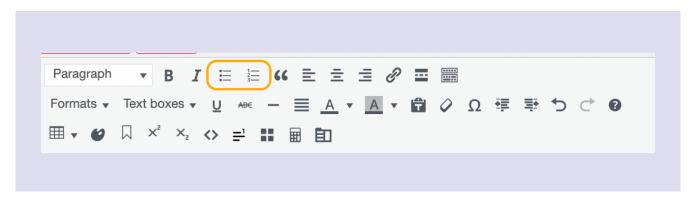
Structure

For content organization, use the Visual Editor styles menu to assign "Heading 1" to sections, "Heading 2" to sub-sections and so on. Headings should not use all caps.



Lists

For lists, use the Bulleted List or Numbered List option in the Visual Editor to structure your list in an accessible manner.



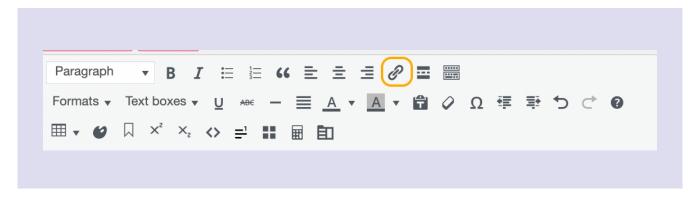
Font Styles

A good step when authoring an accessible OER in Pressbooks is to ensure you are using an accessible Book

Theme. For example, the default theme for the eCampusOntario Pressbooks instance is Malala, which includes a sans serif 12 pt font.

Hyperlinks

To create an accessible hyperlink, copy the link, highlight the text and in the Visual editor, choose insert/edit link and paste the URL. Not that you can also use the shortcut Ctrl/Cmd +K and paste.



Tables

Tables created in Pressbooks need to have a defined structure to be accessible. You need to ensure your table has a legend or title, that there are row and column headers to define the table sections and avoid splitting or merging cells.

To create a legend or title for your table, select the Table icon, then Table Properties and then Legend. Choose the space that now appears above the centre of your table and type a title.

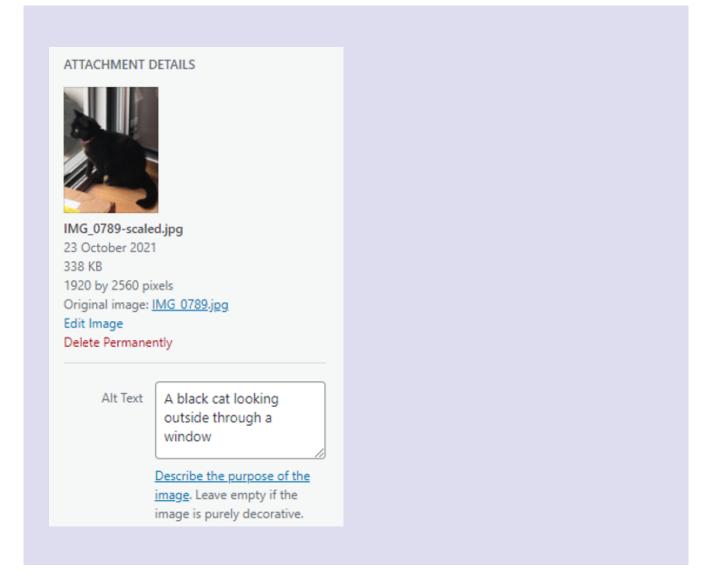
6 Height 45px
Cell padding
e 🔹
nal 🔹
OK Cancel

To add row and column headers after you have created your table, you need to adjust their cells' properties. For example, to add a column header, select all of the cells that in the first column. Then select the Table Icon, then Cell, then Table cell properties and change the "Cell Type to "header cell" and the "Scope" to "Column." Follow the same process to add a row header.

There are many accessibility items to consider with creating tables in Pressbooks. We recommend you review the guidelines on digital content accessibility and Pressbooks by McMaster University.

Alternative Text

For images, add an alt text when adding them to the Media Library.



Colour Contrast

Make sure you check the colour contrast when using two adjacent colours whether they be with your text, background, images, or figures. If you know the hex colour codes you can check via the Color Review contrast checker, or you can paste the URL of your webbook into WAVE Web AIM Accessibility checker and adjust as needed.

Note that if you are an administrator of a Pressbook and require a higher colour contrast to assist with authoring a resource you can change the default admin interface to the Pressbooks a11y selection under "Accounts" and then "Profile". This only changes your interface not that of your readers.

Profile	
Personal options	
Visual editor	Disable visual editor for writing
Code editing	Disable syntax highlighting when editing code
Admin interface colors	Pressbooks Pressbooks a11y

Captions and Transcripts

Because of size limits, we do not recommend uploading and storing media such as audio and video recordings in Pressbooks. Instead, you should upload them to an online repository or hosting platform and use the caption and transcriptions options available within them. For example, uploading your videos to YouTube will give you the opportunity to add and edit captions and transcripts and easily embed them into Pressbooks.

You can also include the transcript for the video and audio recording in the text immediately following the media such as in this example from the Pressbook Essentials of Linguistics which includes the Video Script underneath the video.

Multiple Formats

Finally, it is best to make your webbook available in a variety of formats that allow readers to download your resource for use without an Internet connection (e.g. PDF or EPUB).

Accessibility in H5P Activities

Accessibility in H5P activities is covered in greater detail in the H5P module.

64 | CREATING AND USING ACCESSIBLE OER



Review a resource you have already created in the context of your work using the Checklist for Accessibility [Word document] OR review a resource created by someone else using the Checklist for Accessibility [Word document]. Which features of this resource can you improve upon to make it accessible? How will you proceed? Share your thoughts in a Padlet.



One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/masteringopened/?p=67

CONCLUSION

Generation Key Takeaways

- 1. An accessible OER is a resource that is adapted to a variety of disabilities and learning abilities
- 2. The *Accessibility for Ontarians with Disabilities Act, 2005 (AODA)* requires that web content comply with WCAG 2.0, level AA
- 3. For an OER to be accessible, it is essential to consider its structure, the legibility of the text, descriptive hyperlinks, tables, alternative texts for images, colour contrast as well as captioning and transcripts of audio or video content
- 4. Even if an authoring platform or application complies with accessibility standards, OER authors are also responsible for ensuring that the content they add is also accessible
- 5. Everyone benefits from accessibility best practices

Useful Resources

- Amanda Coolidge, Sue Doner, Tara Robertson, and Josie Gray. (2018). Accessibility Toolkit 2nd Edition. BCcampus.
- Canada School of Public Service. (2021). Making Documents Accessible
- Council of Ontario Universities, Accessible Campus
- Darla Benton Kearney. (2022). Universal Design for Learning (UDL) for Inclusion, Diversity, Equity, and Accessibility (IDEA)
- Inclusive Design Research Centre, Inclusive Learning Design Handbook
- Jacqueline Anderson, Helen Camacho, Ieva Jean, Ingi Hong and Scott Baker, Designing with Intent, Ontario Tech
- W3C Web Accessibility Initiative, Web Content Accessibility Guidelines (WCAG) 2.0 (2008)



Unsure of where to go from here? Navigate with ease using the module map to chart your course!



An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://ecampusontario.pressbooks.pub/masteringopened/?p=70#h5p-15

Attributions

- Government of Ontario. Accessibility for Ontarians with Disabilities Act Annual Report 2019
- Digital Education Strategies, WCAG Principles, *Professional Web Accessibility Auditing Made Easy.* The Chang School, CC BY-SA
- OCADU, Understanding Web Accessibility, Inclusive Design Research Centre, CC BY
- Jessica Blackwood and Kate Brown, Accessible Digital Content Training
- BC Campus Open Education, Accessibility Toolkit 2nd Edition, CC BY 4.0
- Pressbooks, Make Your Book Accessible and Inclusive, Pressbooks User Guide, CC BY 4.0

PART IV

68 | H5P

INTRODUCTION

This module will provide you with fast fundamentals of H5P – from what it is, to why you might want to use it in your teaching and learning, to how to create and use it within online spaces.

What is H5P?

H5P is a free, open-source easy-to-use-yet-powerful content collaboration framework which enables anyone – from novice web users to pro programmers – with the ability to create interactive learning activities and content on the web. It works as a plug-in for web-based platforms such as WordPress, Pressbooks (where it is natively integrated) and learning management systems such as Brightspace, Canvas, Blackboard, Moodle and more.

H5P stands for HTML5 Package – and don't be intimidated by that technical term. Basically, HTML5 is the latest and more versatile version of the standard markup language used to structure and present content on the web – this gives us the power to easily create interactive, responsive, and multimedia-rich content.

The best way to learn about H5P is to first explore and experience the many possible content types. After you familiarize yourself with these, then take the time to consider why you would want to create and use H5P. We'll dig into what you might want to consider, but as with any technology, it's important not to use it just because it exists – but more about what purpose it will serve your teaching and learning context. Once you figure that purpose out, it's time to start looking into what H5P possibilities align. The final step is to give it a go and try it out for yourself. Let's get started!



Learning Outcomes

- 1. Explore the H5P toolset and its range of interactive content types
- 2. Identify contexts in which using H5P provides engaging and interactive learning experiences
- 3. Create interactive content using H5P

70 | INTRODUCTION

4. The presentation below offers some general tips on making some types of H5P content types accessible.

EXPLORE H5P

H5P has an ever-growing catalogue of various interactive content types to choose from. The most current way to explore these is to go to the source – H5P.org – and look at their current catalogue of content types under "View all".

		Content Types		
	View all	Larger Resources Othe	er Tasks	
	4	A diama di Reference diama d		+- × ÷
Accordion	Advent Calendar (b	Agamotto	AR Scavenger	Arithmetic Quiz
Create vertically stacked expandable items	Create an advent calendar	Create a sequence of images that gradually	Augmented reality fun!	Create time-based arithmetic quizzes
Audio Recorder	Chart	Collage	Column	Cornell Notes
Create an audio recording	Quickly generate bar and pie charts	Create a collage of multiple images	Column layout for H5P Content	Take notes using the Cornell system



- 1. Go to the Content Type Catalogue on H5P.org
- 2. Select at least 4 or 5 (or more!) and try the example

3. For each content type, consider the features and benefits and how you could possibly use it in your teaching and learning

Accessibility

H5P has a deep commitment to accessibility and gathers user testing feedback for each tool. Check out their complete list of how each tool meets (or does not meet) accessibility requirements.

Keep in mind that you also have some control of certain aspects of accessibility when creating your content type – such as selecting contrast colours and accessible fonts. Refer to the Accessibility module to learn more about these practices. The presentation below offers some general tips on making some types of H5P content types accessible.

Use the arrows to move through the H5P slideshow below.



An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://ecampusontario.pressbooks.pub/masteringopened/?p=78#h5p-8

Copyright

If you have an idea for an H5P content type and you are including proprietary assets (e.g., publisher materials, images, videos), it must be clearly and appropriately licensed for reuse, or you need to obtain permission from the copyright owner. If you're unsure, you can seek copyright counsel through your Library, Teaching and Learning Centre or a Copyright Office, depending on your institution. To know more about open licenses, visit the Open Licensing module.

WHEN TO USE H5P

Everyone's teaching and learning contexts are different – but one aspect that rings true for all is we don't want to overcomplicate or introduce elements when they don't have a purpose. When considering using H5P for your course or resource, evaluate whether it supports the following key principles:

- 1. The H5P item aligns with intended learning outcomes
- The H5P item provides an opportunity for incorporation of multimedia (multiple modes) to help manage cognitive load during the learning process
- 3. The H5P item provides an opportunity for learners to engage with the content in support of active learning



The following chart¹ will help you consider how you might use H5P for various teaching and learning purposes.

Tools for Formative Assessment	Multiple Choice True/False Fill in the Blanks Mark the Words Drag and Drop Question Sets Interactive Video Image Sequencing
Tools for Unit/Content Review	Course Presentation Flashcards Question Sets Multiple Choice Summary Dialog Cards
Tools for Multimedia Integration	Interactive Videos Branching Scenario Image Hotspots
Tools for Student Submissions*	Questionnaire Audio Recorder Essay Documentation Tool
Tools for Knowledge Application	Branching Scenario

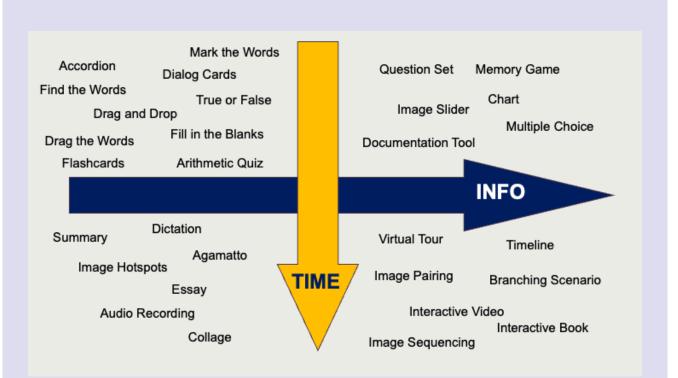
* This only includes the H5P content types where students can submit text/media. Students creating and submitting H5P content types that they have authored is a valuable open pedagogy assignment!

Difficulty Level

You should also consider the difficulty for you to create an H5P as well as the cognitive effort for your learners to use².

^{2.} This chart is an adaption of Slide 7, Intro to H5P for Mohawk College by Peggy French, (CC BY-SA 4.0).

WHEN TO USE H5P | 75



Long Description

A matrix with 4 quadrants. The top left representing less info and less time to create which includes the following H5P content types: Accordion, Find the Words, Drag and Drop, Drag the Words, Flashcards, Mark the Words, Dialog Cards, True or False, Fill in the Blanks, Arithmetic Quiz. The bottom left quadrant represents less info but more time to create which includes: Summary, Dictation, Image Hotspots, Agamatto, Essay, Audio Recording and Collage.

The top right quadrant represents more info and less time to create and includes Question Set, Memory Game, Image Slider, Chart, Multiple Choice and Documentation Tool. The right side bottom quadrant represents more info and more time to create and includes Virtual Tour, Timeline, Branching Scenario, Image Pairing, Interactive Video, Interactive Book and Image Sequencing.

Use Case

Another way of thinking about this is via the following table which lists each H5P content type and their approximate difficulty level to create.

76 | WHEN TO USE H5P

Simple/Easy	Moderate	Advanced/Complex
Arithmetic Quiz	Advanced Fill the Blanks	Branching Scenario
Dialog Cards	Course Presentation	Course Presentation
Drag the Words	Dictation	Interactive Video
Fill in the Blanks	Documentation Tool	Question Sets
Flashcards	Drag and Drop	Interactive Book
Guess the Answer	Essay	Virtual Tour
Image Pairing	Interactive Video	Timeline
Mark the Words	Questionnaire	Image Sequencing
Memory Game	Question Sets	
Multiple Choice	Image Slider	
Single Choice Set		
Summary		
True/False Question		
Chart		

GETTING STARTED WITH H5P STUDIO

Here is a step-by-step guide to getting started with eCampusOntario's H5P Studio. Depending on your familiarity with the platform, you might not need to read each step. If you aren't familiar, we recommend reviewing each step in the following H5P presentation and completing them on your own by opening a new tab or window. Alternatively, you can refer to the "New User Guide to H5P Studio" by eCampusOntario.



An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://ecampusontario.pressbooks.pub/masteringopened/?p=82#h5p-9

Creating H5P content

Now that you have your account, you can get started by creating some H5P content. Don't worry too much about breaking anything when you're playing around in the Studio – you can always delete content. In this next section we'll look and do the following:

- 1. Create H5P Content
 - 1. Question Set
 - 2. Optional Course Presentation or Interactive Video
- 2. Reuse H5P
 - 1. Save your faves
 - 2. Steps to reuse/adapt

78 | GETTING STARTED WITH H5P STUDIO



2.

The best way to learn about H5P is to create a content type yourself! This activity will focus on the "Question Set (Quiz)" – which enables you to integrate multiple different question types options. This will give you a chance to explore a few different content types in one go.

1. Login to the H5P studio and click "Create"

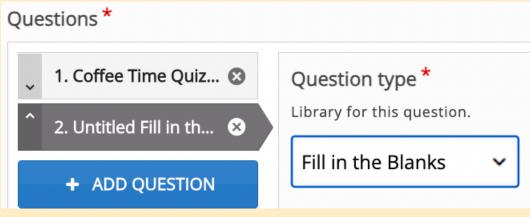
Select "Quiz	: Question Set"	
H5P Editor		
Content type		
HP hub Sele	ect content type	~
• Create (Content O Upload	Paste
quiz		٩
Search Res	sults (7 results)	
	Quiz (Question Set) Create a sequence of various question types	Details

- 3. Add a Title for this purpose we will develop a question set on coffee (but feel free to create your own!) so enter "Coffee Time Quiz"
- 4. You can add a background image for your question set you'll see that we added an image from Unsplash in our example – don't forget to add the licensing information by completing the 'Copyright Information" fields.
- 5. Add your first question select "Multiple Choice" and provide options for answers. You can select "Add Option" to expand it beyond the default two.
- 6. Mark the Correct Answer by checking the box next to "Correct" in this example, Finland is the most caffeinated country!
- 7. We'll keep the "Tips and Feedback" sections blank for now but you might want to try them out!

1. Coffee Time Quiz 😣	Question type *
+ ADD QUESTION	Multiple Choice
	Title * Metadata
	Used for searching, reports and copyright information
	Coffee Time Quiz question 1
	Media
	Question *
	What country drinks the most coffee per person?
	Available options*
	- Canada 🛛 😵 🗘
	Text*
	Canada
	Correct
	Tips and feedback
	- United States
	Text *
	United States
	Tips and feedback
	- Finland 🙁 🛟
	Text*
	Finland
	Correct
	Tips and feedback
	- Sweden 🙁 🗘
	Text*
	Sweden
	Tips and feedback
	ADD OPTION

I

8. Add another question. Click "Add Question" and this time choose "Fill in the Blanks" from the drop-down menu



9. Add your various Text Blocks. The correct fill in the blank answer must be contained within two asterisks. Click on "Show Instructions" to see additional support on providing alternative responses and hints. Note that you can add more text blocks by selecting "Add Text Block"

Title * Metadata	
Used for searching, reports and copyright information	
Coffee Quiz Fill in the Blanks	
▶ Media	
Task description *	
A guide telling the user how to answer this task.	
Fill in the missing words	
Text blocks *	
Line of text	8 🗘
	i Show instructions
The most common coffee bean in the world is the *Arabica*	thean
The most common concer beam in the world is the "Arabica	Scan
Line of text	8 0
	i Show instructions
A concentrated coffee served in small, strong shots is *espre	esso*
Line of text	⊗ ≎
	I Changing the
	i Show instructions
B I <u>U</u> S I _x ≡ ≡ ≡	
An average cup of coffee contains about 125 milligrams of *caffeine*	
body p	
	-

10. Now let's try one more question type – the "Drag the Words" option

Questions *	
🔪 1. Coffee Time Quiz 😣	Question type *
2. Coffee Quiz Fill i 😢	Library for this question.
[^] 3. Untitled Drag the ⊗	Drag the Words 🗸

11. Similar to the Fill in the Blanks question, you insert text into the Text Block and identify the correct 'draggable' words by placing them within two asterisks. Check out the "Show Instructions" for advanced features.

Coffee Quiz Drag the	Words		
• Media			
Task description *			
Describe how the user shou	Ild solve the task.		
Drag the words into t	the correct boxes		
Text *			i Show instruction
	Seattle. The r nilla* Latte. Ho	nost popular or	-

Optional Activities

There are numerous content types in addition to the Question Set. To expand your knowledge of H5P, we encourage you to try to build two of the more popular content types on H5P Studio.



Course Presentation

Course Presentation is like a slideshow of content that you can strategically pepper with reflective questions and prompts. Check out this example as well as this one and then give the following tutorial a try. Try the Course Presentation Tutorial.

Interactive Video

The interactive video content type adds engaging features to your videos by integrating checkpoint questions and prompts that the user engages with as they are watching a video. Here is an example using the openly-licensed "World of Amphibians" video from YouTube. Note the circles that appear on the timeline indicate a new checkpoint. Try the Interactive Video Tutorial.

Reusing H5P Content

One of the 'open' benefits of H5P is the ability to easily reuse and adapt content that others have created if they have licensed it for re-use. If, for example, someone has already created a Branching Scenario on conflict resolution and you are looking to create the same – you can download the .h5p file, upload to your account, and adapt it for your context – saving you time and tapping into what others have openly shared.

Save your Faves!

A good way to get started with reusing H5P is to take some time to explore eCampusOntario's H5P Studio and save your favourites. To do this, you:

- 1. Log in to the H5P Studio
- 2. Click on Catalogue
- 3. Use the various search fields to find H5P interactives for your context
- 4. Click the little heart icon next to "Save to My Favourites
- 5. Your Favourite H5P's will now appear in your Dashboard under the (appropriately!) "My Favourites" tab.

Steps to Reuse/Adapt

Now that you've found an H5P that you would like to reuse, you can decide whether you want to retain and embed it as is or adapt it for context. Embedding it as is, is as easy as clicking on the "Embed" option in the bottom left corner, and copying and pasting the code into whatever platform you would like it to appear in (e.g., LMS, Pressbooks, WordPress). We'll talk more about those steps in the next section.



To reuse and adapt the H5P, let's try the following steps:

- 1. In the H5P you have found, select "Reuse" which should appear at the bottom left corner of the interaction. You will be prompted to download the h5p file.
- 2. While logged into the H5P studio, select "Create"
- 3. This time, instead of selecting "Create Content" select "Upload"
- 4. Grab the .h5p file from your downloads folder and upload
- 5. Now you can edit and adapt!

EMBEDDING H5P CONTENT INTO LEARNING MANAGEMENT SYSTEMS

Now that you have created some content, the next step is to learn how to embed that content into your course. For this section, we are outlining the steps for this within Brightspace (D2L) as it is the most commonly-used LMS in Ontario postsecondary education – however, here are links to tutorials for Canvas, Blackboard and WordPress.

Step 1: Find the Embed Code on H5P

Once you have created your content piece, and saved it, you can view the content piece. At the bottom of the content piece, above "Save to my Favourites," you'll see two buttons, "Reuse" and "Embed." Click "Embed".

Drag the w	ords into the correct boxes and	then click "Che	ck" at the bot	tom!		
The	is where you can see any	y content that you	had previously	v developed.		Catalogue
The	is where you can see co	ntent created by c	others!			right
		_				Dashboard
To develop your own To get a quick orienta		on the top		of the screen		Tour
	k orientation to the H5P Editor, clic	ĸ	on the top		of the screen.	Create
						left
🛛 🕑 Check						

A small box titled "Embed" will appear on the screen. Copy the Embed code, ensuring you have both the beginning. If you wish, you can alter the dimensions by changing the numbers in the box, making the content piece bigger or smaller depending on your needs.

Drag the wor	ds into the correct box	es and then click "Check" at the bottom!		
The	is where you can	Embed X		Catalogue
The	is where you can			

Step 2: Pasting the Embed Code in Brightspace

Create a new file by navigating to your course shell. Select the Content tab, and then select the correct module in the left-hand column which has the Table of Contents. Once the module opens in the main column beside the Table of Contents, open the dark blue Upload/Create drop-down menu underneath the module title, and select "Create a File."

→ C ê avenu	e.cllmcmaster.ca/d2l/le/content/332815/	lome		9 ☆	● ★ ≕ 🤅
	Content Resources 🗸 Comm	unication 👻 Assessments 👻 Course Admin			
	Search Topics Q		Print Stattings		
	Overview	H5P			
	Bookmarks	~			
	Course Schedule	Add dates and restrictions Add a description			
	Table of Contents 64		🔗 Bulk Edit		
	Creating Interactive	Upload Files ive Content Using H5I	Ρ	øø · ✓	
	Developing A Teaching 8 Portfolio (For TAs, Graduate Students, and Postdoctoral Fellows)	Video or Audio		, w ; ♥	
		Create a File	the workshop!		
		Create a Link active Content Using	~	~	
	Universal Design for 18 Learning and Accessibility	Add from Manage Files			
		Add Object from LOR New SCORM/xAPI Object		~	
	M Hidden	New Assignment of Content and their U	ses 🗸	~	
	Getting Started: 9 Important Information ii for Graduate Teaching Fellows	New Checklist			
		tep-by-Step Guides New Discussion	~	~	
	🗯 Hidden	New Quiz porating H5P (Optiona	al) 🗸	~	
	FDW Lesson 3 5	Summary: Creating Interactive Content Using H5 Web Page	P ~	~	

Format the new file as you wish (e.g., add text description, context). Then, when you have selected the position where you wish to add your H5P content, use the "Insert Stuff" button, which includes a play button in the top left corner, a pause button in the top right corner, a circle in the bottom left corner, and a square in the bottom right corner.

From the "Insert Stuff" menu that appears, select "Enter Embed Code" and paste the embed code from H5P.

88 | EMBEDDING H5P CONTENT INTO LEARNING MANAGEMENT SYSTEMS

Content Nesot	rrces ∽ Communication ∽ Assessments ∽ Course Admin		
Edit HT	Insert Stuff	×	
Orientation to t	Add Video Note	>	
Hide from Use	Video Note Search	>	
Paragraph ~	YouTube	> 53	
	•• Flickr	>	
	o ^p Insert Link	>	
	Enter Embed Code	>	
	Add MacVideo Media	>	
	Cancel	1.	
	H5P studio before, you will need to click Register and fill out the form, but if you know you already have an account you can just login with your username and password.		

Now your H5P content is embedded in your course!

CONCLUSION

In this module we discovered what H5P is and considered the possibilities for its use in your teaching and learning. We explored some of the content types and evaluated which ones might be best suited for your use. We went through the steps of getting an account on eCampusOntario's H5P studio and got started by creating some content and learning how to reuse and embed in various platforms.

There are numerous resources and support communities available for H5P so take a look and advance your learning beyond this module.

G Key Takeaways

- 1. H5P is an open-source platform used to build interactive content in HTML5 for embedding in websites, Pressbooks and Learning Management Systems.
- 2. H5P has an ever-growing catalogue of many interactive content types.
- 3. Various H5P content types can be explored for different teaching and learning purposes, as well as time and effort to create and use.
- 4. eCampusOntario offers H5P for free to all Ontario colleges, universities and Indigenous institutes via the H5P Studio.
- 5. H5P content is easily created and reused in the H5P Studio as well as embedded in Learning Management Systems.



• H5P.org – the definitive spot for all things H5P!

90 | CONCLUSION

- eCampusOntario's New User Guide to H5P Studio -introduces new users to H5P studio and provides information on creating an account, creating and using H5P content types and additional resources.
- The H5P Kitchen a BCcampus initiative by Alan Levine providing numerous user-friendly tips, tutorials and recordings on learning about, and getting creative with H5P.
- Conestoga College H5P Guide created by Conestoga College's Faculty Learning Hub, this is a wonderful step-by-step resource on H5P with brief videos.



Unsure of where to go from here? Navigate with ease using the module map to chart your course!



An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://ecampusontario.pressbooks.pub/masteringopened/?p=90#h5p-15



- University of British Columbia, Why use H5P? UBC's H5P Open Hub, CC BY
- Levine, Alan, Organizing the H5P Utensil Drawer, The H5P Kitchen, CC BY

PRESSBOOKS | 91

PART V PRESSBOOKS

92 | PRESSBOOKS

INTRODUCTION



Pressbooks is an open source, web-based authoring platform. And when you unpack the name a bit you start to understand what is – the "Press" part being that it is built on the WordPress web content creation platform, and the "books" portion in relation to that it was originally developed, and largely is used for, publishing open online books. And although the platform divides the organizational structure of the resource into Parts and Chapters – Pressbooks can be used for so much more. For the purposes of this module, we will focus on open textbook publishing, but keep in mind that some wonderful examples of open online learning materials developed via Pressbooks tap into its flexible and easy-to-use interface.

You don't need to know anything about book design or ebook development: Pressbooks has been built to handle all the details for you, and lets you focus on the creation! Pressbooks is supported by eCampusOntario, who has made it freely available for all Ontario post-secondary educators, learners, and staff to create and adapt open textbooks. Let's look at some of the key features of Pressbooks:

- 1. Write once, publish many: Pressbooks makes it easy to export well-formatted publications in multiple outputs (PDF, EPUB, and more)
- 2. WYSIWYG (What You See Is What You Get) Editor for familiar creation: Creating right in Pressbooks is similar to creating a Word document with a bit more fun added into the mix
- 3. Easily clone other openly licensed content created in Pressbooks to adapt for any teaching and learning context
- 4. Accessible: Web-based resources built in Pressbooks are by default designed to be accessible and compatible with screen readers and other assistive technologies. Keep in mind there are other key elements you need to consider when creating to make your resource more accessible and inclusive.
- 5. Easily add users with various roles and permissions to enable collaboration on a resource
- 6. Familiarity of the traditional textbook, but with the ability to move the medium forward and become more of a learning environment

Let's take a look at two recent publications that were recognized as favourites by the Pressbooks community.

94 | INTRODUCTION

Navigate each for a few minutes to familiarize yourself with the user experience when accessing a published webbook:

- Liberated Learners: How to Learn with Style This resource was created via a collaboration of several institutions and offers readers 4 modules on the various dimensions of digital learning. Notice the design aesthetic, integration of H5P interactions, various use of multimedia and distinct voices of the authors.
- Pulling Together: Indigenization Guides A series of guidebooks aimed at educating educators, researchers, and staff across post-secondary institutions in British Columbia. An important and highly collaborative project supporting systemic change through Indigenization, decolonization, and reconciliation.

Now that you know a little more about Pressbooks and have seen it in action, let's focus on using it. This module will guide you through a series of steps and options and have you creating your first (simple!) book.

Learning Outcomes

- 1. Navigate the Pressbooks platform to create, export and publish a simple digital book.
- 2. Add multimedia elements, including videos, images, hyperlinks, and H5P interactive activities using Pressbooks to enhance learning.
- 3. Collaborate within Pressbooks throughout the creation process.

GETTING STARTED

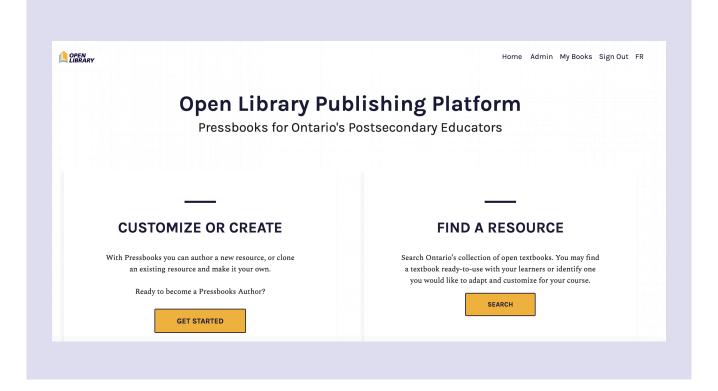
Create an Account

Pressbooks is a centrally managed network of individual books hosted by eCampusOntario and available for free to educators, students and staff at Ontario colleges, universities, and Indigenous institutes. This is Ontario's Pressbooks homebase – and each book you create will have a home page on this network.

If you don't already have an account, there are two pathways to get one. Either way, start by:

- 1. Going to the Open Library Publishing Platform
- 2. Click on "Get Started" under "Customize or create"
- 3. Select your Institution from the drop-down list
- 4. If your institution has enabled single sign on, you will be prompted to select the "INSTITUTIONAL LOGIN" option and log in with your institutional credentials
- 5. Otherwise, you will be prompted to complete a form and a member of the Open Library team will review your request and confirm within 2 business days.

Once you've created your account and have successfully logged in, you'll be presented with a page like the one you started with, but with "Admin" and "My Books" options.



Overview of the Pressbooks Interface

Before creating or writing in Pressbooks, you may want to consider a few important features or elements about your book. Take some time to think about your book's landing page, also known as the "webbook". To be clear, whether the resource you're creating is an actual 'book' or not – this is the term used to describe the landing page. The "webbook" is the book's home page. Each book you create will have its own distinct URL. A book's home page looks a bit like the image below.

•	Neuroscience: Canadian 1st 2 Dition 2 Dr William Ju 2 Neuroscience: Canadian 1st Edition Open Textbook is a comprehensive source that examines the nervous system, neurodegeneration, techniques in studying neuroscience and emerging topics in the field. 2 Image: Complete Commons Attribution Commons Attribution	NEUROSCIENCE Canadian 1ª edition open textbook
	READ BOOK	Download this book EPUB3 EPUB Digital PDF Print_pdf MOBI Pressbooks XML
	4 CONTENTS HIDE ALL CONTENTS Acknowledgements: eCampusOntario Lunit 1 - Neuroscience: The Basics 1.1 The Cellular Levels of Organization	WordPress XML OpenDocument
	1.1 The Cellular Levels of Organization 1.2 The Nervous System and Nervous Tissue	

METADATA

TITLE

Neuroscience: Canadian 1st Edition

AUTHOR

Dr William Ju

EDITORS

Georgia Bains; Ingrid Barany; Maksym Shcherbina; and Summer Lee

ILLUSTRATORS

Ingrid Barany; Maksym Shcherbina; Summer Lee; and Thanvin Giridhar

CONTRIBUTORS

Alexandra Santos; Amy Freeman; and Emerson Daniele

<u>Neuroscience: Canadian 1st</u> <u>Edition</u> Copyright © by Dr William Ju is licensed under a <u>Creative</u> <u>Commons Attribution 4.0</u> <u>International License</u>, except where otherwise noted.

The book cover is on the right and, below it, a drop-down menu shows the different download formats. There's also basic descriptive information about the book, as well as a clickable table of contents that lets you browse the book. You can also include other metadata at the bottom of the page.

- 1. Title, author, licensing information
- 2. Cover image
- 3. Download options
- 4. Table of contents
- 5. Metadata

There should also be a basic description of the book.

The best way to learn about the Pressbooks platform is to simply start creating with it. In this next section, we'll walk through the process of creating a new book that you can use as your safe space for testing things out prior to publishing a more permanent resource.

Create a Book

There are three ways you can create a new book in Pressbooks:

- 1. Create a new book from scratch
- 2. Clone an existing book and adapt it
- 3. Import an existing resource to create a new book



This activity is optional.

Complete the steps below to create a Pressbook from scratch.

- 1. Click on "Create a New Book".
- Create your URL: the URL for all your resources will start with
 ecampusontario.pressbooks.pub/ and you'll be asked to fill in the remainder of this.
 Choose wisely because you won't be able to change it later. For this Activity, simply call it
 "My Sandbox".
- 3. Add a title we suggest "My Sandbox".
- 4. Choose the language of the book (this corresponds to the language of the reader's interface).
- 5. Set Privacy: Choose "No" for this purpose as you don't want your "My Sandbox" book to be visible to anyone but you!

Clone a Book

There are other ways to create new content for your book other than from scratch. You can clone any book in a Pressbooks network, provided it is licensed under an open license that allows adaptation. You can duplicate the book's content and settings by simply copying and pasting its URL, then assigning a new one.



This activity is optional.

Complete the steps below to clone a book in Pressbooks.

- 1. Search the Pressbooks Directory for a Pressbooks resource that has a license that allows for adaptation.
- 2. Copy the URL.
- 3. Make sure you are logged into your own Pressbooks instance.
- 4. This time choose "Clone a Book".
- 5. Paste in the Pressbooks URL link of the original book.
- 6. Create a link for the new book.
- 7. Add your own title of the new book.

A cloned copy of the original resource will now be listed in your books (under "My Books"). You can now easily edit the Parts and Chapters to customize and contextualize it for your own teaching and learning purposes.

You can also add a source comparison. If you clone a book, it will always feature that handy little tag at the bottom of the page indicating the book's source and linking to it. This helps readers understand which version of the book they're looking at. You can even activate a side-by-side source comparison to show readers what has changed in your version.

Import an Existing Resource

If you've already created content elsewhere via another tool or platform, you can easily import it. You can import Word documents, EPUBs, XML or content from URLs. For example, if you have written content using Word, you can import this content and create a digital book that can be shared and distributed in different formats. You can also use the import function to extract specific chapters if you want to rework or just use part of an existing text.

Best practices for importing .DOCX files – Importing from one format to another never goes smoothly, so you'll need to do a bit of clean-up. You can prepare your Word document to facilitate this process:

1. Ensure that the file name does not contain any special characters

- 2. Check your file size (maximum 25M)
- 3. Mark new chapter titles as "Heading 1". Pressbooks recognizes "Heading 1" as the title of a new chapter.
- 4. Use the style panel: Basic markers will be transferred (e.g. bold, italic, etc.), but special fonts and colors will not
- 5. Make sure your images are accompanied by alternative text



This activity is optional.

Complete the steps below to import an existing resource into Pressbooks.

- 1. Find an existing Word Document resource that you have created and/or used in a course.
- 2. Log into Pressbooks and go to the "My Sandbox" book you created earlier.
- 3. On the tool list (normally in the Dashboard on the left) select "Import".
- 4. Choose the type of file to import in this case, Microsoft Word (docx).
- 5. Select your file and click "Begin Import".

When you import content, a list of all "chapters" is displayed, allowing you to choose which chapters you want to keep and where in the book you want items to appear. Chapters can easily be reorganized later using the "Organize" menu, so don't worry too much about getting everything in the right place from the start. This is also useful if you're only adapting part of a book and want to exclude certain sections.

PRESSBOOK BUILDING BLOCKS

Next, we'll take a look at the primary pieces you need to familiarize yourself with in order to create a resource in Pressbooks. This by no means is an exhaustive overview – you can continue acquiring more advanced knowledge by checking out the Useful Resources section at the end of this module. Keep in mind best practices for accessibility covered in a previous module as you complete this one. Here, we will cover the:

- 1. Authoring Dashboard
- 2. Dashboard Menu
- 3. Sharing and Privacy
- 4. Organization and Editing (Parts & Chapters)
- 5. Visual Editor
- 6. Book Information
- 7. Appearance
- 8. Publishing and Exporting

Authoring Dashboard

The dashboard is where you are automatically directed after you log in. It is where you, as an author, will spend most of your time writing and where you can find a list of the various tools and functions. Here is a handy breakdown of some of the items that appear there:



An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://ecampusontario.pressbooks.pub/masteringopened/?p=100#h5p-10

Dashboard Menu

The menu bar on the left side of the authoring interface contains a list of options for you to use while creating your book. This breakdown explains each option further:



Sharing and Privacy

At the start of creating your book, you should think about its sharing and privacy settings. Specifically, you should review the selection of fields for book visibility and inclusion in the Pressbooks directory. These are all aspects you can come back to later in your project to adjust.

Organization and Editing (Parts & Chapters)

When you create a book, Pressbooks automatically generates three parts, which you can view by clicking "Organize." They are:

- 1. Front Matter
- 2. Main Body
- 3. Back Matter

These can be easily deleted or modified to suit your book by clicking on it to bring up the editing interface.

Front matter sections usually contain items like acknowledgements, foreword, introduction, and abstracts. The **main body** is normally where the bulk of the content is created through parts and chapters, and the **back matter** commonly is the place for appendices, glossary, bibliography, and version history.

What is the difference between Parts & Chapters?

Chapters are the pages that contain the main content of the resource. Parts are like containers for chapters – think of them as the overarching sections which can contain as many chapters are you like. So, a complete resource is made up of multiple chapters which are sequentially ordered in parts.

Note that although the Pressbooks platform uses the names "parts" and "chapters" you are welcome to label these sections whatever you like. For example, you could label parts as chapters and label chapters as chapter sections.

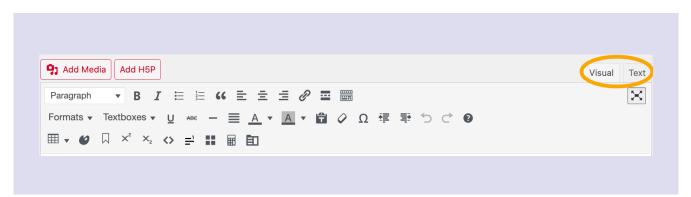
 Image: Contract of the second seco

Note that you can also add Parts and Chapters when you click on "Organize" – bringing you to a page that looks like this:

My Sandbox Exp	ort Add Front Matter Add Back Matter A	dd Chapter Add Part Add Glossary Term				
Word Count: 32 (whole bo	ok) / 32 (selected for export)					
Front Matter Add Fro	Front Matter Add Front Matter					
er Title	Authors	Show in Web	Show in Exports	Show Title		
Overview	-					
e Edit View	er Add Part					
Title	Authors	Show in Web	Show in Exports	Show Title		
Sample New Chapter	-					
Back Matter Add Bac	< Matter					
Title	Authors	Show in Web	Show in Exports	Show Title		
Appendix	-					
nt anu Damad ta Damata da I	cout · Guides and Tutorials · Diagnostics · Site Map	- Contact				

Visual Editor

After creating a new chapter or part, click on it and you will see the editing interface. This is a rich text editor with a visual and textual option that is fairly intuitive but has limited customization. Each part and chapter have their own hyperlink, making it easy to share and integrate distinct pieces of the book. The editing interface has standard text editor functions, including footnotes.



Note the Visual vs. Text options (highlighted). This is particularly useful when formatting doesn't always appear as expected when you preview the book – giving you the ability to use the text editor and examine the HTML code for errors, e.g. extra spaces. Of course, it is recommended to save often!



An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/ masteringopened/?p=100#h5p-13

Book Information

This tool is where you add the title and description, add contributors, add copyright information and/or choose a license for your book. It is also where you upload your book's cover image. If you prefer, you can use the simple cover available from Pressbooks under Export – Cover Generator.

Appearance

There are over twenty different themes to choose from in Pressbooks. The default theme is Malala. We recommend this theme or Jacobs or McLuhan as they are more accessible and we find them more suitable for textbooks. However it is up to you – each theme has many customizable options. For example, you can choose the colours of the text boxes or the table of contents. You can also set different parameters for PDFs, Web Books and eBooks. Finally, if you have the coding skills, you can edit your book's Cascading Style Sheets (CSS) to create something completely unique. The Liberated Learner project shown earlier is a great example of use of CSS to create a signature design aesthetic.



We advise selecting your theme early on in your project, as different themes have variations in appearance and customization options that may affect the digital, e-book or PDF versions of your content.

Publishing and Exporting

Before you share your work with the world, take some time to think about how your content is organized for publishing online and the various export options. Some important questions to ask yourself are:

- 1. Do you have Web-only sections? If so, you may want to exclude them from export files.
- 2. Do you need to move chapters within the same part, or move them to another section? Then take a look at the "Organize" page and make the necessary changes.
- 3. Do you have your own book cover that you'd like to supply for a printed version of your work? Or do you need to create one?



Once the book is organized and all content is complete, you're ready to export. Note that if you've included videos and H5P elements, these will not be included in the PDF and eBook versions. A placeholder will appear with a link to the web version to watch the video or complete the activity online. Pressbooks offers several export formats to meet different distribution and accessibility needs. Whichever export type you select, it will be available in the "download this book" drop-down list under the book cover. For the purposes of this module, we won't export your "My Sandbox Book" project, as you likely want to keep that hidden.

We highly recommend reviewing the Export chapter in the Pressbooks User Guide to determine what is right for you.

ADDING MULTIMEDIA

Now that you've created and configured your "My Sandbox" book, let's look at some of the steps you can take to transform your flat text into content that is more easily digestible and engaging from a learner perspective. In this section, we'll look at some of the options you might consider to make y our resource more dynamic, visually appealing and interactive. These include:

- 1. Textboxes
- 2. Images
- 3. Audio
- 4. Video
- 5. H5P Interactive Elements

Textboxes

Within the Visual Editor, there is a "Textboxes" option. You can see from the image below the number of options that have been designed with suggested content in mind.

Standard: This is a standard textbox.							
S	baded: This is	is a shaded textbox.					
Examples							
This is an Ex	Exercises	Key Takeaways					
• First • Second	This is an Exe • First • Second	This is Learning Objectives					



Щ,

An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://ecampusontario.pressbooks.pub/masteringopened/?p=102#h5p-14

It is recommended that the Textboxes be used for the purpose they have been designed for (e.g., Learning Objectives) due to metadata added to each textbox for optimal discoverability. However, the headings can be rewritten to better reflect the exact content added. You can always easily modify the font type, size, and colour.

Images

Once you have found (or created) an openly-licensed image to add to your book, you add it via the Media Library. Make sure the image you have selected is either .jpg, .gif or .png.

Activity

- 1. Find an openly-licensed image (e.g., on Unsplash) and save it to your computer
- 2. Navigate to a Part or Chapter of the book and place your cursor where you would like the image to appear
- 3. Click on "Add Media" within the Visual Editor
- 4. Select "Upload Files" and choose the image from your computer (note the maximum file size within the eCampusOntario Pressbooks platform is 24MB)
- Complete the necessary fields for the "Attachment Details" (Alt Text, Title, Caption, Description), "Attributions" (Source URL, Author, Author URL, License, Adapted by, Adapted by URL)
- 6. Determine and insert your preferences for the "Attachment Display Settings" (Alignment, Link to, Size)
- 7. Click "Insert into Chapter"
- 8. Save and preview

Another option to add an image that you have the URL for, is to select "Add Media" and "Insert from URL." Keep in mind that this will hyperlink the image and does not give you the option to include information contained in the aforementioned "Attachment Details." Also note that while it is best to edit your images before you upload them to your book, Pressbooks does offer limited editing capabilities.

Audio

If audio is stored within an online repository (e.g., Soundcloud), you can embed it by copying and pasting the URL into the Visual Editor. This will automatically embed the audio clip. If the audio is from a platform that does not allow oEmbed, it must be hyperlinked. It is important to ensure all of your media is accessible and

audio is no different. The audio should have an accompanying visual of any words in the clip. If this is missing, you must supply a link to a transcript for individuals with disabilities to interact with it.

Activity

- 1. Locate an audio clip on Soundcloud. You might want to use "Beats to Study To" from the Liberated Learner
- 2. Copy the URL for the clip
- 3. Navigate to a chapter within your My Sandbox book
- 4. Place the cursor where you would like the audio clip to appear
- 5. Paste, Save and Preview

Video

Similar to audio, video that is stored within a dedicated streaming service that supports oEmbed like Youtube, Vimeo, etc. can be embedded into your book. Additionally, your videos must be appropriately captioned – the bare minimum being automatically generated captions, but ideally captions that are 100% accurate.



- 1. Copy the URL of a Youtube Video (find your own or you can use this one)
- 2. Navigate to a chapter within your "My Sandbox" book and open for Editing
- 3. Paste the URL where you want it to appear in the Visual Editor
- 4. Save and Preview

Magically, you will see the URL you pasted replaced with the embedded video.

H5P Interactive Elements

The eCampusOntario hosted version of Pressbooks includes H5P, an open-source plugin which you can use to create interactive content and learning activities in your book. There are over 50 content types (and growing!) that you might consider integrating into your book to elevate the content.

While there is a separate module on H5P in the Train the Trainer suite, we'll review the steps to activate and use the plugin to create H5P content within your resource. We encourage you to check out the H5P module for more advanced guidance on using and reusing H5P content developed globally, or within the eCampusOntario H5P Studio. Let's try it out by creating a Multiple Choice H5P interaction as a knowledge check.

Activity

- 1. Active the H5P Plugin through the Dashboard by clicking on "Plugin" and activating (a new "H5P Content" will now appear on your Dashboard Menu)
- 2. Click "H5P Content → Add New" from the Dashboard Menu
- 3. Click "I Consent, give me the Hub!" to enable the H5P interface
- 4. Scroll down through the various Content Type options and click "Get" next to Multiple Choice
- 5. Review the Content Demo (optional)
- 6. Click "Install"
- 7. Once Installation is complete, click "Use"
- 8. Add a Title (note this does not appear on the interactive and is used for metadata). For this activity you can create your own, or use our example "Multiple Choice Question: Periodic Table"
- 9. Add a Question E.g., "How is the element Helium represented on the periodic table?"
- 10. Enter options for the for answers. Note that the default is two options and you can click "Add Option" to expand the number of possible answers. E.g., enter "Hm", "Hu", "He"
- 11. Click the box next to "Correct" for the "He" option
- Check out the possibilities and default selections for the "Tips and Feedback", "Overall Feedback", "Behavioural Settings" and "Text Overrides and Translations" – for the simplicity of this activity, we won't adjust these.
- 13. Scroll up and click "Create"
- 14. Your new H5P interaction is now saved to your Library

- 15. Insert it into any Chapter of your book by clicking on "Add H5P" (a new box next to "Add Media" in your Visual Editor) and selecting "Insert" next to the H5P you just created
- 16. Save and Preview!

A couple of things to keep in mind:

- You can always upload an existing H5P to your Pressbooks and contextualize it rather than starting from scratch
- If you have cloned a book that includes H5P, unfortunately the H5P content does not copy over to the new version.

Other Pressbooks Tools

There are other features within the Visual Editor that you might want to explore that aren't detailed in this section. They include tables, lists, glossary, and footnotes.

In addition to H5P, Pressbooks has optional plugins you also may want to activate depending on what is needed for your resource. We won't go into great detail on these, but have included more advanced resources for you to consider.

Hypothesis: Hypothesis is an open-source web annotation tool which, when activated in Pressbooks, gives users the ability to annotate (publicly or privately). This can be a powerful teaching and learning activity for your readers, enabling open dialogue and engagement. It can also be used as part of the publishing process for editing and proofreading purposes. Find out more and see Hypothesis in action.

MathJax: MathJax is another open-source JavaScript display engine integrated into Pressbooks – providing you with a method for rendering LaTeX (mathematical markup) into web accessible equations. Learn more and see a demo of its use.

TablePress: TablePress is a plugin which gives you the power to create dynamic, iterative tables that can be sorted, filtered and searched within your resource. Here is further reading and an example.

ADDING CONTRIBUTORS

You can work collaboratively in Pressbooks by assigning contributor roles from the book Dashboard. There are five roles for contributors, ranging from "subscriber", with read-only permissions, to "administrator", who have the right to edit all book content. An "author" can create their own content in the book, but can't modify other contributors' content or the book's settings.

Role	Manage Users & Settings	Add or Edit Chapters	Publish Chapters	Delete Chapters	Read Private Chapters	Comment (if enabled)
Administrator	Yes	Yes	Yes	Yes	Yes	Yes
Editor	No	Yes	Yes	Yes	Yes	Yes
Author	No	Only their own	Only their own	Only their own	Only if setting is enabled	Yes
Collaborator	No	Only their own	No	No	Only if setting is enabled	Yes
Subscriber	No	No	No	No	Only if setting is enabled	Yes

Roles in Pressbooks

If you have co-authors, you can add them as contributors to a particular book. Once you have a book, you can add them from the Dashboard menu under "Users" – "Add New"



If your contributor already has a Pressbooks account on the eCampusOntario network, you can add them as an "existing user" with their institutional email. If not, you can add a new user to Pressbooks by creating a new account "Add New User", which requires the assignment of an identifier (username) and their institutional email. The new user will receive an invitation to activate their account by logging in. This option also applies when you want to add contributors from other postsecondary institutions in Ontario that have their own instance of Pressbooks, such as York University or Toronto Metropolitan University (TMU).

If you're working with contributors outside Ontario's post-secondary sector (other sector or out-of-province),

new accounts must be requested directly from eCampusOntario. You can have an unlimited number of contributors in each book, but you can't all edit the book's content at the same time. Save often and be careful not to override if a user is currently in the book.

CONCLUSION

• Key Takeaways

- 1. Ontario post-secondary educators, learners and staff have the ability to create a free Pressbooks account courtesy of eCampusOntario.
- 2. The best way to learn about Pressbooks is to start using it by creating a safe 'sandbox' book to check out the various editing capabilities, tools, features and plugins.
- 3. You can enhance usability, aesthetic, and reader engagement for your book by tapping into various formatting options and exploring adding multimedia and H5P content types.
- 4. Pressbooks opens up collaboration opportunities by allowing you to add multiple users in various roles

 all working together on a shared book.

Useful Resources

- Pressbooks User Guide
- Rebus Community
- Pressbooks Forum
- BC Campus Pressbooks Guide
- Ontario Open Library Support



Unsure of where to go from here? Navigate with ease using the module map to chart your course!



An interactive H5P element has been excluded from this version of the text. You can view it

online here: https://ecampusontario.pressbooks.pub/masteringopened/?p=106#h5p-15

Attributions

- 1. Brunet, Mélanie, Introduction to Pressbooks for Digital Publishing, CC BY-SA
- 2. eCampus Ontario, Introduction to Pressbook
- 3. Aesoph, Lauri M., Pressbooks Guide, BC Campus Open Education, CC BY

118 | CONCLUSION

PART VI BUILDING OPEN EDUCATION INITIATIVES

INTRODUCTION

Open education initiatives focus on removing barriers to learning by making educational resources, materials, and practices freely accessible to all. Whether you are a seasoned educator, a dedicated administrator, or a passionate advocate for equitable access to education, this module will provide you with insights and strategies to champion and implement open education practices at your institution.

Learning Outcomes

- 1. Explain the importance and benefits of sharing and collaborating openly in educational institutions.
- 2. Identify the different types of open education initiatives by level of engagement.
- 3. Outline the strategies required to grow open institutional initiatives.
- 4. Discuss steps and strategies for developing a department dedicated to supporting the development of OER.

BENEFITS OF SHARING

Why is it Important to Share Openly?

The open sharing of information and knowledge not only allows for greater access, but also supports collaboration and innovation. The idea of free and open sharing in education is not new. In fact, education IS the sharing of information and ideas upon which new knowledge, skills and understanding can be built. Sharing information allows for greater retention as it becomes part of a collective repository that many can access. It helps to break down silos and allows for new ideas — or thoughts — to germinate.

Sapire and Reed's (2011) study shows that sharing and collaboration in open education improves the quality and depth of learning resources. Those who engage in open collaborative projects are more likely to collaborate in the future (Petrides et al., 2011). Furthermore, educators who co-create OER are more likely to continue creating and sharing content online on a consistent and ongoing basis (Petrides et al., 2008). This suggests that once educators engage in a community, they see the benefits of it — which makes this process more sustainable.

The benefits of sharing are great and have an impact on all stakeholders in open education. Through open sharing, students have a richer and more engaging learning experience — as they have greater access to information, perspectives and materials to help them to succeed. Educators can draw on resources from all around the world — and researchers can share data and develop new networks. People can connect with others they wouldn't otherwise meet to share ideas and information. Materials can be translated, mixed together, broken apart and openly shared again — increasing access and inviting fresh approaches. See the table below for a list of benefits experienced by all of those involved in open education.

Benefits of Sharing

Students

- Applying knowledge in a wider context than their course would otherwise allow
- Freedom of access and enhanced opportunities for learning

- Support for learner-centred, self-directed and social/informal learning approaches
- The opportunity to test out course materials before enrolling
- Continued access to learning resource after the course ends

Educators

- Student/user feedback and open peer review
- Benefits to reputation; recognition
- Efficiencies experienced when collaborating with others
- Sharing of ideas and best practices with others
- Reaching a wider range of learners

Educational Institutions

- Recognition and enhanced reputation
- Wider availability of their academic content
- Efficiencies in content production
- Increased sharing of ideas and practice within the institution
- Increased understanding of intellectual property rights

Other Sectors (Employers, Government, etc.)

- Access to re-purposable content
- Input to scoping, development and endorsement of open content in their focus area
- New potential partnerships with content providers and other sectors
- Increased understanding of intellectual property rights, curriculum development and learning technologies

One barrier to sharing and collaborating openly is the lack of institutional support for open work. However, institutions that promote openness as a value, in order to demonstrate their contribution to the public interest of their society, will enhance their image and role within that society (Skidmore & Provida, 2019). In the following section, we will see some examples of initiatives that are happening at institutions in Ontario to support working openly.

124 | BENEFITS OF SHARING



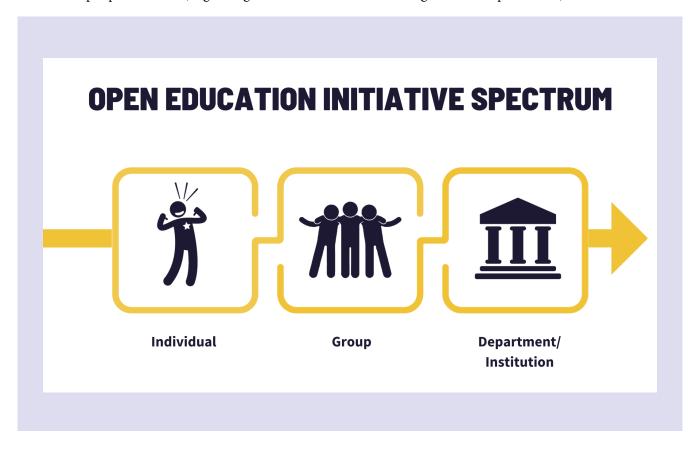
After reading this section on the benefits of sharing, reflect on your own work in your institution.

Do you regularly share openly? What are some ways you could be more open?

TYPES OF OPEN INSTITUTIONAL INITIATIVES

Support for open education and OER institutional initiatives can take many forms. Most activities and projects begin at the grass roots level, with individuals or small groups who are passionate about engaging in open projects. Institutional support can help build awareness and encourage adoption and creation efforts across the school.

Below are some types of support initiatives you may encounter in your institution categorized by the number of people involved (beginning with individuals and moving towards departments).



126 | TYPES OF OPEN INSTITUTIONAL INITIATIVES



Individuals working within educational institutions can engage in open work either formally as part of their role or informally. Often open work begins informally through the efforts of passionate individuals and then grows into institutionally supported duties or roles. See some examples of the types of roles below.

- Open Education Advocate/Champion is a person who is passionate about open education and serves as a point of contact to support educators in learning more about open education. This person may have developed OER or has knowledge of the process and can share their experiences. The position is usually informal, or in some cases may be formalized as part of their formal role. Examples: University of Guelph OER Champions, Fanshawe College Open Champions, CLOpen: OER with Colleges Libraries Ontario
- **OER Librarian** is a formal role within the library of an institution. The purpose of this role is to gauge the level of OER use within the institution, provide support in finding OER, and engage in outreach efforts to help build awareness. Examples: Centennial College OER Librarian, Sheridan College OER Librarian, Niagara College OER Librarians
- **OER Faculty Developer** is a role that usually resides in the institution's Teaching and Learning center. This role supports faculty in engaging with open education through training and project opportunities. Example: Loyalist College – Open Education Strategist



OER Committees, Working Groups, and Communities of Practice are either informal or formal groups established within an institution to support faculty who are interested in open and to help build awareness. Working groups may be tasked with objectives, such as building an open policy for the institution, developing recommendations and guidelines for the institution.

Examples:

• McMaster's OER Committee began as a grassroots collaboration focused on advocating for awareness and use of OER with an aim to make course materials more accessible and affordable for students. Two key projects of this committee were incentivizing development of OER by establishing an OER Grant Program and lowering the barrier to faculty adoption of OER by publishing the McMaster OER By Discipline Guide.

• Seneca Open Educational Resources (OER) Sub-Committee

Department

An OER Development Department involves a full-scale wrap-around support structure for faculty to develop OER and engage in Open Pedagogy. Department structures can come in many forms but include key individuals who are passionate about open. Individuals can include staff, faculty and students working in different ways. It may include part-time, full-time and temporary contract work.

Examples:

- Fanshawe OER Design Studio The Fanshawe OER Design Studio provides support to faculty and staff looking to adopt or create open educational resources (OERs) to be used by students in Fanshawe courses and programs.
- Ontario Tech University Open Education Lab is a student-run, staff-managed group that brings content and technological expertise to the timely creation of high quality OER that will be used directly in an Ontario Tech course by Ontario Tech students.
- Centennial College OER LAB The OER Lab is a student-run, staff-managed service, providing support in OER development and adaptation to the Centennial College community.

Institutions

Institution-wide support for open education may rest with a particular department or be interwoven through the school. Institution support at this level includes strategic goals and the development of policy. Policies help shape strategic planning, tenure and promotion, faculty development programs, grants, textbook costs, and institutional culture more broadly (Skidmore & Provida, 2019).

Cross-Institutional Initiatives

There are a number of groups that Ontario postsecondary faculty, staff and administrators are involved with to help expand open work in the province.

128 | TYPES OF OPEN INSTITUTIONAL INITIATIVES

- eCampus Ontario OER Rangers are a network of educators advancing the open movement at higher education institutions across Ontario. Using open practices, rangers lead others to develop OER and make education more affordable, accessible, and effective.
- eCampus Ontario Ontario Open Library Network (OOLN) is a space for librarians, faculty, students, instructional designers, and educational technologists interested in Open Education to exchange ideas. Get started by joining the Slack channel.
- Canadian Association of Research Libraries (CARL) Open Education Working Group is a group of Canadian librarians working in and committed to open education (OE). The group is designed to offer experienced insight towards ensuring ongoing relevance of CARL's open education activities, and towards creating high-quality opportunities for librarians to develop capacity and leadership skills in open education. Its activities and programs are designed to bolster this emerging area of practice and support the development of national leadership in this arena. In 2023 the Open Education Working Group (OEWG) moved into the newly formed Advancing Teaching and Learning Committee (ATLC) at CARL.
- College Libraries Ontario Communities of Practice brings together information about OER initiatives at Ontario Colleges.

STRATEGIES & STEPS FOR GROWING OER INITIATIVES

The previous sections highlighted the reasons why sharing and working openly is beneficial to all stakeholders in educational institutions and explored initiatives undertaken by level of engagement. This section will provide some resources to assist in supporting and growing open initiatives at your institution, by level of engagement. The intention is to provide a variety of resources and tools to fit each institution based on where they are at in their open education journey.



If you are interested in becoming an OER champion at your institution, your first step could be to engage in open communities and learn from others. Below is a list of networks and newsletters that are available to learn more.

Ontario

- eCampus Ontario Open Communities (available to Ontario educators)
- eCampus Ontario Open Library Network (OOLN)

Canada

- BC Open Education Librarians OEL
- Réseau-REL (French-language listserv)

Global

- Community College Consortium for OER CCCOER Google Group
- Creative Commons Open Education Platform CCOpenEdu
- Global OER Graduate Network (GO-GN.net) Group
- OER Commons

- Open Education Community
- Open Education Group
- Open Education Network Community
- SPARC OE Forum (the Scholarly Publishing and Academic Resources Coalition)

Job Postings

It can be challenging to justify the funding need for open work support roles with many competing priorities for institutional funding. Administrators may feel that it is an easier sell to secure funding for a permanent position after a pilot period in which to demonstrate impact. A temporary position frees up time for other library faculty and staff who had been adding OER to their plates in addition to their regular work. Consider this post on Advice on one-year OER Librarian Positions for guidance on temporary positions. The post also includes a list of ideas of action items to try when taking on an OER support role.

Sample Job Postings

• Toronto Metropolitan University OER Librarian Job Posting

Institutional Group Level

If your institution is interested in supporting a community of practice or working group, the following resources may be helpful.

Open working groups are a great way to conduct advocacy and build momentum for open education in an institution. They bring together the people on campus that are interested in or already engaged in open educational practices (OEP). These groups are oriented towards tasks for a certain length of time. Some may revolve around a project like developing an Open Educational Resource (OER) strategy, and others may include cross-functional members in charge of distributing OER grants. The term "working group" is often used to distinguish a group from something more formal, such as a committee or steering group. Many institutions purposefully choose the term "working group" to signify ideological driven action, with members working in partnership towards a common goal. You may choose to name your group something even less formal—perhaps, "[School Name]'s Open Champions," or more formal like, "Open Education Committee." The range of projects or initiatives your group is involved in may inform the name. The term "working group" is used broadly and includes community-learning groups such as communities of practice (CoPs) and institutional-based working groups or project groups.



The links below provide information to help you establish a new open working group, formalize a current one, or refresh/restart one that has been struggling. Also included are some examples of working groups and research about working groups and communities of practice.

- Working Group Guide Establishing a Working Group
- Ontario Open Library Network OER Working Group Templates
- Western University's Open Education Working Group Charter
- The Rebus Guide to Publishing Open Textbooks (So Far) provides a whole section on building a team and project scoping to assist you in your open project.

Sprints



STEP

STEP

N2

Plan

The sprint team determines the goals of the sprint, the sprint team, the logistics and the venue

.



Set Up

The team sets up the venue, creates necessary style guides, and templates



STEP

STEP

05



Prepare

collects open resources

The team explores the sprint content, process, technology and



...............

ne sprint facilitator leads the intensive sprint emphasizing intensive content creation and collaboration



Debrief

The sprint team captures resources created and plans for the publication process

A Sprint Process by Krista Lambert and Lucas Wright BCcampus. Licensed under CC-BY 4.0. Click on the image to enlarge.

Long Description

A Sprint Process

Step 01: Plan

The sprint team determines the goals of the sprint, the sprint team, the logistics, and the venue

Step 02: Prepare

The team explores the sprint content, proccess, technology and collects open resources

Step 03: Step Up

The team sets up the venue, creates necessary style guides, and template

Step 04: Deliver

The sprint facilitator leads the intensive sprint emphasizing intensive content creation and collaboration

Step 05: Debrief

The sprint team captures resources created and plans for the publication process

The concept of a sprint comes from software design and is becoming increasingly used as a strategy or approach for developing OER. The sprint approach can be used in a variety of contexts where a group of people (often cross-disciplinary) come together to focus on a specific project. In higher education, sprints are emerging as a way to accomplish a shared goal while working across disciplines and on a short timeline. Hackathons can follow a similar process — but often have a competitive element.

The sprint methodology involves the following features:

- short timelines and achievable goals;
- time-boxed working sessions (usually two to three days, but can vary according to context and needs);
- a defined outcome (to produce a textbook or other resource, etc.);
- a planning process to develop the sprint process;
- multiple perspectives and skill sets;
- identified/agreed roles for participants;
- collaborative rather than competitive development processes

Sprint Resources

Explore more information and examples of sprints by clicking on the following links:

- eCampusOntario Open at Scale Business Sprints
- UBC's Sprint Toolkit
- BCcampus Working Group Guide Appendices on Sprints

STRATEGIES & STEPS FOR GROWING OER INITIATIVES (CONTINUED)

Department/Institutional Level

At the department level, a few Ontario institutions have created a center dedicated to supporting the development of open educational resources. Formal centers can provide wrap around support for faculty who may struggle with the technical aspects of publishing, and also rapidly build awareness in the institution. Planning an initiative on this scale requires a business plan outlining the overall goals, structure, funding, and reporting metrics.

- Policies and Plans
- Organization Structure and Roles
- Resource Needs & Funding
- Processes
- Metrics
- Communication Plan

Policies and Plans

By adopting high-level open education policies and guidelines, institutions signal their commitment by making open education integral to their mission. Of course, policies don't exist in a vacuum; they are borne out of a need to establish and codify an institution's procedures (Skidmore & Provida, 2019). An open policy model may include: inclusion in strategic plan, tenure/promotion considerations, intellectual property rights, required educational resources, institutional groups and committees, roles, funding and technology/ infrastructure required.

Resources

- Research Report A Place for Policy: The Role of Policy in Supporting Open Educational Resources and Practices at Ontario's Colleges and Universities
- Kwantlen Polytechnic University's Open Education Strategic Plan (2018-2023)

- Open Washington Open Educational Resources Network OER Policy Videos
- OER Policy Development Tool

Organization Structure and Roles

The structure of the department will be unique to each institution. Some of the key roles and duties required to provide wrap-around support to faculty and staff creating OER include those listed below. The duties listed may be part of a shared role across departments or may form part of an individual's overall role within the institution.

Role	Description
Project Manager	Manages all the OER projects coming into the department. They are responsible for tracking progress and liaising with the subject matter expert (SME) and department staff to ensure the project is on track and meets completion goals. Helps to build awareness across the institution, and networks with others in the open community. Fanshawe College Project Lead Role Reflection
Instructional Designer / Quality Assurance	Works with the SME and utilizes instructional technologies to develop Open Educational Resources (OER). The instructional designer will provide guidance around effective use of the technology and pedagogy. Fanshawe College Instructional Design Role Reflection
Graphic Designer	Receives direction from the project lead and instructional design team to meet faculty needs in building high quality digital learning resources. Ensures designs meet accessibility standards and are copyright compliant. Sources stock photography where required. Fanshawe College Graphic Design Role Reflection
Copyright Consultant or Librarian	Reviews open resources for copyright infringement. Requests permission where needed to re-use resources. Provides suggestions of alternative resources that can be used in the creation of newly adapted works. Provides guidance on attribution statements and formatting. Could be combined with OER librarian role.
Research or OER Librarians	Assists in locating open educational resources for faculty and students. Produces environmental scans for open resources based on course learning outcomes or topics. Sample Environmental Scan Template.
Accessibility Specialist	Reviews open resources to ensure they meet accessibility requirements. Recommendations and training provided to ensure resources are accessible. Accessibility Toolkit & Checklist
Copyeditor	Reviews and edits digital learning resources to correct spelling, grammar, syntax, and punctuation errors. They check text for readability and consistency with a style guide, and rewrite text to improve clarity and readability.
Photographer	Works with subject matter experts and instructional designers to take professional quality photos for use in open resources.

Students can be hired as part of their practical learning experience. Students can be hired through both work study, international work study, and co-op positions. Fanshawe College Sample Student Role Descriptions.

Funding

Funding required to form a new open education department includes resources to staff the department, any technological needs, including software licenses, as well as money available for grants. Additional funds may be required for memberships with open organizations and professional development. The following are some resources to help develop an OER grant program at your institution.

Resources

- Ontario Open Library Network OER Grant Program Templates
- BCcampus Open Education Resources Grant Program
- Examples: Fanshawe OER Grant Program, McMaster OER Grant Program, University of Ottawa Library OER Grant

Processes

Processes are essential for ensuring the department runs effectively. Processes required to run a department could include: OER environment scan process, OER development process, OER adoption process, and OER grant process.

Resources

- Fanshawe OER Design Studio Processes
- Seneca OER Workflows
- CLO Free the Textbook Workflow
- Other Workflow Examples

Metrics

There are several ways to measure the impact of open education initiatives. The metrics tracked will depend on the overall purpose and value proposition of the initiative. It is important to identify the metrics to be tracked at the beginning, as it can be difficult to go back and try to locate the information after the fact. Metrics can be tracked in software if available, or by using spreadsheet software.

According to David Wiley, the key metrics for measuring the student impact of open educational materials are success, scale, and savings (3S's).

Defining Success

Success means a student has completed a course with a final grade that allows the course to count towards

140 | STRATEGIES & STEPS FOR GROWING OER INITIATIVES (CONTINUED)

graduation. According to Wiley, the impact of student success occurs most clearly between the boundary of C and D final grades as a small change here in the final grade has a large impact on graduation. To learn more about how this can be calculated to show the impact of OER on student success, read S3: A Holistic Framework for Evaluating the Impact of Educational Innovations (Including OER).

Defining & Measuring the Scale of Success

Measuring Success: The proportion of students being reached.

Scale = Number of Students in OER Sections / Number of Students in All Sections

How many of our students are benefiting from this innovation?

Defining and Measuring Savings

Savings: The amount of money spent on course materials by the average student using OER compared to the amount of money spent on course materials by the average control student.

Savings = Average amount spent control – Average amount spent on OER / Average amount spent control How much money does this innovation save students?

Wiley provides a final impact formula based on relative weights for each of the 3S's which can be found here: S3: A Holistic Framework for Evaluating the Impact of Educational Innovations (Including OER)..

Some other indicators to consider for measurement of OER impact can be found below.

36 Indicators of OER Impact

Peer Review Physical book sales Student savings \$ Downloads Website hits Adoptions Adaptions Media mentions **Quotes in media** Course enrollment Course completion Rabble rousing Social networking contacts Increased diversity Grant \$ Student success Mention by policy makers Angry letters from important people

Meetings with important people Protests/demonstrations/sit-ins Trending in social media Student surveys Student testimonials Trust/reputation Blog mentions Faculty recommendations Faculty award/prize Influencing curriculum creation Influencing the textbook market Participating in public education programs Invitations to present Invitations to consult Invitations to evaluate Change in policy Change in processes or behavior Thank you cards from students and parents

36 Indicators of OER Impact by Janet Swatscheno, licensed CC BY 4.0. This graphic is adapted from 56 Indicators of Impact by Holbrook, J Britt, Kelli R. Barr, and Keith Wayne Brown. 2013. Figshare. https://doi.org/10.6084/m9.figshare.707081.v3. Licensed under CC BY

4.0

Long Description

36 Indicators of OER Impact

- 1. Peer Review
- 2. Physical book sales
- 3. Student savings \$
- 4. Downloads

- 5. Website hits
- 6. Adoptions
- 7. Adaptions
- 8. Media mentions
- 9. Quotes in media
- 10. Course enrollment
- 11. Course completion
- 12. Rabble rousing
- 13. Social networking contacts
- 14. Increased diversity
- 15. Grant \$
- 16. Student success
- 17. Mention by policy makers
- 18. Angry letters from important people
- 19. Meetings with important people
- 20. Protests/demonstrations/sit-ins
- 21. Trending in social media
- 22. Student surveys
- 23. Student testimonials
- 24. Trust/reputation
- 25. Blog mentions
- 26. Faculty recommendations
- 27. Faculty award/prize
- 28. Influencing curriculum creation
- 29. Influencing the textbook market
- 30. Participating in public education programs
- 31. Invitations to present
- 32. Invitations to consult
- 33. Invitations to evaluate
- 34. Change in policy
- 35. Change in processes or behavior
- 36. Thank you cards from students and parents

Resources

• The eCampus Ontario Impact page shows the total student savings in Ontario and also provides a

calculator to see how much a faculty member could save students. It includes other important statistics and graphics as well.

- eCampus Ontario Data Collection: A place for tools and templates to assess the OER landscape at your institution
- The BC campus Open Textbook statistics page includes information about student savings, known adoptions, and the number of reviews for each book.

Communication Plan

It is critical that you have a plan for how to communicate the support available for open education initiatives, as well as the results and impact of the initiatives. The OER Champion Playbook by Lumen Learning outlines various 'plays' to help generate awareness excitement and momentum about open education. Some key plays include:

- An OER initiative website Create a website to let your campus community (and the world) know about your OER initiative and the impact you're making with OER.
- Marketing Campaigns Raise awareness about your initiatives by targeting departments, faculty, and support staff with strategic messaging that promotes specific action.
- OER Award and Recognition Program Create an award program to recognize and express appreciation for individual contributions moving towards broader use of OER.
- Student Savings Social Media Campaigns Invite students to share what they spent on textbooks and how they utilized cost savings via social media to promote OER.

Resources

- eCampus Ontario Slide Decks: Adaptable presentations for leading workshops or classes about OER.
- eCampus Ontario Promotion materials: Promotional visual assets for promoting OER at your institution.



Take a moment to reflect on your institution.

Question 1: Where is your institution in terms of the level of engagement in OE initiatives? Individual, Group, Department / Institution-wide, and how do you know?

Question 2: What are some strategies or actions you can take to help increase engagement with open education at your institution and what support would you need?

CONCLUSION



Unsure of where to go from here? Navigate with ease using the module map to chart your course!



An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://ecampusontario.pressbooks.pub/masteringopened/?p=123#h5p-15



- 1. "2 Frameworks and Approaches to Community" from Working Group Guide by BCcampus is licensed under a Creative Commons Attribution 4.0 International License, except where otherwise noted.
- 2. "Advice: One-year OER Librarian Positions" in Open Oregon Educational Resources Blog by Amy Hofera is licensed under a Creative Commons Attribution 4.0 International License.
- 3. "Explain: Open Sharing" from Extending Into the Open by Paula Demacio; Alissa Bigelow; Tricia Bonner; and Shauna Roch is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License, except where otherwise noted.
- 4. OER Champion Playbook by Lumen Learning is licensed under a Creative Commons Attribution license unless otherwise noted.
- 5. Skidmore, J., & Provida, M. (2019). A place for policy: The role of policy in supporting open educational resources and practices at Ontario's colleges and universities [Research report]. Available at https://www.ecampusontario.ca/publications-reports/