UH OER Publishing Guide

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Overview: UH OER Publishing Guide

E Komo Mai & Welcome to the UH OER Publishing Guide!

In this book, we offer an introduction to OER publishing, examples of Open Pedagogy, OER-Enabled Pedagogy, and working with learners; and guidelines, best practices, and suggestions for how to plan, create, publish, and distribute your OER textbook and materials.

This book is divided into four chapters.

Teaching with OER, Open Pedagogy, and Working with Learners offers information about teaching with Open Educational Resources (OER), the ideas, practices, and principles behind Open Pedagogy, and working with students using OER and Open Pedagogy. We also provide resources to help orient students to OER, Open Pedagogy, and best practices for digital and online learning.

Planning an OER Project provides guidelines on planning, workflow, and development of Open Educational Resource (OER) Textbooks; guidelines and suggestions on outlining, compiling, and writing your OER textbook and materials; a chapter prototype, and a quick guide to Pressbooks.

Pre-Publication takes you through the steps necessary before you publish your OER textbook or materials. Sections include editing and formatting; assessment, evaluation, and rubrics; accessibility and usability, including localization, culturally appropriate materials, and student-centered pedagogy; and platform decisions.

Post-Publication gives an overview of steps to take after you publish your OER textbook or materials. Topics include formatting output files, post-release considerations, user evaluation, including instructor and student evaluation, as well as peer-review; and updates, sustaining your OER textbook or materials, and considerations around new versions and new editions.
Below, you will find a list of quick links to the chapters of the book.

**Table of Contents: UH OER Publishing Guide**

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PART I

TEACHING WITH OER, OPEN PEDAGOGY, AND WORKING WITH LEARNERS

In this chapter, you will learn about teaching with Open Educational Resources (OER), the ideas, practices, and principles behind Open Pedagogy, and working with students using OER and Open Pedagogy. We also provide resources to help orient students to OER, Open Pedagogy, and best practices for digital and online learning.
Introduction: Teaching with OER, Open Pedagogy & Working with Learners

Chapter Overview: Teaching with OER, Open Pedagogy & Working with Learners

In this chapter, you will learn about teaching with Open Educational Resources (OER), the ideas, practices, and principles behind Open Pedagogy, and working with students using OER and Open Pedagogy. We also provide resources to help orient students to OER, Open Pedagogy, and best practices for digital and online learning.

Below, you will find an overview of the chapter sections and quick links to each section.

Chapter Table of Contents: Teaching with OER, Open Pedagogy & Working with Learners

- Teaching with OER
- Open Pedagogy
- Working with Learners
- Becoming an Open Educator – OEPS 1 Course
Overview: Teaching with OER

Welcome to teaching with OER! In the following modules, you will learn about becoming an Open Educator, the benefits of OER-Enabled Pedagogy, best practices guidelines, and online open pedagogy workshops and faculty development resources.

This section consists of several parts.

**Becoming an Open Educator** offers a series of writings by Open educators on their experience and suggestions for new Open Educators. It also offers an introduction to the self-paced course, “Becoming an Open Educator,” which is included later in this book.

**Benefits & Best Practices of OER Enabled Pedagogy** offers a series of materials on the benefits of teaching with OER and best practices for OER enabled pedagogy.

**Workshops & Faculty Development Resources** offers links and materials related to Open Pedagogy and OER workshops and faculty development resources. First, we provide a series of useful quick links compiled by Open Educator Rajiv Jhangiani. Then we include an outline and links for the SPARC* Open Education Leadership Curriculum. Finally, we offer an introduction to the OEPS Course, which will be provided in the next section.

Table of Contents: Teaching with OER

- **Becoming an Open Educator**
  - [Open Pedagogy: Freedom in the Classroom – Instructor Notes by Ibukun D. Alegbeleye](#)
  - [My Open Textbook: Pedagogy and Practice – Instructor Notes by Robin DeRosa](#)
Introduction to Open Pedagogy — Instructors’ Guide by Robin DeRosa & Rajiv Jhangiani
Becoming an Open Educator: Course Overview — Quick Intro by Apurva Ashok

• Benefits & Best Practices of OER Enabled Pedagogy
  • Why OER Matters — Open Washington
  • OER-Enabled Pedagogy Library – Open Education Group
  • Five Rules of Textbook Development – BCcampus OpenEducation & Lauri Aesoph
  • Quick Guide: Accessibility, Diversity, and Inclusion – BCcampus & Lauri Aesoph
  • Fix As You Go – BCcampus & Lauri Aesoph

• Workshops & Faculty Development Resources
  • Quick Links: Open Pedagogy Resources – Rajiv Jhangiani
  • SPARC* Open Education Leadership Curriculum
  • OEPS 1.0 Course Intro – Opening Educational Practices in Scotland & The Open University

Overview: Becoming an Open Educator

In the first two sections, educators Ibukun D. Alegbeleye and Robin DeRosa discuss their ideas and practices of open pedagogy. In the third section, Robin DeRosa and Rajiv Jhangiani offer an overview of open pedagogy. In the fourth section, Apurva Ashok gives and overview of the online course, “Becoming an Open Educator.” Activities and materials from this course are included later in this book.

Table of Contents: Becoming an Open Educator

• Open Pedagogy: Freedom in the Classroom – Instructor Notes
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Overview: Benefits – OER Enabled Pedagogy

This section offers a series of materials on the benefits of teaching with OER and best practices for OER enabled pedagogy. First, we provide an article from Open Washington on the importance and benefits of OER. Next, we include a guide to the unique potential of OER-enabled pedagogy by the Open Education Group. Further, we offer materials from BC Campus and open educator Lauri Aesoph on basic rules of textbook development, guidelines to student-centered Open pedagogy, including accessibility, diversity, and inclusion; and a quick guide to fix-as-you-go as a principle of OER material and textbook development.

Table of Contents: Benefits – OER Enabled Pedagogy

- Why OER Matters – Open Washington
- OER-Enabled Pedagogy Library – Open Education Group
- Five Rules of Textbook Development – BCcampus OpenEducation & Lauri Aesoph
- Quick Guide: Accessibility, Diversity, and Inclusion – BCcampus & Lauri Aesoph
- Fix As You Go – BCcampus & Lauri Aesoph
Overview: Workshops & Faculty Development Resources

This section offers links and materials related to Open Pedagogy and OER workshops and faculty development resources. First, we provide a series of useful quick links compiled by Open Educator Rajiv Jhangiani. Then we include an outline and links for the SPARC* Open Education Leadership Curriculum. Finally, we offer an introduction to the OEPS Course, which will be provided in the next section.

Table of Contents: Workshops & Faculty Development Resources

- Quick Links: Open Pedagogy Resources – Rajiv Jhangiani
- SPARC* Open Education Leadership Curriculum
- OEPS 1.0 Course Intro – Opening Educational Practices in Scotland & The Open University

Overview: Open Pedagogy

This section presents theory, practice, and praxis of Open Pedagogy.

The first part of this section, Open Education: 7 Things You Should Know, presents a series by Educause that discusses main points about Open Education content, practices, and policies.

The second part of this section, Case Studies: Projects, offers a selection of Open Pedagogy case studies presented in the OER

The third part, **Interviews, Faculty User Stories & Case Studies**, provides interviews with Open Educators David Squires and Gabriel Higginbotham, who have worked with students to create OER textbooks and materials. It also links to videos from OER instructors and learners from California OER Council member colleges and universities.

The fourth part, **Student Rights & Faculty Responsibilities**, discusses the ways that faculty have a responsibility to keep student rights front of mind when making open textbooks with students. Privacy, licensing, and digital literacy are among the main issues to consider. Also included in this section is a sample memorandum of understanding for student authorship of OER textbooks and materials.

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**Table of Contents: Open Pedagogy**

- **Open Education: 7 Things You Should Know** – Educause
  - Open Education: Content
  - Open Education: Practices
  - Open Education: Policies
- **Case Studies: Projects** – *A Guide to Making Open Textbooks with Students & Elizabeth Mays*
  - Case Study: Frank Lloyd Wright and His Madison Buildings
  - Case study: Antología Abierta de Literatura Hispánica
  - Case Study: Principles of Microeconomics
  - Case Study: Expanding the Open Anthology of Earlier American Literature
- **Interviews, Faculty User Stories & Case Studies** – *A Guide to Making Open Textbooks with Students & Elizabeth Mays, California OER Council*
Overview: Open Education: 7 Things You Should Know

This section offers a series of articles from Educause on 7 Things You Should Know. This series of articles focuses on Open Education content, practices, and policies.

Table of Contents: Open Education: 7 Things You Should Know

• Open Education: Content
• Open Education: Practices
• Open Education: Policies
Overview: Case Studies — Projects

This section offers a selection of Open Pedagogy case studies presented in the OER book, A Guide to Making Open Textbooks with Students, edited by Elizabeth Mays. These case studies provide examples of projects instructors have used to engage learners in creating, adapting, and editing OER textbooks and materials.

Table of Contents: Case Studies — Projects

- Case Study: Frank Lloyd Wright and His Madison Buildings
- Case study: Antología Abierta de Literatura Hispánica
- Case Study: Principles of Microeconomics
- Case Study: Expanding the Open Anthology of Earlier American Literature

Overview: Interviews, Faculty User Stories & Case Studies

This section offers interviews with Open Educators David Squires and Gabriel Higginbotham, who have worked with students to create OER textbooks and materials.

Table of Contents: Interviews, Faculty User Stories & Case Studies

- Interviews — Elizabeth Mays, David Squires, and Gabriel Higginbotham
Overview: Student Rights & Faculty Responsibilities — Elizabeth Mays, Zoe Hyde Wake, David Squires

When making open textbooks with students, faculty have a responsibility to keep student rights front of mind. Privacy, licensing, and digital literacy are among the main issues to consider. Also included in this section is a sample memorandum of understanding for student authorship of OER textbooks and materials.

Table of Contents: Student Rights & Faculty Responsibilities — Elizabeth Mays, Zoe Hyde Wake, David Squires

- Privacy
- Licensing
- Digital Literacy
- Memorandum of Understanding (MOU) for student OER authorship participation

Overview: Working with Learners

This section contains six parts – Student Spotlights, Learning with...
OER – Benefits to Students, Student Planning – CCCOER, Students as OER Contributors, Evaluators, Co-Authors; Open Pedagogy Notebook Examples, and Sample Assignments & Resources.

**Student Spotlights** offers student spotlights from students who have been involved in the creation of OER materials and textbooks. This material comes from *A Guide to Making Open Textbooks with Students: Project Ideas & Case Studies* – Rebus Community & Elizabeth Mays.

**Learning with OER – Benefits to Students** offers faculty and student perspectives on the benefit to students of learning with OER and Open Education. This material comes from Barbara Illowsky, Rajiv Jhangiani, Nicole Allen, David Wiley, Jaime Marsh, Open Washington Open Educational Resources Network, Tacoma Community College, JoAnne Eller, and Jennifer Snoek-Brown.

**Student Planning – CCCOER** highlights ways that students and student groups can initiate and support Open Education. This material comes from CCCOER, with further resources from BCcampus.

**Students as OER Contributors, Evaluators, Co-Authors** offers writings by instructors with extensive OER experience. These instructors offer suggestions, guidelines, and tested methods for engaging students in not only the use of OER materials, but also the creation of materials. This information comes from a variety of educators, including Christina Hendricks, Rajiv Jhangiani, Jody R. Rosen and Maura A. Smale; Robin DeRosa, and Sean Michael Morris, Pete Rorabaugh and Jesse Stommel.

**Open Pedagogy Notebook Examples** offers selected materials from the Open Pedagogy Notebook, spearheaded by Robin DeRosa and Rajiv Jhangiani, including experience, guidelines, and suggestions by experienced instructors who use Open Pedagogy.

**Sample Assignments & Resources** presents a list of links to further examples, as well as materials from the Open Education Group for engaging students with Open Pedagogy, OER textbooks and materials, and OER projects.
Table of Contents: Working with Learners

- **Student Spotlights**
  - Student Spotlight: Samara Burns, Open Logic Project
  - Student Spotlight: Matthew Moore, The Open Anthology of Earlier American Literature, 2nd Edition

- **Learning with OER – Benefits to Students**
  - Faculty Perspectives on Open Textbooks
  - Student Perspective: What Open Education Taught Me – Jaime Marsh
  - Tacoma Community College: Student Guide to OER: OER Stories

- **Student Planning – CCCOER**

- **Students as OER Contributors, Evaluators, Co-Authors**
  - Students' Vital Role in OER – Christina Hendricks
  - Pilot Testing Open Pedagogy – Rajiv Jhangiani
  - Beyond Rigor – Sean Michael Morris, Pete Rorabaugh and Jesse Stommel
  - Further Resources

- **Open Pedagogy Notebook Examples**
  - Why have students answer questions when they can write them? – Rajiv Jhangiani
  - Collaborative Syllabus Design: Students at the Center – Amy Nelson
  - Student-Created Open “Textbooks” as Course Communities – Robin DeRosa

- **Sample Assignments & Resources**
Overview: Student Spotlights

This section offers student spotlights from students who have been involved in the creation of OER materials and textbooks.

- **Student Spotlight: Samara Burns, Open Logic Project**
- **Student Spotlight: Matthew Moore, The Open Anthology of Earlier American Literature, 2nd Edition**

Overview: Learning with OER – Benefits to Students

This section offers faculty and student perspectives on the benefit to students of learning with OER and Open Education.

- **Faculty Perspectives on Open Textbooks**
- **Student Perspective: What Open Education Taught Me – Jaime Marsh**
- **Tacoma Community College: Student Guide to OER: OER Stories**

Overview: Student Planning

An important stakeholder group and set of team members in most open education plans is students. Student groups, particularly student governments, are strong advocates for open education. More importantly, student groups can provide feedback on how open education affects their learning. There are a variety of ways that students can support open education efforts. Here are some suggestions for working with student groups.
Overview: Students as OER Contributors, Evaluators, Co-Authors

This section offers writings by instructors with extensive OER experience. These instructors offer suggestions, guidelines, and tested methods for engaging students in not only the use of OER materials, but also the creation of materials. These instructors encourage you to think beyond the disposable assignment and beyond traditional concepts of rigor to the active engagement of students in their education. Make the most of the opportunities offered by the unique medium of OER to offer hands-on and student-directed learning. Included are short writings by Open educators on the role of students as OER contributors, evaluators, and co-authors. Further resources for project and planning suggestions are also included.

- Students' Vital Role in OER – Christina Hendricks
- Pilot Testing Open Pedagogy – Rajiv Jhangiani
- Beyond Rigor – Sean Michael Morris, Pete Rorabaugh and Jesse Stommel
- Further Resources

Overview: Open Pedagogy Notebook Examples

- Why have students answer questions when they can write them? – Rajiv Jhangiani
- Collaborative Syllabus Design: Students at the Center – Amy Nelson
- Student-Created Open “Textbooks” as Course Communities –
Becoming an Open Educator – OEPS 1 Course

This section presents a self-paced course on becoming an Open Educator. Materials are sourced from the Opening Educational Practices in Scotland (OEPS) course. Topics include definitions and practices of Open Education, benefits of practicing Open Education, how to find and use OER materials, how to create and share OER materials, and what Open practice, theory, and praxis look like. Learn more at your own pace.

- Contents
- 1. What Is ‘Open’ Education?
- 2. Why Use Open Practices and Resources?
- 3. Using Open Educational Resources
- 4. How to Create and Share Open Educational Resources
- 5. Putting Open into Practice
2. Teaching with OER

IBUKUN ALEGBELEYE, APURVA ASHOK, ROBIN DEROZA, RAJIV JHANGIANI, OPEN WASHINGTON OPEN EDUCATIONAL RESOURCES NETWORK, WASHINGTON STATE BOARD FOR COMMUNITY AND TECHNICAL COLLEGES, OPEN EDUCATION GROUP, BCCAMPUS OPEN EDUCATION, LAURI AESOPH, SPARC OPEN EDUCATION LEADERSHIP PROGRAM, OPENING EDUCATIONAL PRACTICES IN SCOTLAND (OEPS), THE OPEN UNIVERSITY, ABBEY ELDER, AND NADIA MIRELES

This section consists of several parts.

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Table of Contents: Teaching with OER

- Becoming an Open Educator
- Benefits & Best Practices of OER Enabled Pedagogy
- Workshops & Faculty Development Resources
Learning Objectives: Teaching with OER

Type your learning objectives here.

- First
- Second

Here is a quick video. Abbey Elder presents “An Introduction to Open Educational Resources.”
Becoming an Open Educator

This section offers a series of writings by Open educators on their experience and suggestions for new Open educators.

- **Open Pedagogy: Freedom in the Classroom – Instructor Notes by Ibukun D. Alegbeleye**
- **My Open Textbook: Pedagogy and Practice – Instructor Notes by Robin DeRosa**
- **Introduction to Open Pedagogy – Instructors’ Guide by Robin DeRosa & Rajiv Jhangiani**
- **Becoming an Open Educator: Course Overview – Quick Intro by Apurva Ashok**

Open Pedagogy: Freedom in the Classroom

April 16, 2019  
Ibukun D. Alegbeleye

I should have a lot to write about open pedagogy, I thought to myself ;)...Well, fast forward to this week, I realized I didn’t know as much as I thought I knew about open pedagogy. I had thought open pedagogy was all about open educational resources; alas! it was more than that. I have learned from the readings this week that open educational resources (e.g., open access, open science) is just
a subset of open education, however, when people think about open education, they think more about open educational resources and less about open pedagogy.

Ironically, I have always appreciated open pedagogy, I just didn't know what it was called. I took a course last year and the professor practiced, to some degree, open pedagogy. At the beginning of the course, he asked us to edit the syllabus as we saw fit. Specifically, he asked that we assign grade weights. We worked in groups and we eventually decided on how we wanted our grades weighed and distributed. This was the first time I would be in a class where the professor would invite the students to share some power. I really liked this practice and I decided to adopt it in my future classes. The semester after that, I was the instructor for a recitation class and I tried it out in my class, and the feedback from my students was great – they loved it.

Well, I straight up included it in my teaching philosophy. Here's an excerpt from my teaching philosophy:

“I believe that instruction should be learner-centered and engaged as much as possible. I consider my role as that of a facilitator rather than a teacher – in fact, I learn from all my students. I endeavor to provide a conducive learning environment that provides psychological safety to students, and such that encourages them to actively participate physically, mentally, and socially in class discussions. **One of the ways I do this is to decenter power (as much as possible) and allow my students to regulate some aspects of their learning. For example, I sometimes allow my students to suggest how they want their grades distributed and weighted.”**

Although I had made a decision to be open in my pedagogy about a year ago, I just really understood what it means this week. Here's my definition: Open pedagogy is freedom; it is about inviting students to be free in the classroom. Freedom may take many forms. Examples include:

- Freedom to ask questions freely
• Freedom to think critically and innovatively (which may include disagreement with the professor's perspective)
• Freedom to co-create their learning experience (e.g., setting learning objectives, participating in grade weighing, etc.).
• Freedom to self-construct their own knowledge.

Image: © Bronwyn Hegarty, 2015

Well, freedom leads to power decentralization, which makes many professors feel uneasy. Also, it takes hard work on the part of the professors to implement. For example, allowing the students to adjust the syllabus to fit their learning needs is extra work for the professor, and it may not be very rewarding after all. In fact, many professors have said that working in a big research university like Virginia Tech does not help with investing effort into teaching, since the tenure process places more emphasis on research than teaching. I think it is high time universities (including research
universities) start making teaching a big part of the tenure application packet. This should help the cause of open pedagogy on a larger scale.

As for me, I have made a decision to continue to practice open pedagogy and I will keep learning more ways to be more open with my teaching.

My Open Textbook: Pedagogy and Practice — Robin DeRosa

I've spent some time talking about open pedagogy at several universities this Spring, and in each of those presentations and workshops, I have usually mentioned The Open Anthology of Earlier American Literature, an OER anthology that my students and I produced last year for an American literature survey course I taught. When I talk about the anthology, it's usually to make a point about open pedagogy. I began the project with the simple desire to save my students about $85 US, which is how much they were (ostensibly) paying for the Heath Anthology of American Literature Volume A. Most of the actual texts in the Heath were public domain texts, freely available and not under any copyright restrictions. As the Heath produced new editions (of literature from roughly 1400-1800!), forcing students to buy new textbooks or be irritatingly out of sync with page numbers, and as students turned to rental markets that necessitated them giving their books back at the end of the semester, I began to look in earnest for an alternative.

I launched the open textbook project over a summer, and because I teach at a public university where I had no easy access to graduate assistants or funding, I hired a bunch of undergrad students and recent alums, and paid them out of my own pocket to assist me. Turns out, most of them were willing to work for free (I didn't let them, though what I paid was low because it was all I could spare), and turns out the whole endeavor of building the work turned out
to be transformative to my own pedagogy and to the course that followed. I want to share here the nuts and bolts of how we built the textbook, and reflect on how it affected the pedagogy that surrounded the book.

Building the Book

I have basic WordPress experience, and since I am too busy with teaching to explore every cool new thing I’d like to, I wanted to stick with an easy tool to build the book. I settled on Pressbooks, which is a very simple, WordPress-based platform. If you are somewhat tech-savvy and comfortable playing around with things, you could definitely teach yourself the basics in an hour or so. I opened a free account and set up a framework for the book. Every section would feature a primary-source public domain document from the period, as well as an introductory context-setting piece.

I created a GoogleDoc and posted a call for research assistants on the undergraduate English Department Facebook group at my university. Research Assistants (RAs) were paid $10 for every public domain text they retrieved and documented, and we tracked it all in the GoogleDoc. Each RA was also paid to complete a basic training on copyright and open licensing, so they understood the definition of “public domain” and understood how to ascertain whether a particular digital version of a text was under copyright.

We started with the main texts that I wanted to cover in the course, based on what I had covered in the past using the Heath and other anthologies. Together over the summer, eight of us built the initial skeleton of the anthology: seven undergraduates (or recent
alums) and me. In most cases, students provided the texts, and I edited and excerpted them myself, and then I loaded them into Pressbooks. When the Fall came, the course started and I introduced our rudimentary textbook to the crop of enrolled students, many of whom were aware of the project because their friends had participated in creating the book so far.

What the book still lacked, which my undergraduates really wanted, was the front matter that is conventionally included at the beginning of each text, which generally provides historical and biographical context to help students engage more fully with the primary documents. So students in the course signed up to create these introductions as we went through the course. Generally, they submitted them in time for the class to use them when we covered the text in the syllabus, but they also often revised them after we discussed the text in class if they thought they could improve them. Students also did editorial work on the primary documents, particularly in terms of modernizing spelling, which was a helpful exercise for them in terms of learning how to read original early documents, but also helpful to future students, who can now read the texts more quickly in the modernized versions; in one case, this version is the only openly-licensed modernized version of the text that currently exists.

In addition, students occasionally produced short films, discussion questions, and assignments related to the primary texts, and I have begun uploading those into the anthology as well. I am transitioning to a new department this summer, and doubt I will have time to really stick with this project (anyone can pick it up, of course, but I am also hoping to formally pass it to someone who will commit to building it out), but it’s easy to see the possibilities of how the collection could grow, and how the students could continue to add additional interactive materials.

So many of you are thinking, “That’s great, but my field isn’t comprised of public domain literature that I can just copy and paste into a book.” Well, let me tell you about my second textbook project! The book I am currently working on is a different animal altogether.
It's designed for Interdisciplinary Studies students, and will include foundational theory as well as research methodologies and a new vision for the field that integrates open pedagogy into interdisciplinary scholarship. I started working on the book last year in my courses by asking students to blog about different topics we covered. They assimilated ideas from outside readings (all properly cited), from my lectures, and from active learning projects that we did. They also wrote about their own customized majors and applied capstone projects (service-learning/experiential/partnership-based) and how it all tied in with the foundational theories of the field.

I just received a small grant from the University System of New Hampshire to develop this textbook. This summer, the plan is to take the student-created content (all of which is cc-licensed) and drop it into a Pressbooks shell much the way we did with the public domain literature in the anthology project. And in the Fall, students in the Interdisciplinary Studies (IDS) intro course will edit that material, create glossaries and short introductions, add assignments and writing prompts, and in-load multimedia supplements. In the Spring, the capstone students will augment the sections that relate to the practice of IDS in their field experiences, and link their own websites (we call them “ePorts”) into the book to demonstrate how different principles get applied in their curricula and practica. Students will also help me curate resource links for further reading, and locate other openly-licensed articles to import into the book.

People often ask me how students can create textbooks when they are only just beginning to learn about the topics that the textbooks cover. My answer to this is that unlike many other scholarly materials, textbooks are primarily designed to be accessible to students— to new scholars in a particular academic area or sub-specialty. Students are the perfect people to help create textbooks, since they are the most keenly tuned in to what other students will need in order to engage with the material in meaningful ways. By taking the foundational principles of a field—
most of which are not “owned” by any prior textbook publisher– and refiguring them through their own lens, student textbook creators can easily tap their market. They can access and learn about these principles in multiple ways (conventional or open textbooks, faculty lecture and guidance, reading current work in the field, conversations with related networks, videos and webinars, etc.), and they are quite capable, in my opinion, of designing engaging ways to reframe those principles in ways that will be more helpful to students than anything that has come before.

In other words, whether your subject matter will be made up of public domain literature or not, your students can help you create a textbook in most any field. Here are some practical reminders that might be helpful:

1. There is no rush! Don’t worry about producing a beautiful, flawless textbook. Build it in stages across multiple years, and let different cohorts of students contribute in different, layered ways. Make no claims to perfection. Your textbook is a work-in-progress, and it will continually improve as learners engage with it.

2. Academic labor is labor. Students can help build the textbook if it’s a meaningful part of the learning process in a class. Outside of that, find funding sources to support students or instructors who want to assist with the development of the project.

3. You don’t need to be a tech guru to do this. Learn how to openly license your book and learn how to get it online so folks can access and share it. Make sure you understand copyright issues so you can assure that everything in your book is freely available for you to use. The library is probably your best first stop for licensing questions, and your academic technology folks can assist you with getting a Pressbooks or website set up to host your textbook.
The Effects on Pedagogy

Ok, so now that stuff is out of the way, let’s talk pedagogy. The $85 dollars that I saved for each of my students seemed to be the least of what was exciting to me about the open anthology (and that was pretty exciting, given that many of my students struggled to afford our previous book— to the point that it often took them weeks to raise enough funds to get their own copy). Let me start by telling you that no student in any of my classes ever told me that they loved our Heath anthology back when I was using it. In sixteen years of teaching the course, no student every remarked on a course evaluation that our anthology was the best part of the class. They tolerated it, often liked the helpful glosses, and sometimes loved the literature itself. But a textbook is a textbook, and they saw it as neutral at best, uninspiring or frustrating at worst. I didn’t really set out to make a better textbook. I was just looking to replace a textbook and save some cash for strapped students. Boy, did I underestimate the power of the open textbook.

As students and alums worked with me over the summer to create that first skeletal text, it was clear something amazing was happening. The students immediately seemed invested in the project— almost like they were, well, writing a book with me. To me, the work seemed sort of second nature, since I often write for publication. But for my students, the idea that they were creating something that would be read/used by a different cohort of students a few months later was a truly novel and thrilling concept. They repeatedly volunteered to work for free (I resisted this), and they still sometimes inquire about whether there are roles they can play now that the book is at its next stage of development. When the students in the class started working with and contributing to the book, they often made comments about liking our textbook! But by getting to contribute to the book, make curatorial decisions about the kinds of texts to include, and frame the work in their own words, they seemed more connected to the textbook itself, more willing to
engage with it. Here's a short video featuring several of my students, which explores their experience of using OER and engaging in open pedagogy-based learning.

I also did something else that I think made a big impact on the class. I was sensitive to the fact that our new textbook would be digital, and that most students would not want to use up their print quotas by printing it out. I had read all the same stuff you have probably read about how READING OFF A SCREEN IS BAD and TAKING NOTES ON A LAPTOP IS BAD, but it occurred to me that both of these things have to do with the fact that we spend so little time parsing the differences between reading off a screen and reading print, and so little time examining how digital notetaking differs from handwriting our notes. My hunch is that it's not that screen reading or digital notetaking are worse for learning, but that we don't talk enough about what the digital texts enable that might be quite different from what is enabled by print. So I started the class with a consideration of the problems and potential of moving to digital texts, and with a challenge to the class to try to produce our own work–even our notes on the text–digitally, even if that felt awkward. We would assess at the end of the course which digital tools we would continue to work with and which we would jettison in favor of a return to the analog.

So I added an app called “Hypothesis” to the course, which allows
readers to take notes on the text digitally. Because we set our notes to “public,” students in my course (and in other courses at other colleges!) could see each others’ annotations and comment on them. Almost immediately, we all realized that it wasn’t the digital quality of the notes that was engaging; it was the social quality of the notes. Suddenly, our student-created textbook was turning into a cacophonous, heteroglossic tapestry of voices talking to each other about the literature. While it may very well be true that taking notes longhand can help students recall specific detail more effectively than taking notes on a laptop, the question of how digital annotation of a text differs from hand-written annotation seems distinct, and there is no question that there were certain dimensions that opened up when we allowed the annotations—allowed ourselves— to talk to one another within the context of the close reading.

When I finally had time to sit down and take stock of what was happening, I realized a few things.

- The open textbook allowed for student contribution to the “master text” of the course, which seemed to change the whole dynamic of the course from a banking model (I download info from the textbook into their brains) to an inquiry-based model (they converse with me and with the text, altering both my thinking and the text itself with their contributions).
- The digital textbook meant they all had the book on Day 1 and nobody was behind, which seemed to level the playing field so we were all contributing more evenly than I had seen in the past.
- The fact that there were no limits on the kinds of things we could add into the textbook seemed to engender creativity in students, and allowed them to play to their strengths in figuring out what they brought to the table. This looked more like a real-world group project, in which team members would be asked to bring their talents to bear on some task.
As all of this became more evident to me, I began to be more concerted about playing up the open pedagogy that was developing. I became more reliant on Twitter as a tool in our class, and worked to develop the class community on our course hashtag, with the idea that letting students feel connected to each other outside of class would help them begin to engage with the work more as scholars and less as students. I opened Twitter chats with working scholars, tweeted links to their own student blogs when they interested me (we worked mostly outside of the LMS), and encouraged them to share their own work across whatever social media platforms they enjoyed using.

I also realized that my course was basically functioning as a MOOC (minus the “massive”–maybe it was a PMOOC: “Potentially Massive Open Online Course”). The text was free online. The syllabus and all assignments were online. The annotation system was publicly accessible, and the students were mostly all blogging on public websites that they built. Many class discussions had Twitter chats embedded inside of them, and any of the lectures I gave were livetweeted (pre-Periscope!). While we still had a sense of intimacy and trust in our classroom, it seemed to liven everything up to
connect our work as scholars of history and literature to larger communities outside of that classroom.

Now I want to pause for a second and get off the hype-mobile that I have been riding so far in this post. While it’s true that the creation of the open textbook absolutely transformed my teaching and my pedagogy, and while it is true that an open textbook has much more to offer faculty and students than cost-savings, it is not true that the open textbook is magic. For every affordance it offered, my open textbook also revealed serious pitfalls, barriers, and challenges that I am still working out. Here are a few of them, which I hope to tease out more thoroughly in my work over the next year or so:

- If OER is free, what hidden costs exist in using it that still hinder student access to education? For example, at my institution, 94% of students come to school with a laptop, which mostly means that my university wasn’t too worried about providing laptops for students because (as one colleague told me) “they all have them.” But all meant that in my 25-student classes, there were regularly 1-2 student(s) who didn’t have a machine. In order to do what I wanted to do with the digital textbook and the connected learning, I had to first work to get a laptop rental program installed in my library to ensure that my students all had access to hardware. I also had to spend a LOT of time going through each step of basic tech set-up. Because the “digital native” concept is (still a) fallacy, and because my institution does not fully cover basic electracy (I just learned that word from Gardner Campbell and Alex Reid) or digital literacy skills at the introductory level, I couldn’t shorthand things like “create a Hypothesis login” without immediately leaving some students behind. While I am all for letting students find their own way through the acquisition of specific tech skills, this self-directed approach to tech learning is something that has to be modeled and facilitated to ensure that students who are newer to technology can participate fully. Bottom line, opening one line of access to a free eBook
doesn’t erase about a zillion other access issues that you will want to acknowledge honestly and assertively.

- If OER is free, what hidden costs exist in its production? Making these textbooks is taking me a chunk of time in the off-season. Thanks to my salaried position, I feel ok about putting in the overtime, but it’s a privilege my colleagues who teach under year-to-year part-time non-contracts can’t afford. Who should be funding OER creation? Institutions? Students? For-profit start-ups? How will you invest time in this project without obscuring the true costs of academic labor? Right now, we pass the corruptly high cost of academic publishing onto the backs of academia’s most vulnerable members: students. But as OER gains steam, we need to come up with funding models that don’t land us back in the same quagmire of exploitation that we were trying to get out of.

- Working in public is exciting and enriching, and I have seen my students thrilled by the connections they have made and engaged by the ability to produce work for a larger academic commons. That being said, working in public, and asking students to work in public, is fraught with dangers and challenges. Students need to understand privacy and safety issues (and so do we; in case you haven’t had FERPA waved in your face recently let me do that for you now). They may not know about trolling or how to respond to it (seriously, we can’t even say there is a universally agreed-upon best practice for handling trolling). They may (will) face vicious harassment, racism, sexism, homophobia, and all of the other things that we do a reasonably good job at regulating in our classrooms (maybe?), depending on the kind of work they do or the kind of digital profiles they put forward, purposefully or otherwise. They will put crappy work online sometimes (sometimes they will know it’s crappy and sometimes they won’t); is that ok? Will it come back to haunt them when they look for a job (we need to take this concern seriously, given the debt they incur to study with us)? What professional risks do I assume when
my pedagogy is so fully exposed? And who in the academy can afford to take those risks...and who cannot?

So yeah, that’s only three bullet points, but there are so many threads embedded in each of those, I think I will stop there.

Here's the takeaways, for those of you who are first and last paragraph readers:

Open textbooks save money, which matters deeply to our students. But they can also create a new relationship between learners and course content, and if teachers choose to acknowledge and enable this, it can have a profound effect on the whole fabric of the course. Jumping into the “open” part of the open textbook means opening our eyes to the real hazards and challenges of connecting our courses to a wider public. I am no expert on any of this, and I welcome feedback and thoughts (and suggestions for further reading) as I start to pick my way through this kind of teaching. My best advice is just to share your experiences and roadblocks with others. Lots of people are promising that “open” is a panacea for everything that ails us in education, and lots of people are rejecting “open” for its failures to deliver on that promise. Both of those positions seem reductive to me. So maybe I'll leave with two questions aimed at opening, rather than closing, the conversation:

Do you use an open textbook? If so, what's that “open” part doing to/for your course?
If you want to try incorporating an open textbook into your course but haven't yet, what questions do you have before you'd want to give it a go?

Introduction to Open Pedagogy

There are many ways to begin a discussion of “Open Pedagogy.” Although providing a framing definition might be the obvious place to start, we want to resist that for just a moment to ask a set of related questions: What are your hopes for education, particularly for higher education? What vision do you work toward when you design your daily professional practices in and out of the classroom? How do you see the roles of the learner and the teacher? What challenges do your students face in their learning environments, and how does your pedagogy address them?

“Open Pedagogy,” as we engage with it, is a site of praxis, a place where theories about learning, teaching, technology, and social justice enter into a conversation with each other and inform the development of educational practices and structures. This site is dynamic, contested, constantly under revision, and resists static definitional claims. But it is not a site vacant of meaning or political conviction. In this brief introduction, we offer a pathway for engaging with the current conversations around Open Pedagogy, some ideas about its philosophical foundation, investments, and its utility, and some concrete ways that students and teachers—all of us learners—can “open” education. We hope that this chapter will inspire those of us in education to focus our critical and aspirational lenses on larger questions about the ideology embedded within our educational systems and the ways in which pedagogy impacts these systems. At the same time we hope to provide some tools and techniques to those who want to build a more empowering, collaborative, and just architecture for learning.

“Open Pedagogy” as a named approach to teaching is nothing
new. Scholars such as Catherine Cronin, Katy Jordan, Vivien Rolfe, and Tannis Morgan have traced the term back to early etymologies. Morgan cites a 1979 article by the Canadian Claude Paquette: “Paquette outlines three sets of foundational values of Open Pedagogy, namely: autonomy and interdependence; freedom and responsibility; democracy and participation.”

Many of us who work with Open Pedagogy today have come into the conversations not only through an interest in the historical arc of the scholarship of teaching and learning, but also by way of Open Education, and specifically, by way of Open Educational Resources (OERs). OERs are educational materials that are openly-licensed, usually with Creative Commons licenses, and therefore they are generally characterized by the 5 Rs: they can be reused, retained, redistributed, revised, and remixed. As conversations about teaching and learning developed around the experience of adopting and adapting OERs, the phrase “Open Pedagogy” began to re-emerge, this time crucially inflected with the same “open” that inflects the phrase “open license.”

In this way, we can think about Open Pedagogy as a term that is connected to many teaching and learning theories that predate Open Education, but also as a term that is newly energized by its relationship to OERs and the broader ecosystem of open (Open Education, yes, but also Open Access, Open Science, Open Data, Open Source, Open Government, etc.). David Wiley, the Chief Academic Officer of Lumen Learning, was one of the first OER-focused scholars who articulated how the use of OERs could transform pedagogy. He wrote in 2013 about the tragedy of “disposable assignments” that “actually suck value out of the world,” and he postulated not only that OERs offer a free alternative to high-priced commercial textbooks, but also that the open license would allow students (and teaching faculty) to contribute to the knowledge commons, not just consume from it, in meaningful and lasting ways. Recently, Wiley has revised his language to focus on “OER-Enabled Pedagogy,” with an explicit commitment to
foregrounding the 5R permissions and the ways that they transform teaching and learning.

As Wiley has focused on students-as-contributors and the role of OERs in education, other Open Pedagogues have widened the lens through which Open Pedagogy refracts. Mike Caulfield, for example, has argued that while OER has been driving the car for a while, Open Pedagogy is in the backseat ready to hop over into the front. Caulfield sees the replacement of the proprietary textbook by OERs as a necessary step in enabling widespread institutional open learning practice. In that post, Caulfield shorthands Open Pedagogy: “student blogs, wikis, etc.” We might delve in a bit deeper here. Beyond participating in the creation of OERs via the 5 Rs, what exactly does it mean to engage in “Open Pedagogy?”

First, we want to recognize that Open Pedagogy shares common investments with many other historical and contemporary schools of pedagogy. For example, constructivist pedagogy, connected learning, and critical digital pedagogy are all recognizable pedagogical strands that overlap with Open Pedagogy. From constructivist pedagogy, particularly as it emerged from John Dewey and, in terms of its relationship to technology, from Seymour Papert, we recognize a critique of industrial and automated models for learning, a valuing of experiential and learner-centered inquiry, and a democratizing vision for the educational process. From connected learning, especially as it coheres in work supported by the Digital Media and Learning Research Hub, we recognize a hope that human connections facilitated by technologies can help learners engage more fully with the knowledge and ideas that shape our world. And from critical digital pedagogy, as developed by Digital Humanities-influenced thinkers at Digital Pedagogy Lab out of educational philosophy espoused by scholars such as Paulo Freire and bell hooks, we recognize a commitment to diversity, collaboration, and structural critique of both educational systems and the technologies that permeate them.

If we merge OER advocacy with the kinds of pedagogical approaches that focus on collaboration, connection, diversity,
democracy, and critical assessments of educational tools and structures, we can begin to understand the breadth and power of Open Pedagogy as a guiding praxis. To do this, we need to link these pedagogical investments with the reality of the educational landscape as it now exists. The United Nations Universal Declaration of Human Rights asserts that “higher education shall be equally accessible to all.” Yet, even in North America in 2017, “the likelihood of earning a college degree is tied to family income” according to Sara Goldrick-Rab, author of Paying the Price: College Costs, Financial Aid and the Betrayal of the American Dream (Chicago: The University of Chicago Press, 2016). For those of us who work in higher ed, it’s likely that we have been casually aware of the link between family income and college enrollment, attendance, persistence, and completion. But for those of us who teach, it’s also likely that the pedagogies and processes that inflect our daily work are several steps removed from the economic challenges that our students face. Even though 67% of college students in Florida and 54% of those in British Columbia, according to Rajiv Sunil Jhangiani and Surita Jhangiani, cannot afford to purchase at least one of their required course textbooks, we more readily attribute their inability to complete assigned readings to laziness and entitlement than to unaffordability. This is precisely why the push to reduce the high cost of textbooks that has been the cornerstone of the OER movement has been a wake-up call for many of us who may not always have understood what we could do to directly impact the affordability of a college degree.

When faculty use OERs, we aren’t just saving a student money on textbooks: we are directly impacting that student’s ability to enroll in, persist through, and successfully complete a course, according to John Hilton III, Lane Fischer, David Wiley, and Linda Williams. In other words, we are directly impacting that student’s ability to attend, succeed in, and graduate from college. When we talk about OERs, we bring two things into focus: that access is critically important to conversations about academic success, and that
faculty and other instructional staff can play a critical role in the process of making learning accessible.

If a central gift that OERs bring to students is that they make college more affordable, one of the central gifts that they bring to faculty is that of agency, and how this can help us rethink our pedagogies in ways that center on access. If we do this, we might start asking broader questions that go beyond “How can I lower the cost of textbooks in this course?” If we think of ourselves as responsible for making sure that everyone can come to our course table to learn, we will find ourselves concerned with the many other expenses that students face in paying for college. How will they get to class if they can’t afford gas money or a bus pass? How will they afford childcare on top of tuition fees? How will they focus on their homework if they haven’t had a square meal in two days or if they don’t know where they will be sleeping that night? How will their families pay rent if they cut back their work hours in order to attend classes? How much more student loan debt will they take on for each additional semester it takes to complete all of their required classes? How will they obtain the credit card they need to purchase an access code? How will they regularly access their free open textbook if they don’t own an expensive laptop or tablet?

And what other access issues do students face as they face these economic challenges? Will they be able to read their Chemistry textbook given their vision impairment? Will their LMS site list them by their birth name rather than their chosen name, and thereby misgender them? Will they have access to the knowledge they need for research if their college restricts their search access or if they don’t have Wi-Fi or a computer at home? Are they safe to participate in online, public collaborations if they are undocumented? Is their college or the required adaptive learning platform collecting data on them, and if so, could those data be used in ways that could put them at risk?

OERs invite faculty to play a direct role in making higher education more accessible. And they invite faculty to ask questions about how we can impact access in ways that go beyond textbook
costs. At the very least, they help us see the challenges that students face in accessing higher education as broad, as severe, and as directly related to their academic success, or lack thereof.

So one key component of Open Pedagogy might be that it sees access, broadly writ, as fundamental to learning and to teaching, and agency as an important way of broadening that access. OERs are licensed with open licenses, which reflects not just a commitment to access in terms of the cost of knowledge, but also access in terms of the creation of knowledge. Embedded in the social justice commitment to making college affordable for all students is a related belief that knowledge should not be an elite domain. Knowledge consumption and knowledge creation are not separate but parallel processes, as knowledge is co-constructed, contextualized, cumulative, iterative, and recursive. In this way, Open Pedagogy invites us to focus on how we can increase access to higher education and how we can increase access to knowledge—both its reception and its creation. This is, fundamentally, about the dream of a public learning commons, where learners are empowered to shape the world as they encounter it. With the open license at the heart of our work, we care both about “free” and about “freedom,” about resources and practices, about access and about accessibility, about content and about contribution. This is not a magical thinking approach to digital pedagogy. It’s an honest appraisal of the barriers that exist in our educational systems and a refusal to abdicate responsibility for those barriers.

To summarize, we might think about Open Pedagogy as an access-oriented commitment to learner-driven education AND as a process of designing architectures and using tools for learning that enable students to shape the public knowledge commons of which they are a part. We might insist on the centrality of the 5 Rs to this work, and we might foreground the investments that Open Pedagogy shares with other learner-centered approaches to education. We might reconstitute Open Pedagogy continually, as our contexts shift and change and demand new, site-specific
articulations. But if we want to begin “open” our courses, programs, and/or institutions, what practical steps can we take to get started?

OEP, or Open Educational Practices, can be defined as the set of practices that accompany either the use of OERs or, more to our point, the adoption of Open Pedagogy. Here are some simple but profoundly transformative examples of OEPs:

- Adapt or remix OERs with your students. Even the simple act of adding problem sets or discussion questions to an existing open textbook will help contribute to knowledge, to the quality of available OERs, and to your students’ sense of doing work that matters. The adaptation of the open textbook Project Management for Instructional Designers by successive cohorts of graduate students at Brigham Young University provides an excellent example of this approach.

- Build OERs with your students. Though students may be beginners with most of the content in your course, they are often more adept than you at understanding what beginning students need in order to understand the material. Asking students to help reframe and re-present course content in new and inventive ways can add valuable OERs to the commons while also allowing for the work that students do in courses to go on to have meaningful impact once the course ends. Consider the examples of the open textbook Environmental Science Bites written by undergraduate students at the Ohio State University or the brief explainer videos created by Psychology students around the world and curated by the NOBA Project.

- Teach your students how to edit Wikipedia articles. By adding new content, revising existing content, adding citations, or adding images, students can (with the support of the Wiki Education Foundation) make direct contributions to one of the most popular public repositories for information. Indeed, more than 22,000 students already have, including medical students at the University of California San Francisco. More than
developing digital literacy and learning how to synthesize, articulate, and share information, students engage with and understand the politics of editing, including how “truth” is negotiated by those who have access to the tools that shape it.

- Facilitate student-created and student-controlled learning environments. The Learning Management System (Canvas, Moodle, Blackboard, etc.) generally locks students into closed environments that prevent sharing and collaboration outside of the class unit; it perpetuates a surveillance model of education in which the instructor is able to consider metrics that students are not given access to; and it presupposes that all student work is disposable (as all of it will be deleted when the new course shell is imported for the next semester). Initiatives such as Domain of One's Own enable students to build “personal cyberinfrastructures” where they can manage their own learning, control their own data, and design home ports that can serve as sites for collaboration and conversation about their work. Students can choose to openly license the work that they post on these sites, thereby contributing OERs to the commons; they can also choose not to openly license their work, which is an exercising of their rights and perfectly in keeping with the ethos of Open Pedagogy. If students create their own learning architectures, they can (and should) control how public or private they wish to be, how and when to share or license their work, and what kinds of design, tools, and plug-ins will enhance their learning. It is important to point out here that open is not the opposite of private.

- Encourage students to apply their expertise to serve their community. Partner with nonprofit organizations to create opportunities for students to apply their research or marketing skills, or ask them to write (and submit for publication) op-ed pieces to share evidence-based approaches to tackling a local social problem. Demonstrate the value of both knowledge application and service by scaffolding their entry into public scholarship.
• Engage students in public chats with authors or experts. Platforms such as Twitter can help engage students in scholarly and professional conversations with practitioners in their fields. This is another way that students can contribute to—not just consume—knowledge, and it shifts learning into a dialogic experience. In addition, if students are sharing work publicly, they can also use social media channels to drive mentors, teachers, peers, critics, experts, friends, family, and the public to their work for comment. Opening conversations about academic and transdisciplinary work—both student work and the work of established scholars and practitioners—is, like contributing to OERs, a way to grow a thriving knowledge commons.

• Build course policies, outcomes, assignments, rubrics, and schedules of work collaboratively with students. Once we involve students in creating or revising OERs or in shaping learning architectures, we can begin to see the syllabus as more of a collaborative document, co-generated at least in part with our students. Can students help craft course policies that would support their learning, that they feel more ownership over? Can they add or revise course learning outcomes in order to ensure the relevancy of the course to their future paths? Can they develop assignments for themselves and/or their classmates, and craft rubrics to accompany them to guide an evaluative process? Can they shape the course schedule according to rhythms that will help maximize their efforts and success?

• Let students curate course content. Your course is likely split into a predictable number of units (fourteen, for example) to conform to the academic calendar of the institution within which the course is offered. We would probably all agree that such segmenting of our fields is somewhat arbitrary; there is nothing ontological about Introduction to Psychology being fourteen weeks long (or spanning twenty-eight textbook chapters, etc.). And when we select a novel for a course on
postcolonial literature or a lab exercise for Anatomy and Physiology, we are aware that there are a multitude of other good options for each that we could have chosen. We can involve students in the process of curating content for courses, either by offering them limited choices between different texts or by offering them solid time to curate a future unit more or less on their own (or in a group) as a research project. The content of a course may be somewhat prescribed by accreditation or field standards, but within those confines, we can involve students in the curation process, increasing the level of investment they have with the content while helping them acquire a key twenty-first century skill.

• Ask critical questions about “open.” When you develop new pathways based on Open Pedagogy, pay special attention to the barriers, challenges, and problems that emerge. Be explicit about them, honest about them, and share them widely with others working in Open Education so that we can work together to make improvements. Being an open educator in this fashion is especially crucial if we wish to avoid digital redlining, creating inequities (however unintentionally) through the use of technology. Ask yourself: Do your students have access to broadband at home? Do they have the laptops or tablets they need to easily access and engage with OERs? Do they have the supports they need to experiment creatively, often for the first time, with technology tools? Do they have the digital literacies they need to ensure as much as is possible their safety and privacy online? Do you have a full understanding of the terms of service of the EdTech tools you are using in your courses? As you work to increase the accessibility of your own course, are you also evaluating the tools and technologies you are using to ask how they help or hinder your larger vision for higher education?

These are just a few ideas for getting started with Open Pedagogy. Most important, find people to talk with about your ideas. Ask
questions about how OERs and the 5 Rs change the nature of a course or the relationships that students have to their learning materials. Look to programs and colleges that are widely accessible and which serve a broad variety of learners and ask questions about how their course designs are distinct or compelling. Ask your students about meaningful academic contributions they have made, and what structures were in place that facilitated those contributions. Try, explore, fail, share, revise.

Open Pedagogy is not a magical panacea for the crises that currently challenge higher ed. That being said, we both feel that Open Pedagogy offers a set of dynamic commitments that could help faculty and students articulate a sustainable, vibrant, and inclusive future for our educational institutions. By focusing on access, agency, and a commons-oriented approach to education, we can clarify our challenges and firmly assert a learner-centered vision for higher education.

A portion of this article was remixed from “Open Pedagogy and Social Justice” by Rajiv Jhangiani and Robin DeRosa, available under a CC-BY 4.0 license at http://www.digitalpedagogylab.com/open-pedagogy-social-justice/.

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Fellow with the Open Education Group, a faculty fellow with the BC Open Textbook Project, a faculty workshop facilitator with the Open Textbook Network, and the associate editor of NOBA Psychology.

Becoming an Open Educator: Course Overview — Quick Intro by Apurva Ashok

_Becoming an Open Educator_ is a great resource for faculty or instructors who are wondering about the benefits and impact of open. It begins with a basic introduction to the tenets of Open Education, and later answers more in-depth questions about creating and disseminating Open Educational Resources. This online course is designed to let you work at your own pace, while also providing you with activities, quizzes, and access to additional resources. You can interact with peers, maintain a reflective log, and earn a badge of completion. This relatively straightforward course was developed as part of the Opening Educational Practices in Scotland (OEPS) and supplies the foundational information required for anyone who is curious about the power of open.

Quiz: Becoming An Open Educator

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

[http://pressbooks-dev.oer.hawaii.edu/uhoerpubguide/?p=134](http://pressbooks-dev.oer.hawaii.edu/uhoerpubguide/?p=134)
Benefits & Best Practices of OER Enabled Pedagogy

This section offers a series of materials on the benefits of teaching with OER and best practices for OER enabled pedagogy. First, we provide an article from Open Washington on the importance and benefits of OER. Next, we include a guide to the unique potential of OER-enabled pedagogy by the Open Education Group. Further, we offer materials from BC Campus and Open educator Lauri Aesoph on basic rules of textbook development, guidelines to student-centered Open pedagogy, including accessibility, diversity, and inclusion; and a quick guide to fix-as-you-go as a principle of OER material and textbook development.

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- **Why OER Matters – Open Washington**
- **OER-Enabled Pedagogy Library – Open Education Group**
- **Five Rules of Textbook Development – BCcampus OpenEducation & Lauri Aesoph**
- **Quick Guide: Accessibility, Diversity, and Inclusion – BCcampus & Lauri Aesoph**
- **Fix As You Go – BCcampus & Lauri Aesoph**

A short video: “Open Education Matters: Why is it important to share content?” by Nadia Mireles.
Why OER Matters — Open Washington

We have discussed OER, Open Licenses, Creative Commons Licenses, and Public Domain. We learned that there are quality open resources made available for educators like us to adopt and adapt. Here, we will discuss why all these matter to us (or not).

What are the benefits in using OER?

Why on earth do we care? Why do open educational resources matter? What is the point of using OER?
The development and promotion of open educational resources is often motivated by a desire to curb the commodification of knowledge and provide an alternate or enhanced educational paradigm (sentence from Wikipedia, OER). As an educator, what benefits do you see in using OER for you and your students?

Below are some of the benefits of using open educational resources that I have seen while working with OER over the past several years.

**Saves costs for students**

OER can offer drastic savings in the cost of education. Some students, who otherwise cannot afford to buy expensive textbooks or other course materials, will appreciate this affordable option when taking your course. A faculty member from a community college said during an interview

> “Many of my students are struggling. They are working adults trying to make ends meet. I used to use a $150 textbook from a publisher and I switched to an open textbook. My students love it because it costs nothing. They are now asking if my next course will use the free textbook too.”

> “I made my own course materials package for my students. It is free to download and a printed version is only 40 dollars. I could not find a ready-made open textbook for my course. So I combined the open resources out there and developed my own. It was a lot of work, but my students are happy to save good money.”

**Grants access to more quality choices**

There are more than 1000 free online courses from leading
universities that are open to the public. Students in low-resource environments can enjoy the recorded lectures and video tutorials developed by other institutions such as,

- **Open Yale courses** (from Yale University),
- **Webcast.Berkeley** (from the University of California at Berkeley),
- **Stanford Engineering Everywhere** (from Stanford University),
- **Open Learning Initiative** (from Carnegie Mellon University)
- **MIT OpenCourseWare** (from MIT)
- **Open Learning Initiative** (from Carnegie Mellon University)
- **Harvard Open Courses** at Harvard Extension School (from Harvard University)

This is just to name a few. Many other universities, colleges, and other educational institutions in higher education are preparing to offer open online courses to the public. Educators are happily sharing their life's work with students and enjoying the greater influence their materials have on larger audiences.

**Helps prior learning and after learning**

If an instructor opens his/her own course materials, and shares them with the public it greatly enhances opportunities for learning for both students who already took the course and the prospective students.

Students often would like to look over course materials before the term begins. If students have that opportunity to take a look at the course materials it will help them make more informed decisions in choosing their courses, and will give them the opportunity to prepare themselves for the class.

Students also would like to revisit their course materials after the quarter/semester is over to refresh their memories or to further study the topics. Open course materials will help them reinforce what they have learned and further develop their level of understanding in the area.
Provides peace of mind for all users

If you're re-using someone else's materials, one of the best reasons for using OER is for peace of mind about attribution. The resources are licensed to allow the sharing of content and so you will not need to contact the author about making use of his or her work provided that what you want to do falls within the ‘open’ license. OERs are free at the point of use, so you will not need to provide monetary compensation for using them. Then there is the opportunity of discovering alternative ideas for presenting and teaching your subject matter or being able to point your students to the alternative explanations for further study (text in this paragraph is from Why OER by Kabils, CC BY).

Other benefits

• Showcases research to widest possible audience
• Enhances a school's reputation as well as that of the teacher or researcher
• Social responsibility – provides education for all
• Shares best practice internationally
• Creates additional opportunities for peer review
• Maximizes the use and increases availability of educational materials
• Raises the quality standards for educational resources by gathering more contributors

What do you see? Do they make sense? Think about what OER can do for you and your students.
What are the challenges in using OER?

Below are some of the challenges of using/providing open educational resources.

**Quality Assurance**

A growing number of digital resources are available. Teachers, students and self-learners looking for resources will not have trouble finding resources but might have a harder time judging their quality and relevance. Many institutions that supply OER go through an internal review process before releasing them to the public but these processes are not open in the sense that the user of the resource can follow them (text from Open Educational Resources by Jan Hylen, CC-BY). Also there is a lack of research data focusing on comparing the amount students learn from OER compared to the amount they learn from prevailing publisher materials. Whether the material is free or expensive, quality does matter.

**Sustainability of OER**

Many OER initiatives begun in recent years were dependent on one-time start-up funding. Although some projects have a strong institutional backing, it is likely that the initial funding will cease after a few years and maintaining the resources will be difficult and expensive. Without maintenance the resources will become obsolete and the quality could be lost. Therefore it is critical to figure out how to sustain these initiatives in the long run.
Lack of public understanding about OER

At just over ten years old OER is a very recent development in education. It requires a huge paradigm shift and attitude change and this is a much bigger challenge than introducing a new tool or knowledge. Many in education do not understand the potential of OER and feel that it threatens their ownership of intellectual property. It takes some time to understand that open licenses, such as Creative Commons licenses, clearly recognize and can reinforce someone's intellectual ownership. The open licenses are simply to make the sharing process easy while protecting the copyright.

What other challenges do you see?

Below are presentation slides that discuss the benefits and challenges of OER prepared by Washington State Community and Technical College faculty.

- The Road Ahead Open Educational Resources Touting the Benefits while Recognizing the Challenges by Pat Pickering
- Open Educational Resources by Amy Hammons
- Open Educational Resources: Should I Use them? by Leo Hopcroft
- In Favor of Open Educational Resources by Bev Farb
- Open Educational Resources: Weighing the Benefits and Challenges by Debi Griggs
- OER: Benefits and Challenges by Tamara Ottum
- OER: The Good, The Bad by Nancy Scofield
- Pros and Cons of OER by Barbara Jacobs
- OER~The Future Picture of Online Education? By Tom Pickering
- Benefits and Challenges of Using OERs by Debbie Crumb
OER-Enabled Pedagogy

OER-Enabled Pedagogy is the set of teaching and learning practices only practical in the context of the 5R permissions characteristic of open educational resources. Some people – but not all – use the terms “open pedagogy” or “open educational practices” synonymously.

The purpose of this page is to provide a list of concrete examples of how OER-enabled pedagogy, is implemented in the real world. (We appreciate earlier efforts to collect examples like this one by BC Campus). We've kept our descriptions brief and, where possible, linked directly to the artifacts students have created or to articles that provide more information on what they did. Please send additional examples to David Wiley and we will add them to this list with a credit.

Please see this article for further thoughts on a definition of OER-enabled pedagogy.

Examples from the Real World

Students write or edit Wikipedia articles

- Murder, Madness & Mayhem assigned students to edit (and if necessary create) Wikipedia articles about lesser known Latin American authors.
- Azzam assigned fourth-year medical students to edit and improve Wikipedia articles related to public health topics.
• See additional Wikipedia-based assignments here and here. Also, see this report that 6% of edits to science articles in on Wikipedia in April 2016 were made by students.

Students remix audiovisual materials to both entertain and inform

• Blogs and Wikis combines existing video with new audio to describe the difference between blogs and wikis.
• Rick Noblenski: Blasting Caps Expert and Wiki Advocate combines existing video with new audio to advocate for the use of wikis in the teaching.
• District Policies Regarding Blogs and Wikis combines existing video with new audio to warn teachers about how their desire to use social media may run afoul of school district policies.

Students create or revise/remix entire textbooks

• The Open Anthology of Earlier American Literature was created by Robin DeRosa and her students.
• Project Management for Instructional Designers was created by David Wiley and his students as an adaptation of an existing open textbook written for a different audience.

Students openly license supplemental materials they create for each other

• Teachers at Mountain Heights Academy encourage students to create openly licensed study guides, review games, tutorial videos, and other materials which they review and integrate into their courses.
**Students create test banks**

- Jhangiani describes a Social Psychology course in which 35 students created over 1400 test questions for a quiz bank.

**Students create their own assignments**

- DS106 has students create (or remix) and share assignments, together with worked examples, difficulty ratings, and tutorials for how to successfully complete the assignment.

**Additional Ideas**

Here are some other ideas for engaging in open pedagogy that we haven't yet seen in the real world. If you've seen them, let us know.

**Students create tutorial videos**

- Students can create tutorial videos for a particular topic or assignment. These tutorial videos could cover a wide range of topics such as teaching specific skills, summarizing key concepts, providing worked examples, or creating connections to student lives.

**Students create summaries**

- Students can create written or video-based presentations that summarize key aspects of the storyline, character, interpretation, symbolism, etc. These summaries could be both
used by and improved upon by future generations of learners.

**Students create worked examples**

- Students can create worked examples that provide other students with step-by-step templates of how to do problems (these are particularly popular in math), like [this one](#), specifically in topics that have proven troublesome to students in past semesters.

**Students connect principles with popular culture**

- Students can explain how principles studied in class are exemplified in popular media like movies, television, music, or books.

**Students create games**

- Students can create games to be played by future generations of learners to help them prepare for, or deepen their learning on, specific topics.

**Students create guided notes**

- Students create guides to direct other students through readings or lecture.

**Five Rules of Textbook Development —**
The below list provides five rules that help guide the development of a good textbook, adapted from wikibooks.

1. Rule of frameworks

Memory and understanding are promoted by the use of a structure that mimics the structures we all use within our minds to store information. Before we can use or master a subject, we have to have a mental road map that allows us to navigate within and through the subject domain. The text can best aid understanding by making this framework visible early on within each section or topic. The extent to which the student understands that they are using a framework, and knows what that framework is, is important as they internalize and make use of the material presented.

2. Rule of meaningful names

Everything we know is tagged with an index or a title. These indices are critical to the ability to recall or retrieve the things we know and remember. Each concept, process, technique or fact presented should aid the student to assign a meaningful name for it in their own mental organization of the material. To be most useful, these names shouldn't have to be relearned at higher levels of study. The names assigned by the text should be useful in that they support some future activities: communication with other practitioners, reference within the text to earlier mastered material, and conformity to the framework used for the subject. Each unique element of the subject domain should have a unique name, and each name should be used for only one element.
3. Rule of manageable numbers

When we learn from an outline, an illustration, or an example, most of us are limited in our ability to absorb new material. As we become familiar with part of a subject domain this number expands, but for new material four to six new elements is a reasonable limit. If a chapter outline contains twelve items, the student will have forgotten the outline before getting to the last item. When a text fails to support this rule, it requires even a diligent student to needlessly repeat material.

4. Rule of hierarchy

Our mental frameworks are hierarchical. Learning is aided by using the student’s ability to couple or link new material with that already mastered. When presenting new domains for hierarchical understanding, the rules for *meaningful names* and *manageable numbers* have increased importance and more limited application. A maximum of three levels of hierarchy should be presented at one time. The root should be already mastered, the current element under consideration clearly examined, and lower levels outlined only to the extent that they help the student understand the scope or importance of the current element. This area is supplemented by two more rules within this rule: those of Connectivity and Cohesion. Connectivity requires consideration of what the student likely knows at this point. The more already mastered elements that one can connect with a new element, the easier it is to retain. Cohesion requires that the characteristics of new elements as they are presented be tightly coupled.
5. Rule of repetition

Most people learn by repetition, and only a few with native genius can achieve mastery without it. There is a pattern of repetition that aids in promoting the elements of a subject from short-term to long-term memory. Implementations of this rule may mean that frameworks and important hierarchies are repeated as many as five or six times, while frequently used elements are repeated three or four times, and elements of lesser utility may not be repeated at all. The first repetition should normally occur within a day of first presentation, followed by a gradually decreasing frequency. Exercises and review sections are ideally contributing to a designed repetition pattern.

5 Rules of Textbook Development [Long Description]

Attributions

The content in this section comes from Wikibooks:Textbook considerations and is used under a CC BY-SA 3.0 Licence.
Long Descriptions

5 Rules of Textbook Development long description:

1. The rule of frameworks means maintain a consistent structure. The text can best aid understanding by making this framework visible early on.
2. The rule of meaningful names means create and use consistent titles and terminologies. The names are critical to the ability to recall or retrieve the things we know and remember.
3. The rule of manageable numbers means limit the amount of new information introduced at one time.
4. Rule of hierarchy means new knowledge builds on learned knowledge. The student needs to understand the foundational knowledge before being introduced to a new concept. When new concepts are introduced they should be explicitly connected to the foundational material.
5. The rule of repetition means repeat important concepts. There is a pattern of repetition that aids in promoting the elements of a subject from short-term to long-term memory.

Quick Guide: Accessibility & Equity, Diversity, and Inclusion (EDI) — Adapted with minor edits from BCcampus & Lauri Aesoph

One of the basic premises of open education is access. The United Nations Educational, Scientific and Cultural Organization (UNESCO) believes:

...that universal access to high quality education is key to
the building of peace, sustainable social and economic development, and intercultural dialogue. Open Educational Resources (OER) provide a strategic opportunity to improve the quality of education as well as facilitate policy dialogue, knowledge sharing and capacity building.

**Access** in this context refers to the ability for students, instructors, and others to obtain access to education. Releasing textbooks and other educational resources with open-copyright licenses is a big step toward removing barriers, as it makes these materials free of cost and free to use, distribute, and change. But there is more that goes into accessing a resource than it just being free and online.

For a textbook to be truly accessible, people of all abilities need to be able to access the content. This means designing a textbook that accommodates people with diverse learning styles and ensuring the content can be accessed by all, regardless of disability. It also means creating materials that include diverse viewpoints and voices. As you plan your textbook, contemplate how to design it so it is accessible, diverse, and inclusive.

Read what your colleagues are saying about [Equity, Diversity, Inclusion & Open Education][1].

### Accessibility

As an open textbook author and publisher, it’s important to consider the social-justice side of open education. Listed below are some of the barriers students face during their education, as well as some solutions and examples.
<table>
<thead>
<tr>
<th>Barrier Type</th>
<th>Challenge</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Impairments</td>
<td>Low vision or blindness</td>
<td>Use alternative text (alt-text) to describe an image's content or function that can be read by a screen reader.</td>
</tr>
<tr>
<td></td>
<td>Hearing impairment or deafness</td>
<td>Add transcripts and captions to all audio content.</td>
</tr>
<tr>
<td></td>
<td>Motor-skill impairment, immobility</td>
<td>Provide file formats that can be uploaded into a variety of mobile devices.</td>
</tr>
<tr>
<td>Learning Disabilities</td>
<td>Difficulty absorbing information via reading or difficulty concentrating</td>
<td>Add audio clips to printed text that student can listen to while reading along.</td>
</tr>
<tr>
<td></td>
<td>(ADHD)</td>
<td></td>
</tr>
<tr>
<td>Language Comprehension</td>
<td>Low literacy: adult basic education (ABE) student or English language</td>
<td>Provide a print copy with increased font size or provide formats that allow the font size to be adjusted.</td>
</tr>
<tr>
<td></td>
<td>learners (ELL)</td>
<td></td>
</tr>
<tr>
<td>Limitations of Time and</td>
<td>Working, parenting, or live far from a college or university</td>
<td>Provide a version of the textbook that can be accessed from anywhere online.</td>
</tr>
<tr>
<td>Place</td>
<td>Unreliable or no access to the Internet</td>
<td>Set up a service that can supply a print-on-demand copy.</td>
</tr>
</tbody>
</table>

Refer to the BCcampus Open Education Accessibility Toolkit [New Tab] for information on how to make sure you create an accessible textbook. (A French version [New Tab] is also available.) There are a number of accessible textbooks in the B.C. Open Textbook Collection [New Tab]. They are flagged as “Accessible” when they meet all requirements on the Accessibility Checklist [New Tab].
The National Center on Universal Design for Learning [New Tab] also offers guidelines on how best to design educational resources so that students with a variety of learner styles benefit. You can also watch this video produced by the University of British Columbia: Open Dialogues: How to make open content accessible [YouTube – New Tab].

Equity, Diversity, and Inclusion (EDI)

In the context of writing an open textbook, equity, diversity, and inclusion means centering a wide range of perspectives in your textbook. This can help ensure that more readers identify with and relate to the material. Some benefits are:

- Engaging more students because they recognize themselves or their life experiences in the material
- Appealing to instructors in a variety of educational settings
- Creating a more interesting reading and learning experience

Question 10 on the BCcampus Open Education Review Rubric [Word file] addresses the issue of diversity and inclusion. (See Textbook Reviews.)
Ethnocentrism

Whether intentional or not, ethnocentrism – “a tendency to view alien groups or cultures from the perspective of one’s own” – can creep into the content and presentation of a textbook, and it is something all authors should be aware of. This doesn't mean you must write a book that fits every culture and perspective, only that you are respectful.

Once your book is published, if instructors from another country and culture want to use your work, they may customize it for their classroom needs. The changes made might include:

- Translating the book into a different language
- Adjusting the content to meet the local cultural, regional, and geographical needs
- Revising the material for a different learning environment

For more information see Reasons to Adapt an Open Textbook [New Tab] in the BCcampus Open Education Adaptation Guide.
Dedicating one or more people to the role of fixer will result in a higher quality textbook.

Computer by mohamed_hassan has been designated to the public domain (CC0).

During production, it’s a good idea to have – in addition to a copy editor – someone who oversees the layout, formatting, and correct treatment of the various elements of your book.

This is your **fixer**.

A good fixer can be invaluable. Through experience, we learned they should be an individual with a keen eye for detail, have the ability to accurately match the exceptions noted on the style sheet against the textbook, be willing to review each chapter and section of your book repeatedly, and be able to distinguish between errors they should correct as part of their job and problems that require input from the author or project lead.

A fixer can also help add elements to the textbook, such as learning-objective textboxes and attribution statements.

Lastly, you and your fixer will learn as you go. The fixer will be
spending a lot of time with the textbook, and because of this, they can offer many helpful suggestions about what’s working, what isn’t, and where the problems are.

Fixer tasks

Before they begin, create a detailed job description for the fixer or fixers so it’s clear what’s expected. Keep a running “fix list” to record both anticipated and discovered errors and inconsistencies, and note details regarding each correction, including what was fixed, the date completed, and who did the job (if there is more one person involved).

The fixer does not copy edit. However, if the fixer notices problems with the language – such as grammar, unclear text, repetitive phrases – they can report these to the copy editor or author.

Typical fixer tasks might include:

- Auditing external resources (images, videos, audio clips) to ensure they meet licensing requirements
- Ensuring that all images, videos, and other external resources added are correctly attributed. The fixer can also be assigned to adding attribution statements. (See Resources: Captions and Attributions.)
- Making sure that figures and tables are correctly captioned, numbered, and referenced in the text
- Comparing key terms highlighted in the textbook against the glossary
- Confirming that links work
- Reviewing the citation style of in-text references or footnotes and the reference list
- Checking the heading styles are correct
- Depending on the country in which a textbook is published,
the fixer might be instructed to:

- change measurements (e.g., from imperial to metric)
- ensure region-appropriate spelling is used.

Quiz: Benefits & Best Practices of OER Enabled Pedagogy

Workshops & Faculty Development Resources

This section offers links and materials related to Open Pedagogy and OER workshops and faculty development resources. First, we provide a series of useful quick links compiled by Open Educator Rajiv Jhangiani. Then we include an outline and links for the SPARC* Open Education Leadership Curriculum. Finally, we offer an introduction to the OEPS Course, which will be provided in the next section.

- Quick Links: Open Pedagogy Resources – Rajiv Jhangiani
- SPARC* Open Education Leadership Curriculum
• OEPS 1.0 Course Intro – Opening Educational Practices in Scotland & The Open University


A YouTube element has been excluded from this version of the text. You can view it online here: http://pressbooks-dev.oer.hawaii.edu/uhoe/hoerpubguide/?p=134

Quick Links: Open Pedagogy Resources — Rajiv Jhangiani

This section: CC-BY-SA

Open Pedagogy Notebook
Making Open Textbooks with Students

Hypothes.is guide for educators
Hypothes.is guide for students
Exporting Hypothes.is annotations
Hypothes.is aggregator WordPress plugin
Questions about Hypothes.is? Contact jeremydean@hypothes.is

H5P: https://h5p.org/content-types-and-applications
H5P accessibility check: https://h5p.org/documentation/installation/content-type-accessibility

Creative Commons license chooser: https://creativecommons.org/choose/
Creative Commons attribution builder: http://www.openwa.org/open-attrib-builder/

Flickr Creative Commons: https://www.flickr.com/creativecommons/
Unsplash: https://unsplash.com/ (openly licensed images)
Pexels: https://www.pexels.com/ (openly licensed images)

Etherpad: http://etherpad.org/ (Google like document authoring)
https://pressbooks.com/
http://proola.org/
https://web.hypothes.is/
SPARC* Open Education Leadership
Curriculum

This section CC-BY

Open Education Leadership Curriculum

SPARC* unique curriculum blends online, peer-to-peer, and project-based learning opportunities to develop participants into subject matter experts with the practical know-how to advance open education initiatives on campus.

Curriculum

Program Outcomes

• Gain a comprehensive understanding of how to approach the discovery, creation, adoption, licensing, and stewardship of open educational resources and how this connects to open pedagogy.
• Develop skills to define, communicate, and advocate for open education to a wide variety of stakeholder audiences.
• Learn how to assess local needs and barriers relating to open education, and design an initiative to address them.
• Gain practical experience planning, implementing, and assessing an open education project that both has an impact locally and contributes back to the community.
• Develop as a leader through personalized feedback, mentorship, and peer-to-peer support.
• Build a network within the open education community, both
through a cohort of peers and access to leading experts in the field.

Intensive Online Course

The first step of the program is an intensive online course facilitated by an instructor. The course is structured into weekly modules, with each module addressing a different theme.

*Modules (Version 1.0)*

- Module 1: What is Open Education?
- Module 2: Open Education on Campus
- Module 3: Discovering and Curating OER
- Module 4: Copyright & Open Licensing
- Module 5: Adapting & Publishing OER
- Module 6: Open Pedagogy & Researching Impact
- Module 7: Open Education Advocacy & Institutional Change
- Module 8: Open Education Project Planning & Management

*Other Materials (Version 1.0)*

- Open Education Primer
- OER Treasure Hunt Worksheet (Module 3)
- Open Pedagogy Worksheet (Module 6)
- Open Education Project Roadmap Worksheet (Module 7)
- Peer Grading Worksheet

In keeping with SPARC’s commitment to setting the default to open, all content we developed is published under a Creative Commons Attribution license.
Course Videos & Readings

Module 1: What is Open Education?

- An Introduction to Open Educational Resources by Abbey Elder
- SPARC: Open Education
- Open Education Primer
  - About this Resource
  - Chapter 1
  - Chapter 2
- Why Open Education matters (video)
- The Difference between Free and Open
- Background and Testimony (written)
- Leading Lines #29 (podcast)
- Study on OER (video)
- Education is Sharing (video)
- Open Content Definition

Module 2: Open Education on Campus

- Libraries and the Open Education Movement by Abbey Elder
- Open Education Primer
  - Chapter 6
  - Chapter 3
- Roles of the Open Education Advocate
- Connect OER (Check out institutions in your region)
- Stakeholders and Benefits
- Barriers (Download the pdf file)
- Steps to Adopting OER
Module 3: Discovering and Curating OER

- How to Find and Evaluate OER by Abbey Elder
- Open Education Primer
  - Chapter 10
  - Chapter 13
- Video Message from Quill West
- Searching for Open Materials (watch all three videos)
- Studies on OER Quality (an ongoing literature review)
- College Textbooks: Do You Get What You Pay For?
- Five Hurdles (this article is nearly 5 years old, but much of it is still relevant)
- Open Textbook Review Criteria from BCcampus

Module 4: Copyright & Open Licensing

- Attribution & Fair Use: Copyright in Open Education #1 by Abbey Elder
- Open Education Primer
  - Chapter 14
- Creative Commons Licenses
- Copyright (U.S.) or Copyright (Canada)
- Fair Use (U.S.) or Fair Dealing (Canada) (also check out these fair use or fair dealing guides and this fair use infographic)
- Public Domain (U.S.) or Public Domain (Canada)
- Court Case on Non-Commercial Licenses
- Step by Step Open Licensing

Module 5: Adapting & Publishing OER

- Creating Open Educational Resources by Abbey Elder
- Open Education Primer
• Chapter 11
• Chapter 12
• Chapter 15

• **OER and Accessibility** (CC BY)
• **OER + Metadata** (CC BY)
• **10 steps to developing your own OER** (CC BY-NC)
• **Case Study: Portland State University Library** (CC BY)
• **Modifying an Open Textbook: What You Need to Know** (read Overview – Step 5) (CC BY)
• **Made with Creative Commons** (pick 2 case studies to read)(CC BY)
• **The Care Framework** and perspectives (for Live Discussion)
  ◦ David Wiley: **The Care Framework Take 2** (CC BY)
  ◦ Paul Stacey: **How Traditional Textbook Publishers Can do Well by the Open Community**
  ◦ Top Hat (Vendor): **Open Educational Resources at Top Hat**

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**Module 6: Open Pedagogy & Researching Impact**

• **Open Education in Practice: Integrating OER Into Your Course** by **Abbey Elder**
• **Open Education Primer**
  ◦ Chapter 4
  ◦ Chapter 15
• **7 Things You Need to Know: Open Education Practices**
• **What is Open Pedagogy?**
  ◦ **David Wiley**
  ◦ **Cape Town Declaration**
  ◦ **Open Pedagogy Notebook**
• **Making Open Textbooks With Students** (Read **this** and **this**, the rest is optional)
• **The Impact Of Open Educational Resources on Various**
Student Success Metrics
• Free Digital Textbooks Vs. Purchased Commercial Textbooks
• Resources to Check Out
  ◦ Open Education Fellows Program
  ◦ Open Education Publications

OER Research Guidebook

Module 7: Open Education Advocacy & Institutional Change
• Barriers to Open Education (& How to Help Break Them Down) by Abbey Elder
• Open Education Primer
  ◦ Chapter 5
  ◦ Chapter 7
• List of State OER Policies (check out your state)
• Recognizing “Open” in tenure and promotion
• Change Management (optional: check out this article illustrated by cats!)
• Crafting a Message
• Communicating “Open” (presentation starts at 1:08:30, it’s a bit longer than other videos we’ve watched but worth it!)

Module 8: Open Education Project Planning & Management
• Planning an Open Education Initiative by Abbey Elder
• Open Education Primer
  ◦ Chapter 8
  ◦ Pick 1 chapter to re-read and contribute
• What Can Leaders Do? (CC BY)
• On the Sustainability of OER Initiatives in Higher Education
• Defining Stakeholders (CC BY)
OER Repositories

Here is a list of resources that will provide you and your campus a place to begin in discovering OER. Some may be familiar, other may not be (and feel free to explore them, as each name will be linked to the source):

Large Repositories: The “big three” large repositories of OER material are below.

- **OER Commons**: Supported in part by the William and Flora Hewlett Foundation, ISKME, the Institute for the Study of Knowledge Management in Education.
- **OpenStax CNX**: A large collection of CC BY licensed OER supported by Rice University.
- **MERLOT**: Led by California State University, along with 23 other universities and institutional partners that support the operation of this repository.

Institution-Based Collections: Below is a set of collections that contain either a selected set of resources, or resources created through a specific project. All are housed at institutions of higher education.

- **Open Textbook Network**: Curated catalog of open textbooks with faculty reviews housed by the University of Minnesota.
- **OpenStax**: Non-profit open textbook publishing company housed at Rice University that offers optional add-ons from outside partners.
- **BC Campus Open Education Resources**: A collection of
textbooks created in British Columbia.

- **Open SUNY**: Textbooks developed by the SUNY system.

Other Collections: Below are a set of OER collections created or curated by other entities, including the private sector.

- **Lumen Learning**: Includes course shells created by Lumen.
- **Boundless**: Includes texts broken into chapters and modules, so that part or a whole chapter or book can be incorporated into a course.
- **Saylor**: Sponsored by the Saylor Academy, this site takes you to the textbooks they sponsor, although they also have online courses and other open material.

In addition, check out the following places:

- **SPARC’s Libraries and OER Forum**: Join and receive up-to-date information on Open Access and Open Education resources that you can pass on to your faculty.
- **Community College Consortium of Open Educational Resources (CCOER)**. Don’t let “Community College” fool you—many resources exist for both two-year and four-year schools.
- **Creative Commons** (we will talk more about this subject next week!)
- **Open Education Consortium** (members from around the world share resources)

For more information and full course materials, see SPARC* Open Leadership Program Curriculum.

**OEPS 1.0 Course — Opening Educational**
Practices in Scotland & The Open University

This course, which was produced as part of the Opening Educational Practices in Scotland (OEPS) project is aimed at anyone who is curious about how ‘free’ and ‘open’ might change our approach to teaching and learning and has been designed for administrators, educators and facilitators in all sectors. It asks you to consider a range of questions. For example, how do I find open resources and what benefits might they bring? Does openness change our relationship to the content I create, the people I create content for, others with whom I share the material, and our own everyday practice and context? And if so, what impact, if any, does openness have on these practices and relationships?

This course is divided into five sections, each with an accompanying ‘If you want to know more …’ section, which thematically presents supplementary material and resources on the topics for that section. You can use the course in any way that you choose.

The course begins with the basics of open educational practices (OEP) and open educational resources (OER). Section one of the course explores what ‘open’ means and what open practices and resources are. It also introduces the concept of an ‘open license' and what this means. Section two focuses on developing earlier discussions of open educational resources (OER) and explores why one might want to use OER or incorporate more open practices, both as individuals and at an institutional level. In addition, the course looks at the importance of developing both your own, and learners', digital literacy.

Sections three and four of the course focus on the practicalities of using OER. Section three looks at using OER, where to find open resources, what factors might influence your resource choice, how to attribute a resource and introduces the idea of curation. Building on the introduction to using OER in section three, section four focuses on remixing open resources, what you will need to consider
when you create OER, how to share your resources and how to choose the most appropriate license for your context.

The final section of the course focuses on the importance of measuring the impact of what you create and explores a range of other practices you might want to consider. It also offers a range of different suggestions for ideas you might want to try before encouraging you to build on your work so far in the course to consider where you want to go next in your ‘open’ journey!

Quiz: Workshops & Faculty Development Resources

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

http://pressbooks-dev.oer.hawaii.edu/uhoerpubguide/?p=134
3. Open Pedagogy

EDUCUSE LEARNING INITIATIVE, ELIZABETH MAYS, ANNA ANDRZEJEWSKI, JULIE WARD, TIMOTHY ROBBINS, MAXWELL NICHOLSON, ZOE WAKE HYDE, CALIFORNIA OER COUNCIL, AND DAVID SQUIRES

This section presents theory, practice, and praxis of Open Pedagogy.

The first part of this section, **Open Education: 7 Things You Should Know**, presents a series by Educause that discusses main points about Open Education content, practices, and policies.


The third part, **Interviews, Faculty User Stories & Case Studies**, provides interviews with Open Educators David Squires and Gabriel Higginbotham, who have worked with students to create OER textbooks and materials. It also links to videos from OER instructors and learners from California OER Council member colleges and universities.

The fourth part, **Student Rights & Faculty Responsibilities**, discusses the ways that faculty have a responsibility to keep student rights front of mind when making open textbooks with students. Privacy, licensing, and digital literacy are among the main issues to consider. Also included in this section is a sample memorandum of understanding for student authorship of OER textbooks and materials.

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- Open Education: 7 Things You Should Know – Educause
- Case Studies: Projects – A Guide to Making Open Textbooks
Learning Objectives

Type your learning objectives here.

- First
- Second

Open Education: 7 Things You Should Know

This section offers a series of articles from Educause on 7 Things You Should Know. This series of articles focuses on Open Education content, practices, and policies.

- Open Education: Content
- Open Education: Practices
Open Education: Content

Scenario

Melinda McGyver, a professor of environmental studies at Parkview College, was initially skeptical about using open educational resources (OER) as curricular material. Several factors led her to change her mind. One was that a growing number of her students were showing up to class without the required textbook; students said they simply could not afford the high price of that book. In addition, she was intrigued by the possibilities of OER after hearing a presentation at a conference about how colleagues in her discipline had used them successfully in their courses.

George Masters, a librarian at Parkview, offered to help McGyver locate a number of relevant OER for her to consider. With his help, McGyver discovered a rich lode of pertinent OER that were available at no charge from several repositories. She assessed a wide range of materials thoroughly and was pleased to find OER that would work well for her students. One item McGyver found was an open textbook. With the assistance of Parkview’s IT staff, she was able to revise the textbook to better match her goals for student learning. The inherent flexibility of the openly licensed material enabled her to seamlessly integrate course modules and resources from several sources.

McGyver was also pleased with how well learners used the open textbook. In one assignment, students documented local environmental issues, including air pollution from a local factory and concerns about the impact of fracking on drinking water. Once their projects were complete, the students integrated them into the open textbook so that future students could learn about these local
issues. McGyver noticed that her students were motivated by this real-world application of their work, and she was excited that the open textbook she was using was being continuously improved by her students.

Student learning assessments showed that students in sections using open content scored a bit better than those using conventional materials. Based on her own day-to-day observations and anecdotal end-of-semester observations from students, McGyver theorized that students using the open content had performed better because they learned the content and concepts more deeply when they were asked to co-create knowledge used in the course. Many students thanked her for assigning free course materials and for empowering them to co-author improvements to the course.

1 What is it?

Open educational resources (OER) are teaching, learning, and research materials in any medium that reside in the public domain or that have been released under an open license that permits no-cost access, use, adaptation, and redistribution by others. OER include textbooks, curricula, syllabi, lecture notes, video, audio, simulations, assessments, and any other content used in education. OER provide ubiquitous access to high-quality, effective learning materials that can be easily tailored and freely adapted, revised, expanded, translated, and shared with educators and learners around the world. OER support the practice of open education, an umbrella term for the mix of open content, practices, policies, and communities that, properly leveraged, can provide broad access to effective learning opportunities for everyone.
2 How does it work?

Most OER are available in digital form, which allows them to be stored, copied, and distributed online at minimal cost. OER also includes printed content that is openly licensed. In some cases, students prefer online materials; at other times, printed content is necessary when computers or high-speed internet access is not available. Advocates believe open resources should be provided as editable files with the legal permission to engage in the “5Rs”: retain (make, own, and control copies of the content, including downloading, duplicating, and storing that material); reuse (use the content in a wide range of ways, such as in a class, on a website, or via video); revise (adapt, adjust, modify, or alter the content itself, such as translation to another language); remix (combine the original or revised content with other material to create something new, such as a mashup of content); and redistribute (share copies of the original content along with revisions). Open licenses, such as those provided by Creative Commons, make it simple to allow such free and open use of content while retaining one’s copyright for that work.

3 Who’s doing it?

OpenStax, based at Rice University, has developed 35 textbooks that are used by students in college and in high school Advanced Placement courses. The Open Textbook Network, based at the University of Minnesota, provides the Open Textbook Library, a growing catalogue of over 480 free, peer-reviewed, and openly licensed textbooks and anchors an alliance of higher
than 240 open textbooks used by thousands of faculty and students. Lumen Learning has a catalogue of over 45 complete sets of OER course materials. Examples and repositories of open resources can be found at the Open Education Consortium, OER Commons, and MERLOT. The Washington State Community College System operates Open Washington, which helps faculty learn about and find OER. Creative Commons hosts a list of OER repositories and runs CC Search.

4 Why is it significant?

Open educational resources are flexible and adaptable, free to use, easily shared, and can be kept forever. They enable faculty and students to readily adapt educational content to meet local needs. For students, OER confer significant dollar savings while also giving learners ready access to a wide range of high-quality, highly flexible educational materials. Many practitioners argue that open education could be positioned as a core education practice, with learners producing, evaluating, using, revising, and sharing OER. For faculty, open content affords rich opportunities to shape educational materials and tailor them to learners’ needs, share knowledge across higher education, and participate more broadly in their field than might otherwise be possible.

5 What are the downsides?

Although OER are free to use, like all educational resources they require an investment to create, adopt, and maintain. Not all institutions are prepared to provide compensation, service support, and policies to support the development of open resources; institutions could investigate redirecting funds away from other
content models to support OER development. One impediment to adoption is that some in the academy still consider open content to be inferior to traditional educational materials, and resistance to the concept of open education persists. Work is needed to raise awareness about the value and quality of OER and research about its impact of OER in the academy. Work is also needed to develop policies—particularly for tenure and promotion—that support the development and distribution of open content.

6 Where is it going?

As evidenced in the steady rise of open resources on ELI's annual survey of key issues, acceptance of OER in higher education is growing. To the extent that the open education movement becomes more fully developed and endorsed—and if pushback continues to build against expensive textbooks, static educational materials, and business models that provide limited and costly access to educational resources—faculty and students will create, adopt, and share more OER. The breadth of open content will expand across a wider range of disciplines. Institutional policies concerning the use and sharing of open resources and their impact on tenure and promotion decisions will continue to evolve, enabling OER to be more commonly accepted as a fundamental tool for learning and contributing to academe. More funding will be dedicated to the development and maintenance of OER. Governments and governing agencies for higher education will continue to increase their recognition of open content, and research in this area will expand.
7 What are the implications for teaching and learning?

In an era when questions loom large about access and affordability in higher education, OER provide a channel to address some of those concerns. Research shows that students save money and can have better outcomes in learning environments where OER is used. Open content offers faculty a means to customize curriculum to better align with learner needs and interests and to collaborate in new ways with peers worldwide. The nature of open resources directly supports some of the most fundamental principles of education in that they are readily accessible, learner centered, collaborative, flexible, and capable of being adapted to encompass new knowledge. Working in an open education environment might better prepare students for work in today’s increasingly collaborative and interdisciplinary workplaces.

Open Education: Practices

Scenario

Having once been skeptical about open educational resources (OER) and open education in general, Professor Tony Abruzzi now considers himself an advocate for open educational practices (OEP). His change of heart began when he realized that OER offered students a viable alternative to increasingly expensive traditional textbooks. To address that challenge, he started using open textbooks in one of his history courses. Gradually, he began to adopt other OER materials into the course, including openly licensed videos and images.

As he learned more about open education, Abruzzi became
intrigued by faculty who reported that adopting elements of OEP was helping them approach pedagogy in creative new ways. Just as intriguing were reports that students were becoming much more engaged in their learning through these practices.

To test these findings himself, Abruzzi decided to convert a history course to an OEP approach. He identified a wide range of OER curricular materials that he considered suitable. Rather than curate the OER for his students, though, Abruzzi invited them to choose from among the materials based on what most interested them. He asked students to identify a particular question and develop a learning plan for exploring that question during the course. He also required that students update and improve the course OER, create new OER where needed, and decide how they should be graded.

Abruzzi continued to lecture periodically and retained some classroom traditions—such as occasional quizzes—but he made sure most of the course time was devoted to helping students pursue the questions they had identified and reviewing their contributions to the course OER. As part of their learning plan, students also wrote or edited a Wikipedia article relevant to their particular focus area. Success in that course prompted Abruzzi to use a similar approach in other courses he teaches. When colleagues expressed interest in what he was doing, Abruzzi helped a biologist and a social psychologist adopt OEP in their courses.

Abruzzi regularly fields requests to present about his experiences with OEP at professional conferences. Through contacts he has made at such meetings, including some in other countries, he is now sharing techniques, tools, and experiences with a growing community of OEP practitioners. On his home campus, Abruzzi was instrumental in helping the provost craft new policies for tenure and promotion that take into account work in OEP.
1 What is it?

While educators often initially embrace open educational content as a way to maximize access to curricular materials and significantly reduce their costs, many instructors leverage OER to reconceptualize and improve pedagogy and advance authentic, participatory, engaged learning. One definition describes such open educational practices (OEP) as the “use/reuse/creation of OER and collaborative, pedagogical practices employing social and participatory technologies for interaction, peer-learning, knowledge creation and sharing, and empowerment of learners.” Open educational practices are seen as a means for students and faculty to develop new approaches to co-creating knowledge, assessing student outcomes, and designing programs. In these and other ways, OEP align with the principles of open scholarship.

2 How does it work?

Open educational practices seek to fully use the potential inherent in OER to support learning and to help students both contribute to knowledge and construct their own learning pathways. Embodying a commitment to learner-driven education, OEP involves students in “active, constructive engagement with [open] content, tools and services in the learning process” in ways designed to help promote learners’ self-management, creativity, and ability to work in teams. OEP also provide a framework for revising the practice of teaching to engage students in actively shaping their learning (e.g., by developing personalized learning projects) and contributing to public knowledge (e.g., by creating and sharing OER). Speaking to the importance of OER in making OEP possible, the term “OER-enabled pedagogy” has been proposed to define “a set of teaching and learning practices [that are] only possible or practical when you
have permission to engage in the 5R activities”—that is, practices only possible when educational content can be retained, reused, revised, remixed, and redistributed.

3 Who’s doing it?

Art history students at the University of Wisconsin–Madison developed chapters to create an OER textbook based on their study of Frank Lloyd Wright architectural sites. The final assignment in a course on “Women and Medicine” at the University of Oklahoma was to create or expand a Wikipedia article on a female physician, healer, or biomedical scientist. To help students reach a deeper level of understanding, a psychology professor at Kwantlen Polytechnic University asked them to develop test questions rather than merely answer them. To help students take ownership for what they learn, a biology professor at Keene State College provides a wide range of OEP-related principles, “how to” information, and links to other relevant materials. Further, the professor requires students to identify topics that are of the most interest to them, how they want class time to be used, and what percentage of their grade should be attributed to various activities of their choosing. The Open Pedagogy Notebook details many examples of OEP.

4 Why is it significant?

OEP provide the architecture and philosophical underpinning for fulfilling the promise of using OER to expand collaborative, inclusive, accessible, and active learning and related pedagogy. Advocates contend that by making possible new pedagogical techniques that enable and facilitate more flexible and collaborative learning, OEP help faculty develop more agency and autonomy by
providing new tools and a broader framework to help them revise, remix, localize, and contextualize pedagogy and curricular resources. OEP also give agency to students by giving them more control over the structure, content, and outcomes of their learning and by creating opportunities for them to create learning materials. In those ways, OEP broaden learning from a focus on access to knowledge to a focus on access to knowledge creation. In learning environments that adopt OEP, for example, students and faculty can collaborate on building and remixing openly licensed course materials in ways that facilitate engaged learning and the development of new course content that contributes to knowledge in a given field. A key tenet is the positioning of the learner as a central, active player in the learning experience.

5 What are the downsides?

Faculty may find it challenging and time-consuming to adapt their pedagogy to an OEP model. Some faculty perceive a loss of control when students are invited to co-create and contribute to course goals, activities, and content. Students accustomed to a more traditional approach may find it difficult to adapt to an OEP-structured course. Other challenges include lack of awareness about what OEP are, confusion about the multiple pedagogic options that OEP afford, and lack of institutional support to redesign one's course to incorporate OEP. Further, many institutions do not recognize OEP in promotion and tenure policies.

6 Where is it going?

Broadly speaking, OEP are continuing to gain acceptance in the academy, and a body of research about OEP is building. Going
forward, practitioners and researchers envision that the focus around OEP will evolve from a relatively narrow emphasis on development, revising, and distribution of OER to further development of related practices, architectures, principles, and policies. OEP practitioners have considerable interest in “moving beyond the textbook”—not just developing open textbooks and other OER but also pursuing broader efforts to develop, practice, and test new ways of thinking about learning and pedagogy. OEP advocates suggest the time is right for more experimentation, including developing the community—of educators across institutions and countries—that is seen as essential to mainstreaming OEP.

7 What are the implications for teaching and learning?

OEP have the ability to reduce barriers to access higher education for multiple types of learners. More broadly, OEP have the potential to empower students to be engaged, active participants in more authentic learning than they might otherwise undertake. Further, OEP go a step beyond active learning by engaging the learner in creating and revising OER and hence contributing to the learning of the students who come after them. Moreover, OEP offer potential for new approaches to pedagogy that, by one observation, can create “a site of praxis, a place where theories about learning, teaching, technology, and social justice enter into a conversation with each other and inform the development of educational practices and structures.”
Open Education: Policies

Scenario

Mavinda Blythe, an associate professor of environmental science at Royal Heights University, is an advocate for open educational resources (OER), having used OER in her courses for several years. Colleagues from numerous disciplines seek her expertise as they adopt OER and open education practices (OEP). The more they use OER, the more Blythe and her colleagues have been frustrated that Royal Heights has not articulated an institutional commitment to OER or OEP. That gap has created confusion about how OER can be used at Royal Heights. Further, the absence of relevant policies leaves unanswered questions about how working with OER or incorporating OEP impacts promotion and tenure.

After discussing these issues with the provost, Blythe agrees to lead a committee to develop a comprehensive open education policy. She consults with colleagues at another university that had written open education language into its guide for faculty promotion and tenure. She talks with a librarian at a different institution that has developed a policy that supports faculty creation and sharing of OER. An online guide to developing open education policy, published by a nonprofit advocacy organization, provides invaluable advice.

Those resources and Blythe's further research help her guide the committee in developing an open education policy for Royal Heights. The committee starts by drafting a rationale for why an open policy is needed. They propose a series of actions that intentionally address issues such as the development, adoption, and sharing of OER and the integration of OEP into courses. The committee reviews existing employment contracts to determine who holds copyright to work produced with university funding because only the copyright holder can openly license a work. Much
of their work is devoted to writing policies about how a professor's work in OER would be treated as part of promotion and tenure determinations. They clearly align the open education policy with the university's mission statement and strategic goals. The draft policy is discussed at length and then approved by the faculty senate. The administration endorses the policy, which is subsequently approved by the Royal Heights Board of Trustees. Having the policy in hand has sparked further interest in OER and OEP at the university, where more faculty are adopting OER.

1 What is it?

Open education policies are formal regulations regarding support, funding, adoption, and use of open educational content and/or open education practices. Such policies can take many forms, including legislation from national, provincial, or state governments; institutional policies and guidelines; funder mandates; and declarations from influential bodies such as UNESCO. Increasingly, colleges and universities are developing open education policies, which link the use of OER and OEP to specific educational goals—such as making access to high-quality education more equitable and affordable—and express a concerted commitment to use OER and OEP for these purposes.

2 How does it work?

Open education policies are designed to support the creation, adoption, and sharing of OER and the design and integration of OEP into programs of study. Such policies identify open licensing standards, technical formats, and accessibility for OER, and they articulate appropriate and permitted uses of funds in support of
OER and OEP. They promote good stewardship of those resources by sharing in public repositories. For example, foundations, governments, and other public entities often have open licensing policies to ensure the resources they fund or procure are OER and are shared broadly. Policies at colleges and universities support the academic use of OER and OEP. Policies by international nongovernmental organizations often seek to frame broad standards and articulate accepted practices for OER and OEP and to promote their adoption.

3 Who’s doing it?

A notable example of an open education policy is the US Department of Labor’s 2010 Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grant Program, which requires that all educational materials created or revised with grant funding be openly licensed under the Creative Commons Attribution License (skillscommons.org is the public repository for TAACCCT resources). A guide to faculty reappointment and tenure at the University of British Columbia includes language about how contributions to open education repositories and resources can factor into decisions about promotion and tenure. The California Community Colleges System requires open licensing on publicly funded materials resulting from contracts and grants issued by its chancellor’s office. The Open Educational Resources Policy at the University of Edinburgh sets the default to open and provides guidelines for the use of open licensing and OER in teaching and learning. The William and Flora Hewlett Foundation requires grantee resources to be openly licensed, and the Bill & Melinda Gates Foundation requires all of the research (articles and data) it funds to be openly licensed. The OER Policy Registry (to be merged with the OER World Map in 2018) maintains a database of current and proposed open education
policies from around the world. SPARC maintains a similar repository of US state open education policies. The OER Policy Development Tool and Institutional OER Policy Template help institutions create open policies. The Policy Brief on OER helps national education policy makers understand the value of open education policies. The Open Policy Network helps national, state, and provincial governments create, adopt, and implement open policies.

4 Why is it significant?

Open education policies provide clarity and frameworks for creating, licensing, adopting, using, and sharing OER. Open policies can help define effective practices and guide more efficient development and scaling of OER and OEP. When issued by governments, such policies ensure that content created with public funding is openly licensed and made widely accessible to the public. Similarly, open policies issued by foundations guarantee that grant money generates OER, maximizing the impact and reach of foundation programs. Further, open education policies underscore the viability and value of OER in teaching and learning and can inculcate OEP at institutions including colleges and universities. Having a critical mass of open education policies in higher education is an important step in ensuring that OER and OEP are scaled and sustained across courses and institutions.

5 What are the downsides?

To effectively influence behaviors and practices, open education policies must be specific (with respect to open license requirements, downloadable files from public repositories, editable
files that can be opened in nonproprietary applications, accessibility requirements, etc.). Administrators who are charged with the development of open education policy may not fully understand the opportunities inherent in OER and OEP, particularly for learners. In these areas, training is vital to increase awareness of open policies and what they mean in practice. Consensus around certain open education definitions remains elusive, which presents a potential barrier to the development of universally adoptable policy. The grassroots ethos of the open education movement can sometimes be at odds with top-down pronouncements that are not fully informed by open education practitioners. Development of open education policy can be hindered by a lack of consensus about OER and OEP and a lack of clarity around related rewards. Flexible policies that shift the default setting to open can raise awareness and nudge behavior without invoking concerns about academic freedom.

6 Where is it going?

As more open education policies are adopted, a growing number of foundations, governments, and institutions are developing and implementing their own open policies. As OER and OEP continue to scale, governments, funders, educational institutions, and others will continue to refine and test new and more nuanced open education policies. Developers and users of such policies will continue to assess the assumptions that inform them and the scope. As the understanding and prevalence of OER and OEP continue to grow, broader adoption of open education policies will likely become more commonplace.
7 What are the implications for teaching and learning?

Open education policies are an essential lever for clarifying what can be gained by the use of OER and what constitutes effective OEP. As such, these policies are invaluable in efforts for OER and OEP to be better understood, sustainably funded, and more widely adopted in teaching and learning. Well-crafted policies that reflect institutional priorities while providing support for faculty will increase the acceptance and use of OER and will help scale OEP. The development of open education policies will help move OER and OEP from the periphery to the center of education practice. Once that goal is realized, learners worldwide will benefit from greater access to open, high-quality, highly flexible learning content and practices.

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Case Studies — Projects

This section offers a selection of Open Pedagogy case studies presented in the OER book, A Guide to Making Open Textbooks
with Students, edited by Elizabeth Mays. These case studies provide examples of projects instructors have used to engage learners in creating, adapting, and editing OER textbooks and materials.

Case Studies:

Are you considering embarking on an Open Pedagogy project in your classroom? These projects will inspire you!

- Case Study: Frank Lloyd Wright and His Madison Buildings
- Case study: Antología Abierta de Literatura Hispánica
- Case Study: Principles of Microeconomics
- Case Study: Expanding the Open Anthology of Earlier American Literature

Case Study: Frank Lloyd Wright and His Madison Buildings

Anna Andrzejewski, an art history professor and director of graduate studies at the University of Wisconsin-Madison, was looking for a hands-on learning project for her Frank Lloyd Wright art history course.

The class was an upper-division, research course designed for art history majors or grad students, but also open to other disciplines. Andrzejewski had arranged access to seven historic local Frank Lloyd Wright houses for the course.

Known for hands-on learning projects that used student research to get ideas out into the broader community, she had had her students create walking tour booklets and websites documenting architectural landmarks in previous courses, but for this class she wanted to do something different.
Steel Wagstaff, an instructional technology consultant at the university, approached her with the idea of having the students create a book using Pressbooks, an online book-formatting software often used for open textbook projects.

Because Frank Lloyd Wright was not her primary area of scholarship, Andrzejewski said, the project became an opportunity for her to learn along with the students.

“Part of the appeal of working on this textbook idea was to create something that the students would participate in and feel invested in but that I could also use later on as a tool in future classes.”

Wagstaff said the project was designed to be a “renewable assignment,” one whose life extended beyond the term of the class.

“What I saw the students really engage with was the idea that they're writing this for Anna but also for a public audience,” Wagstaff said.

Knowing that the next time Andrzejewski taught the course, her students would read the previous students' writing and could add to it or could improve it deepened student engagement with the project, Wagstaff said.

In addition, students might not have access to the same private homes featured in the book in future semesters.

“We hope that this book will provide surrogate access to many of these places for future classes, since they likely won't be able to visit all of them when the course is taught in future semesters,” Wagstaff said.

Before embarking on the major assignment, Andrzejewski gave the students a lower-stakes, small-scale assignment that helped them learn how to use Pressbooks. Each student had to write several paragraphs of architectural context for the building they would visit and upload images into the platform for an overview section framing the progression of Frank Lloyd Wright’s career.

From the low-stakes assignment, Andrzejewski said, “They saw what they had to do. It involved them and also scared them such that they were invested for the rest of the time.”

Next, the small class of cross-disciplinary students, which
included journalism, art, history, geography, urban planning, and other majors, made field visits to seven local Frank Lloyd Wright homes that Andrzejewski had arranged access to.

Making a real book, noted Wagstaff, involves knowledge from lots of different disciplines, and the students in Andrzejewski’s class were able to have cross-functional conversations as they built it.

“It was different than ‘everyone’s writing their own research paper and they never talk to each other,'” Wagstaff said.

At each home they visited, students all had the same shared experience, but two or three took ownership to document that home for a chapter of the book. Those students asked the others for feedback during and after the site visit on what they found most interesting and what they should write about. Students got to pick a theme for each chapter.

“There’s nothing wrong with having an assignment that’s based on what you do in class, but it’s how to make it more than just a report and how to take it in a new direction,” Andrzejewski said.

From an instructional design perspective, Wagstaff said that before students do a site visit, they need to have a sense for what the product is going to be so they can develop research questions in preparation.

Andrzejewski gave her students flexibility within constraints for the group textbook assignment.

First and foremost, the assignment specified that each chapter must include a theme appropriate to the home featured. For instance: preservation, a period of Wright’s career, modular design, or a style of architecture.

In addition, the assignment specified that each chapter should include three different sections:

- An introduction, a one- to two-paragraph overview of the house, and a thesis statement of the chapter to follow;
- An architectural description of the building, to include three to five paragraphs of description and complementary images; and
- An interpretive thematic section, which was a minimum-three-
paragraph, “abundantly illustrated” narrative that was to demonstrate evidence that they listened to their classmates at the class discussions at the site and that they had done additional research outside of class. (Sources for this research could include anything from oral histories to archival research, book research or interviews.)

Students did all the writing, image collection and uploading, editing, book styling and footnotes as they built the book.

The chapters ended up being very different, rather than uniform as in a typical textbook, which could be considered a strength or a weakness.

“[The chapters] follow a basic research model. They all have footnotes and they all have pictures. But the approaches they take to these buildings are pretty disparate,” Wagstaff said.

As of this writing, Andrzejewski and Wagstaff still have work to do over the summer to clean up the book, which is not yet public, in order to make it ready for public view. It will need editing and they’ll have to remove images that were not openly licensed, which are fair use for educational purposes, but not fair game for publication.

The next time, Andrzejewski said, she’ll make using open images a requirement, and build in a week of collaborative editing in the last week of class.

Wagstaff said they will also build in more interactivity in the editing and on the images themselves.

In terms of the content, Wagstaff said he noticed two differences between this and similar Open Pedagogy projects.

First, students used lots of footnotes, and many of them cited not just websites or books but personal interviews with experts and working professionals.

“These weren’t just surface-level quotes. These were substantive conversations they had with real people,” Wagstaff said, remarking on “the depth of engagement they had with actual knowledgeable working professionals.”

Andrzejewski attributes this to the interview training she
incorporated with an oral historian before students embarked on the project.

Second, they did a lot of high-quality documentation in the form of photographs rather than just using photos they could find online. Andrzejewski said the students got inspired by the possibilities for including media after doing the preliminary assignment in Pressbooks.

“They really wanted to be creators of evidence not just regurgitating it,” Andrzejewski said.

She said she felt the project was successful and is now thinking about a similar project for a different class.

“I was so pleased with it I want to do something like it again,” Andrzejewski said.

Wagstaff added: “What all instructors want is higher buyin–higher engagement from their learners. A project like this almost by its very nature produces that.”

Key Takeaways

- Partner with community organizations, so that your project has an impact beyond the classroom.
- Give students small assignments that help them build confidence and acquire the skills needed to complete a larger, final assignment.
- Clearly communicate license requirements for images, videos, or other materials that might be included in the textbook.
- Encourage your students to look beyond literature
(on the Internet or on paper) when conducting research. Suggest they conduct interviews with working professionals or other experts in the field.

- Build in time within the semester to collaboratively edit and refine the final product.

Case study: Antología Abierta de Literatura Hispánica

Antología Abierta de Literatura Hispánica (The Introduction to Hispanic Literature) is the brainchild of Dr. Julie Ward, an assistant professor of twentieth- and twenty-first-century Latin American literature at University of Oklahoma.

Ward said the anthology was inspired by The Open Anthology of Earlier American Literature project Robin DeRosa spearheaded in her classroom. When she saw that text, she thought, “That’s exactly what I wanted to do.”

In the fall 2016 semester, she embarked on a project in her Spanish-language literature course, Introduction to Hispanic Literature and Culture, in which groups of four to five students selected ten texts from the fifteenth century to the twentieth century to include in a critical edition.

The included texts span different genres of literature, with authors ranging from Christopher Columbus to Horacio Quiroga. Ward and a graduate student “research guide” had pre-established lists of texts students could review and choose from.

For each work, the student groups compiled context in the form of an introduction, at least ten annotations on the text about style,
references and colloquialisms, an image and a biography about the
author—their style, milieux and how the work relates to the rest
of their works, and a bibliography. The texts, introductions and all
other contextual elements of the book are all in Spanish.

The content of the critical edition was developed in the class, but
the work on the text didn’t end there. In the subsequent semester,
two students were paid to take the critical edition, verify the facts
and public domain licenses, and format it using Pressbooks. Alice
Barrett, who is being paid by the OU Office of Undergraduate
Research, is one of these students. The other student, Karlee
Bradberry, is an honors research assistant, funded through the OU
Honors College Research Assistant Program.

"I had a great experience with the group work aspect of the
project," said Barrett, who said Ward emphasized group dynamics
and started class with an article about a study Google had done
about creating groups of people that work efficiently and creatively.

“For me what was most helpful was Dr. Ward’s organizational
skills. It was very clear what we were expected to do.”

Barrett said she learned a lot from the project, including how to
do research to find information, how to leverage library resources,
and how to split the workload in a group. (She noted you have to let
people do the work that’s assigned to them.)

Projects like this “will be successful if the group dynamic is
successful and everyone knows what they’re going to be working
on,” she said.

She recommends that future instructors considering similar
projects make sure their students find sources in the public domain
and cite their sources thoroughly and correctly.

After working on the project Barrett said she feels more confident
about taking on big projects as well as writing in Spanish. In her
work after the class, she edited and verified sources for “Hombres
necios que acusáis” by Sor Juana Inés de la Cruz, one of the first
feminist writers in Spanish literature. That experience really
influenced her perspective.
“I have a perspective on Spanish literature I didn’t have before. It changes you.”

When released, the book will be appropriate for university Spanish and Latin American literature courses as well as AP Spanish students in high school.

Currently the book is receiving support from the Rebus Community to create a replicable assignment that will allow Ward’s peers at other universities to do similar projects in their classes to expand the text (view the assignment); to find Spanish speakers to edit and proofread the book; and to enlist faculty to beta-test the book in their courses and provide feedback to Ward on improvements and revisions.

To join the project, go to http://bit.ly/openAALH.

Key Takeaways

◦ Look to your peers for inspiration! You may find their projects can be replicated in your classroom.
◦ Inform your students if they must find public domain sources, and if possible, direct them toward some repositories. Teach them how to properly cite these sources up front.
◦ Survey funding options such as research grants and work-study programs in order to obtain ongoing student help with the project after the semester is complete.
◦ Set clear expectations with your students:
What are the final deliverables they need to submit?

- Be organized. Take your students through the project timeline when you first start out, and try to stick to it!
- Conduct regular check-ins with students to assess the group dynamics. Use this time to track the project’s progress and ensure that everyone is aware of what is going on and where the project is headed.

Case Study: Principles of Microeconomics

Maxwell Nicholson’s interest in open textbooks started as a student leader at the University of Victoria Students’ Society. He ran on a platform of open textbooks, and won (when we spoke with him he was just ending his post as director of campaigns and community relations). His involvement in an open textbook was one way of fulfilling a campaign promise to bring free textbooks into use at the university.

After the campaign, Nicholson met with about ten professors in exploratory meetings to find out about the barriers to adoption for open textbooks. These included Dr. Emma Hutchinson, who taught the ECON 103 course that Nicholson (and three of the other candidates) had been longtime lab instructors for.

“It’s not going to go anywhere if the professor’s not onboard, so we were fortunate enough for Dr. Hutchinson to be really excited about it too,” Nicholson says.

Post-election, Nicholson’s first step to operationalize the project was to apply for a $4,800 grant for the project from BC Campus,
which served as a granting agency for open textbook projects that could prove a demand. Despite a few bumps along the way, the funds came through for the project.

This open textbook project was different in that rather than being primarily the work of an instructor with funding to write it or a class-assigned project for students, the grant funded lab instructors to do the heavy lifting of compiling the textbook. The professor reviewed it and made the changes they thought necessary from there. This was doable since Nicholson had direct experience with how the instructor taught the class.

Nicholson had assisted the microeconomics class three times and the macroeconomics course once. “I’ve been fortunate to be on the pedagogy side to some extent, obviously nothing compared to professors, but when writing the textbook, that was really really crucial for me to have that lens when I was contributing.”

The textbook started as an adaptation of Timothy Taylor’s open textbook, Principles of Microeconomics, from OpenStax. But in the process of adapting the text, they found there were a lot of components that had to be written.

Ultimately, the textbook comprised around 30 percent material that came from Timothy Taylor’s book and 70 percent new content the lab instructors developed from their notes and the professor’s slide decks.

“The reason this project was most appealing is because she had her slides over here which taught what she wanted [students] to know, and then the publisher’s textbook was completely different,” Nicholson says. “So from the start our goal was really to align those two things.”

Nicholson says the lab instructors thought a lot about how students were going to consume the material, and what components of the course the instructor really wanted to stress.

They hoped to save students the cost of buying a textbook they didn’t really use.

The book was structured into eight topics, then the lab instructors divided them and did the heavy lifting to compile the
chapters. Dr. Hutchinson edited each of the chapters to make sure everything was accurate, thorough and clear.

The process, Nicholson says, helped “remove the biggest barrier for professors–the magnitude of work that goes into redesigning a textbook.”

Nicholson says he thinks large first-year courses such as ECON 103 (which has 800 students per year) make the best candidates for OER–and are also the most likely courses to have lab instructors that can be leveraged to compile the content. (He recognizes that most professors probably don’t want to spend their nights and weekends becoming book publishers.)

“What [professors] can do if they know that they’re going to do this project, is take one of their most christened lab instructors, get access to grant funding and pay the lab instructor to work on the textbook,” Nicholson says. “Then they can be confident that it’s someone who not only knows the course, but knows the course as the professor teaches it.”

For his part, Nicholson says he learned a lot from the project, including understanding the work that goes into designing a course, and gaining a greater appreciation for good textbooks and discernment of those that aren’t well-matched for the subject. Creating OER offers great opportunities to customize a textbook to a course, he says, observing that it must be challenging for traditional publishers to create one-size-fits-all content for teachers, who may teach subjects very differently.

“I would hope they’re doing a lot of getting students to read this book and connect on it,” he says. “A lot of times it feels like they don’t.”

Nicholson, who is studying business and economics, says, “If you’re trying to create a product, you’re always supposed to ask your end user ‘what do you think?’”

So even if you don’t want to have students write a textbook for your class, he says, you should have some of your top students read it and provide feedback.
Otherwise, he says, students will either buy the textbook and not use it, or tell future students not to buy it.

“With a publisher’s resource, if it’s not useful, the students are going to stop buying it,” Nicholson says.

Of course, some might object to students having as much involvement in a textbook's writing as Nicholson and his fellow lab instructors experienced, but Nicholson says that after the instructors create the chapters, the professor is going to change and edit things, and ensure the quality meets their standard.

“If you’re a respected faculty and you have the experience teaching and you’ve put that stamp of approval, I’m really confident that the resource is going to be [Dr. Hutchinson’s] resource. It’s not just some resource that was written by students.”

For students involved in such projects, he encourages them to appreciate the potential impact they might have through their involvement.

“If you're involved in this kind of project, you're going to be on the back end of the course design, and you're able to take all the components that you thought were really bad about other textbooks and avoid those and leave all the really good elements,” Nicholson says.

Students working on an open textbook for a class should realize the impact they'll have on future students who take that class—whether it’s the only survey course they ever take on the subject, or the foundation of many in their majors. Plus, they’re participating in an innovative movement in education.

Even for those who may not participate on an open textbook project, Nicholson says they can play a role in the movement as advocates, speaking with professors and outlining the benefits of OER, telling them when their book is expensive and there’s an alternative open textbook in use by a peer institution.

“Creating the buzz about [open textbooks]—students can do that.”
Key Takeaways

For Faculty:

- Engage with student governments, who may be able to spread the word about your project and help recruit interested and willing students.
- Involve TAs who have both taken the course and are assisting in teaching the course and leverage their experience as students.
- Review existing materials (slide presentations, lesson plans, assignments and more) to see if there are any that can be converted into content for the open textbook.
- Get student feedback on the completed book. It’s valuable! Be sure to implement fixes where appropriate for future editions.

For Students:

- Look for internal and external funding opportunities that may pay for your professor to hire you to help them create OER.
- Clarify roles, expectations, workflow, and timelines.
Case Study: Expanding the Open Anthology of Earlier American Literature

OER, Open Pedagogy, and the Early American Literature Survey

At the start of each semester, I write a simple maxim on the board for discussion: “All people are equally intelligent.” The underlying claim, in a paraphrased line from radical philosopher Jacques Rancière, is that any measurable differences in “intelligence” have more to do with access than with intellect. So, before course themes, content, objectives, or outcomes, I insist upon equality as a first principle and a constant practice. Then, as a group, we deliberate: what does “equal” mean in this context? How about “intelligent”? Is the claim true? How does it call upon us to relate to one another? Before the hour is up, we find ourselves in a thick of pedagogical inquiry, from which students tend to reach a fragile but thoughtful consensus: There really exists no one-size-fits-all measure for intelligence. Furthermore, the acquisition of knowledge assumed to be the epitome of individual intelligence—the “Jeopardy contestant” theory of smarts, as one student called it—is a tragic misconception. Learning, instead, is a collaborative enterprise: it’s dialogic, responsive and revisable according to new information, and applicable to our everyday experience. So, yes, all people are in fact equally intelligent once we define “intelligence” more aptly as lived experimentation, rather than the highest grades and test scores.

I’m very clear with my students from the start: I wholeheartedly believe and affirm this principle. It’s that very faith which prompted me to take up the ambitious Open Anthology project described below. And now I hope to build on that text and the pedagogical practices it demands for the rest of my scholarly career.
Teaching a survey of “Early American Literature”

Two years ago, I was fortunate to be hired out right of graduate school and onto the tenure track as an “Early Americanist.” All that means, effectively, is that, every year for the foreseeable future, I’ll be teaching the English Department survey course titled “American Literature to 1900.” That covers the period ranging from colonial contact with the “New World” (the world “new” to Europeans, that is) to the United States’ industrial era, i.e., the beginnings of America’s ascension to a global power.

I’ll go on the record and say it’s impossible to adequately cover any four centuries of literary history. But the truth is, I—newbie I was—made the task all the more impossible. For here I was, freshly trained in literary studies, newly recovering from the discipline’s foundational urge to “cover” everything. My students, of course, would read deeply within and widely across the tradition’s most celebrated authors. At the same time, it was my sacred duty to introduce the significant works of literature recovered since the explosion of “canon” in the last four to five decades. That includes the ever-growing roster of prose, poetry, and drama written by women, indigenous peoples, Africans and African-Americans, South American and Latinx authors, and ethnic immigrants.

So I went to work composing a reading list that could combine (or in the very least mediate) these opposing impulses. As a student of social movements, I like to adopt social history as a methodology, and so I saw “American Literature to 1900” as an opportunity to chart the various and contentious stories of the culture’s movements towards emancipation and equality. As “America” was made into European colonies and eventually a liberal (white, patriarchal, landowner) democracy, from a country of farms and frontiers into an industrialized economic and military power, its literature played an important role in expanding the reading public and creating the definition of a nation. The course tracked roughly chronologically and featured the representative authors and texts. Indigenous creation stories confronted European colonial
documents; the early texts of New England’s Puritan pulpits were met and challenged by the voices and pens of native peoples, African slaves, and women writers. The American Revolution gave way to an explosion of social movements and an expansion of the canon stretching from Thomas Paine’s republican propaganda to the birth of African-American letters in Phillis Wheatley. The selections from the early nineteenth century included the familiar names of the “American Renaissance” — Emerson, Poe, Hawthorne, Whitman, Melville — in tandem with the literature of women’s rights and abolitionism. The final post-Civil War push balanced the social writings of the Gilded Age and Reconstruction with the co-emergence of realist fiction.

This literary historical narrative will seem familiar to Early American scholars, as will the course structure and the palpable tension it produced between content covered and time allowed. What was never at issue, for me, was locating a textbook. See, the literature survey course sports its own special media, the anthology; nearly exhaustive, this master text’s pedagogical significance is matched only by its physical mass. The leading Early American anthologies on the academic market, — Wiley’s *The Literatures of Colonial America* — are the size of small encyclopedias, coming in at 602 and 1845 pages, respectively. These truly impressive scholarly books, which introduced me and the current crop of Early American scholars to the field, have done a great deal in shaping our syllabuses and lesson plans, and, as a consequence, our conception of the era’s literary output. That’s not necessarily a bad thing. Again, these anthologies are excellent, compiled and edited by leading scholars in the field—all acquainted and attentive to the concerns of teaching the literature survey course.

That first fall semester, I decided to assign the Norton edition, chiefly because it contains Mark Twain’s Adventures of Huckleberry Finn in its entirety. I figured a classic piece of fiction, one that allowed us to approach the fault lines between race, slavery, Reconstruction, and national identity, would make for a brilliant capstone. Yet for all of its helpful background material, framed by
the anthology’s wonderfully generative thematic groupings, our class never truly used the book. Admittedly, that's due in part to the sizable number of students who never even laid hands on it. The latest edition of the Norton American literature anthology retails at $81.25 to purchase and between $16 to $25 for a six-month rental. For many working-class, first-generation students, the costs of the text—or, the means to access it, a credit card, for example—are simply prohibitive. As a result, just two or three students bought the latest edition outright—though, they were all generous enough to share with friends. Some purchased older, used versions from online booksellers; still more relied on the web versions of assigned readings that I’d linked to on the course site.

The ensuing scramble and unevenness of our discussions proved a semester-long irritant. The medium was always the message. The few students who purchased the text had access to all the introductory material and paratextual supplements Norton offered. The rest had different editions with different page numbers, or online texts without page numbers; all seemed to be missing crucial excerpts at some point in the term. While a handful of students read along in physical texts during class discussion, others multitasked on laptops or squinted through smartphone screen readings; still others, lacking any portable device, simply stared at the front of the room. It was a logistical nightmare of my own doing because, let’s face it, the college anthology has one real utility and aim: to centralize all course content in an edited and professional manner ready to be taught. That is its appeal. The problem here was that, at the same time, the anthology was making some assumptions about our students, not just in its hefty price tag, but in its very centralizing and authoritative structure.

All the anthology had done for us at this point, where half the class hadn’t adopted it, was allow me to dictate the content of “American Literature to 1900,” raising “coverage” of authors and texts to supreme importance. To “learn” the period’s literature, then, was to consume a whole bunch of texts, be they found in a fresh,
glossy, weighty anthology or retrieved as HTML code on one’s screen of choice.

Open Educational Resources and the Literature Anthology

Right away, I decided I would scrap the paperback anthology the following fall, but I wavered on an alternative outside of simply posting a syllabus of hyperlinks on the site and providing introductory context through mini-lectures. Wasn’t that just “banking education” for the digital age?

In the waning months of graduate school, – when I should have been writing – I began reading up on the burgeoning discussion around Open Educational Resources (OER), materials made free and available on the web to be accessed, downloaded, revised, and recirculated. The conversations of OER had already evolved beyond advocacy for their adoption as learning content, moving instead to sketch the larger contours of Open Education as a pedagogical principle. Recent studies–like the Florida Virtual Campus’s annual surveys –underscore that the integration of free and open textbooks cut costs, increase access, and improve student learning. Still, over and above replacing expensive industry textbooks, OER proponents contemplate how the virtues inherent to open materials necessitate new kinds of teaching and learning, methods that embrace the open ethos to reuse, remix, revise, and redistribute in content and practice. David Wiley, for example, has challenged instructors to discard the “disposable” individual assignment in favor of collaborative and “renewable” open projects. Gardner Campbell recently called for an Open Pedagogy centered on producing insight, where educators turn design over to students, encouraging them to take responsibility for their own learning. The discourse spoke to me.

In line with its disciplinary history, literary studies found itself at the forefront of open initiatives. Thus, after just a few weeks spent revisiting conversations around #openped, I discovered Robin
DeRosa’s rather heroic “open anthology,” a text she created together with her Early American Literature students at Plymouth State. The project entailed that students read widely through the Early American syllabus and decide collectively which authors to excerpt and provide contextual materials for, before polishing and collecting their works in an online anthology to be read and revised by the following crop of students. Drawing on the legacy of Paulo Freire, DeRosa described the project in more detail:

The open textbook allowed for student contribution to the “master text” of the course, which seemed to change the whole dynamic of the course from a banking model (I download info from the textbook into their brains) to an inquiry-based model (they converse with me and with the text, altering both my thinking and the text itself with their contributions).

The more I learned of the project, the more I liked it; and so, in true Open Pedagogy fashion, I stole it to redesign my own course.

Adopting the user-friendly Pressbooks software, DeRosa and her students had managed to put together a promising framework for the “master text” in just a semester’s time, what became the Open Anthology of Earlier American Literature. As I reimagined the survey, following their lead and content, I saw that my inclination towards social history would be easy enough to retain. So, in the first half of our most recent iteration of “American Literature to 1900,” we read through the texts published in the extant Pressbooks anthology—which included a potpourri of canonical and “minor” writers—interspersed with selections from some of the more conspicuously absent names, including Roger Williams, James Fenimore Cooper, William Apess, Ralph Waldo Emerson, and Margaret Fuller. Throughout the term, students agreed to complete short reading engagement worksheets, designed to both guide our in-class discussion and provide “training” in the editing skills needed to build out the anthology. In the latter half, we shifted focus to the hands-on project of remaking the anthology. We dedicated the final months to reading and discussing Open Education and Creative Commons licensing, learning the software, and practicing
plenty on putting together materials for the various elements of the anthology—editing texts, locating and annotating biographical and secondary research, writing introductions, developing supplementary materials, and deliberating on how to make the texts “teachable.” Teams of three built entries for authors and texts not yet represented, and, in the final weeks of the term, led a classroom lesson based on their newly designed anthology chapter.

Truth be told, the analytical skills on display above are the same honed in any upper-level literature course, and they’re assessed through similar assignments: regular reading and discussion, oral presentations, secondary research, critical source annotation, literature reviews, etc. The core difference came in the final product, and here there is, I think, a significant distinction. The traditional boss-level challenge in an English course is the literary critical essay, i.e., it is the peer-reviewed journal article in miniature—only in a version read and peer-reviewed by just one expert, the professor. Don’t get me wrong, I still assign essays and I believe there’s much to be gained from the craft, especially in terms of sharpening argumentation. But I think most literature instructors will confess to the assignment’s utter “disposability,” which is to say, while the skills developed and assessed in essay writing should endure over the course of a student’s college career—and hopefully throughout their life—the actual assignment almost certainly will not. For her, the essay dies mercifully at the professor’s desk, resurrected momentarily only as a final grade is uploaded to the registrar’s website. That abrupt conclusion couldn’t be more at odds with the intellectual afterlife of the professional essay, where publication at least aspires to respond and further instigate critical dialogue.

At its best, then, an “open” project like the student-designed anthology should simulate those aspects of intellectual collaboration and growth. Nowhere is that connection more apparent than in the project’s demand for assessment. In our course, each group met with me to negotiate a grading contract that addressed the entire scope of their chapter, complete with
an outline of group members’ roles and workload and criteria for evaluation and grading. The practice forced students to take a kind of critical ownership of the project by thinking both proactively and reflectively on their own learning and engagement.

Some Practical Advice

Dear reader, if by now you count yourself among the Open Anthology-converted, perhaps you're curious still about the finer details that go into re-organizing a survey course around an OER project. I leave you with a few tidbits of wisdom from my experience—including a sample syllabus and assignments, all of which you are welcome to steal (I mean, retain, reuse, revise, remix, and redistribute) for your own course.

“Syllabus Day”

• Because I have a flair for the dramatic, on day one I lugged the six or seven literature anthologies I own—all adorned with big, bright retail price tags—into class; I then heaved them onto a desk in the front of the room before launching into some ice breakers and then general introductions.
• Once the energy in the room felt upbeat and conducive to dialogue, I passed the tomes around and asked students to flip through the pages and mark down any familiar names and discernible thematic patterns across the texts. This is to provide a sense of the way scholars have conceptualized “Early American Literature.”
• I then explained that we wouldn't, in fact, be using any of these books, but creating our own instead! That’s when I introduced the existing Pressbooks anthology, the final project, and the concept of OER.
I handed out a schedule with abbreviated course and assignment descriptions to be read for the next session.

**Technology**

Unless you can ensure that each student has personal access to a device—smartphones alone won't cut it, unfortunately—you will need to get into a computer lab at multiple points in the term.

- Pro tip: Reserve lab space early in the semester, preferably before it even begins. I went ahead and blocked out a room for the final month to help “train” students in Pressbooks (the software they would use to expand the anthology).
- Securing this space right away is especially important if your institution, like mine, is small and has limited tech resources on campus.

I am a great believer in the power of persistent and collaborative note taking.

- A class-wide or group-specific Google Doc will still get the job done in this regard. In last year's class, I posted sparsely outlined “Keywords” and “Timeline” Google Docs to the course site and had students develop them via in-class and homework assignments throughout the term.
- For in-text highlighting and notes, I use the annotation tool Hypothesis.is, a web overlay that is not only easy to use in the classroom, but is tailor-made for groupwork tasks and for use in Pressbooks.
- The most important aspect of these tools—and, I would argue, of any you choose to introduce in the course—is that students can be given the option to publish privately among peers or anonymously with a private nod to the instructor.
- Last, I think it is important to give students the option of
adopting “lo-tech” methods, too—i.e., note taking with machine-made pen and paper—as a substitute to the above mentioned.

As far as expanding, revising, and publishing a scholarly anthology via Pressbooks, Julie Ward has written a fabulous primer for chapter fifteen of this very handbook.

Assignments

If you're looking to reproduce this project to expand Robin DeRosa's American Literature anthology, but you need broad ideas on the course schedule and structure, and/or specific tasks to accompany the readings, and/or a general set of guidelines for the final project, I give to you my initial crack at a syllabus (Attachment A), sample “reading guides” (Attachments B, C, D, and E), and a final project assignment sheet (Attachment F).

Note: The “reading guides” (Attachments B-E) are effectively daily homework assignments that are to be peer-reviewed in class. Intended as scaffolding tasks to introduce students to Early American authors and texts, reading guides should also progressively build on the concepts and skills needed to curate anthology chapters in the latter part of the course while also helping students connect (what's more than likely to be) foreign material—colonial documents, oral tales, Puritan sermons, etc.—to contemporary issues that seem more relevant to their everyday experiences.
Key Takeaways

- Build on an existing open textbook to expand it.
- Get your students to reflect on their participation and engagement in the collaborative project. Ask them to develop their own grading rubrics, outline individual and group roles, or more.
- Think about how you can add to the “traditional” approach to your subject matter to engage students and how an open textbook might afford those opportunities.
- Frame learning as an ongoing process rather than one that ends upon receipt of a final grade.

Timothy Robbins is an assistant professor of English at Graceland University. His research interests include literature of the “Long Nineteenth Century” in the United States, especially the poetry and prose of Walt Whitman, as well as protest literature and reception theory.
Interviews, Faculty User Stories & Case Studies

This section offers interviews with Open Educators David Squires and Gabriel Higginbotham, who have worked with students to create OER textbooks and materials.

- Interviews – Elizabeth Mays, David Squires, and Gabriel Higginbotham
- Faculty User Stories & Case Studies – California OER Council

Interviews

This section offers interviews with Open Educators David Squires and Gabriel Higginbotham, who have worked with students to create OER textbooks and materials.

- Interview with David Squires: Social Media Texts
- Interview with Gabriel Higginbotham, Open Oregon State

Interview with David Squires: Social Media Texts

David Squires was a visiting assistant professor teaching in Washington State University’s Digital Technology & Culture program and works at the Center for Digital Scholarship and Curation. In fall 2016, he had students in his Intro to Digital Technology & Culture course create two OER texts on social media, The Social Construction of Media: Social Media, Culture and Everyday Life and Everything You Ever Wanted to Know About Social Media (but Were Too Afraid to Ask). We interviewed David about his experience.
Tell us about the project:

The end product is meant to be a prototype of a OER textbook on social media. There are lots of marketing textbooks on social media, but nothing quite like a cultural studies textbook, so that was the goal: a model for what a social media textbook could look like.

How did the project unfold?

We dedicated about six weeks to the whole thing. First we read, wrote, and discussed copyright, Creative Commons, and open access publishing. Then the students started researching topics and writing. Finally, they put the pieces together as a Scalar book.

What role did students play in the project?

My students did most everything, start to finish. I played the role of project manager but tried to let them do as much of the work as possible. They rose to the occasion, tackling research, writing, layout and design—they even conceptualized the subject areas and structure of the project. At the end, they presented their work in public, for the beginning of Open Access Week. That gave them a sense of a hard deadline that wasn't just me saying due date! It really was a moment in time that required a certain level of achievement. I'm glad to report that each chapter-group met the challenge, although a few individual students were not able to present.
How did you leverage the project to achieve the learning objectives for the class?

Over the past year, The DTC program at WSU has worked to clarify course objectives for “Intro to Digital Technology & Culture.” Here’s the outcome:

1. Perform humanistic inquiry in combination with computational methods.
2. Assess information and sources.
3. Engage in collaborative and project-based learning.
4. Practice creative design and analysis of digital media.

This project furthers each of these objectives:

1. Students learn digital research tools and a new web publishing platform, Scalar.
2. Students learn to assess sources as they research their specific chapters, especially as they pull web materials to feature in their book. A big part of this project was identifying valid primary and secondary sources, and knowing which were which.
3. They created this project as a class, and each chapter had a group of three students contributing.
4. The primary sources required critical analysis, while the Scalar platform allowed students to practice design and layout as part of the writing process.

What advice would you have for faculty planning similar projects in which they and students create open textbooks?

While I was writing the syllabus, six weeks seemed like a long time
to work on a single project. During the semester, however, I wished we'd had more time. If I did it again, I think I would organize the copyright and open access material into one project. Then let the social media textbook follow as the second project. Which is a way of saying, I'd dedicate more time to the research and writing on social media. Research and writing can't be rushed, especially when students are learning a new platform.

The other note I would add is that Scalar worked very well for this assignment in all regards except one—multiple users working on the same page at the same time caused havoc. We made it work, but knowing that in advance would have helped me prepare students. In general, knowing the platform in advance is essential to guiding students through the process.

**If you did this again, what would you change? What are some pitfalls faculty can watch out for?**

In addition to the above advice, I'd suggest reading Anne Cong-Huyen's blog post, “**Whittier Workshop: Scalar in the Classroom**.” I wish I'd found it before teaching this assignment. She lays out the pros and cons of using Scalar very clearly, reminding readers early on that Scalar is a publishing platform, not a learning management system. I think it's important to emphasize the publishing, editing, and document design aspects of using Scalar. That should be part of the assignment goals when asking students to produce open textbooks.

*I'm not seeing individual credits for the students on each chapter, but I do see them at the end credited with the work overall. How did this decision come about?*

The students who worked on those Scalar projects had varying
degrees of interest in having their names attached. Some wanted to a byline on their writing; others wanted to remain anonymous. In the end, the class decided to create a contributors page for two reasons. First, because it prevented inconsistencies that would arise with some portions having bylines while others not. Second, after workshops, revisions, and collaborative writing they realized that a byline might not make a lot of sense. In the end, most students decided not to add their names to the contributors page and, if I recall, at least one decided to add her byline to a page she felt her own.

Did you have any conversations about which license to use with the students, and what was the outcome?

We did talk about licensing. We spent the first two weeks of the project discussing Creative Commons and selections of Lawrence Lessig's *Free Culture*. We were lucky enough to have WSU’s scholarly communications librarian Talea Anderson join us for one class period. She showed the students about twenty different open textbooks that she had on hand and asked them to look at the different licenses they used. Most used some version of a CC license but a couple had GNU licenses. That exercise was especially helpful for thinking about why some restrictions—like the non-commercial option—do not work for OER despite aligning with the spirit of creating affordable textbook options. In the end, the students decided they did not need a CC license. I was a little disappointed. However, they reasoned that using Scalar made it unnecessary because public Scalar books are easy to reproduce within Scalar but difficult to reproduce in any other form. They saw their prototypes as open (in the OER sense) to a only small community of Scalar users.
Did you discover anything unexpected in this process?

I learned a lot about social media in the process of this assignment. My students had a lot of knowledge to share that didn't fully emerge during class discussion. Reading their chapters taught me that class discussion is the tip of the iceberg when it comes to what students have to share about a topic related to an important part of their everyday experience. Seeing students struggle with Scalar also taught me that frustration isn't necessarily bad. The students who experienced the most frustration were the same students who used the platform to its fullest capacities. Their chapters featured more interesting layouts, richer media, and better organization than the students who treated Scalar like just another blogging platform. The trick is to convince students to embrace the frustration!

Key Takeaways

- Devote ample time for the research and writing stages.
- Familiarize yourself with the various platforms you will be using before the project begins. This will be necessary to assist and guide students through the project.
- Have students decide how to credit and license their contributions.
- To help students make informed decisions, invite a librarian in for a “guest lecture” on content licensing
and attribution, and ask them to introduce students to the resources available at your institution. If these staff cannot come to the classroom, connect students to approach them as needed.

- If possible, have your students present their work to a public audience and/or look for a related event or celebration. This has a two-fold benefit: it gives students a deadline-in-disguise, and imbues them with a feeling of accomplishment.
- When coming up with new assignments or projects, map them to the learning objectives already laid out for your course.
- Encourage students to express their frustration when they experience roadblocks or obstacles. Offer what support you can, and help them see problems in a different perspective.

Interview with Gabriel Higginbotham, Open Oregon State

Gabe Higginbotham worked as a student project assistant on open textbooks for two years at Open Oregon State. He received his B.S. in Business Information Systems at Oregon State in early 2017. Currently, he works as an IT consultant for OOS. In fall 2018, he will go to grad school abroad to study Human Computer Interaction Design. In his career, he plans to continue contributing to the Open Education field.
Tell us about the role you played in open textbook creation at Open Oregon State.

I have been involved with the creation of roughly 10 textbooks at Open Oregon State, including *A Primer for Computational Biology* (set to go to print soon!), *Introduction to Permaculture* and *Introduction to Microbiology*.

I worked on converting professors’ texts (either Word or LaTeX) to HTML.

Some of our books were created from materials used in online courses; others were LaTeX books that became online books to increase their availability.

I also designed the books (using CSS) to cater to either the needs of the professor or the purposes of the book. I learned HTML, CSS, and LaTeX on the job, and was one of the first student workers in the department.

Books at Open Oregon State are created using PressBooks, a WordPress plugin. We use some other multimedia tools including video and, more recently, H5P. We also use a number of WordPress plugins such as a glossary, code highlighter, and broken link checker.

When I was first hired, I was tasked with making a list of open textbooks available online. I also found replacement materials that professors could use in courses. Over the course of a few months I made an Excel spreadsheet of 4,500 open textbooks available on the web, and this list is continually growing!

What did you learn and what skills did you acquire in the process?

As a student in information systems, learning HTML and CSS in my position were particularly useful as an introduction to programming before entering my actual programming courses. The tasks of my
position allowed me to navigate the process of problem solving in a relatively risk-free environment. Conversely, my courses often introduced me to techniques and tools I could use in my position with open textbooks. For example, learning PHP in my programming course allowed me to edit a WordPress plugin to meet the unique needs of a particular programming textbook.

Troubleshooting design issues in my position introduced me to platforms such as Stack Overflow and GitHub, where I could interact with other contributors and find solutions to problems I came across. I was able to apply the solutions in one problem to a similar context in another problem, often with a creative and unique approach. These proved vital in my courses later on, where I would encounter more complex problems such as querying databases and creating UIs.

My position was also beneficial in the realm of project management. Working on a number of distinct textbooks with different needs, stakeholders, contributors, and deadlines improved my ability to estimate task times and switch back-and-forth between various tasks and requests. This was useful and applicable in my courses, where I had very different projects that demanded varying levels of attention. I needed to allocate my resources to succeed in my courses as efficiently as possible.

Researching open materials for my position in turn made me more adept at finding free learning resources to augment my own course materials. Where other students may have paid for supplementary course materials, I could find suitable free resources, saving me hundreds of dollars on my undergrad degree. Most students I encountered had no idea such materials existed.

What do you see as processes or practices that lend themselves to best success when faculty and students work on these projects?

Communication is key when creating open textbooks. It’s imperative
that students (or any other contributors) understand the purpose and needs of the finished book. Everyone must be on the same page or there will be a lot of duplicate or superfluous work. Checking in with professors, faculty, and other student workers can ensure that nothing falls between the cracks. A task management system such as Basecamp or Asana may be useful to create project milestones and allocate work. This is more important as a team increases in size. Open Oregon State did not take full advantage of a task management system, but there were only about five student workers at any given time.

A cohesive “vision” for the department may help limit the scope of certain books that may require special attention (in my experience, these include math-based or programming books). This “vision” may need to develop over time and can include strategic intentions for both content and style. Since open textbook programs (and the open textbook industry in general) are relatively new for most universities, I believe this process is still in its infancy. A few standouts have emerged including BCcampus and the University of Minnesota. These are definitely models to follow for the establishment of new open textbook departments. I believe that OSU is emerging as an exemplary model.

It is imperative that the knowledge gained from student workers not be lost when they leave or graduate. There is a substantial learning curve that comes along with being hired in any position. Using previous student workers’ perspectives and experiences to train new hires can not only speed up book production, but create a more cohesive body of work and culture within the department. I cannot stress enough how important I believe this legacy knowledge is.

Fostering a collaborative and open environment is vital for student workers to thrive and find creative solutions to complex problems. Create a space where students can work together and share input; this keeps them motivated and engaged when design work gets tedious. I was lucky to have a patient and open boss at Open Oregon State who listened to my ideas and considered my
advice when making decisions. I would suggest that other open textbook department heads do the same: consider the opinions of your students workers. They have the perspective of both a student and a faculty member.

What are some key challenges and considerations you would like to see addressed in such projects?

For professors generously contributing content to open textbooks, they must be made aware of the limitations that certain platforms may have. For example, an HTML environment will not have the same cross-referencing or indexing capabilities as a LaTeX environment will. Illuminating these limitations from the start will prevent unnecessary work and avoid disappointment as the book progresses. However, the advantages and rewards of an open book must be emphasized over any potential shortcomings that may present themselves.

The interactivity and availability of supplementary materials must increase as more textbooks are developed. I believe this is one of the main hesitancies of professors in adopting an open textbook for their course. As the trust in open materials gains momentum over time, ability to replace existing materials in courses with minimal effort and exceeded expectations will prove to be essential.

Anything else you’d like to add?

Students’ input is most essential, but can often be overlooked! I would like to see more projects emerge that aim to share the best practices of student workers, both within and across universities.

I would like to thank the Director of Open Oregon State Dianna Fisher for giving me the opportunity to learn and grow in this
position. Her guidance, support, and willingness to allow me to take on new challenges provided a fulfilling environment for my first job.

**Faculty User Stories & Case Studies — California OER Council**

Permalink for online version: [http://tinyurl.com/OERCaseStudies](http://tinyurl.com/OERCaseStudies)

- **User Stories & Case Studies – California Community Colleges (CCC), California State University (CSU), University of California (UC) Faculty Videos**
- **Research & Case Studies of open textbook use in higher education**
- **Bibliography of Case Studies**

**User Stories & Case Studies – CCC, CSU, UC Faculty Videos**

**COOL4ED – Alice Taylor – Humanities – West Los Angeles College**

**COOL4ED – Ruth Guthrie – Computer Information Systems – Cal Poly Pomona**

**COOL4ED – Dianne Bennett – Chemistry – Sacramento City College**

**COOL4ED – Vera Kennedy – Sociology – West Hills Community College**

**COOL4ED – Roxanne Schroeder – Biology – Humboldt State University**

**COOL4ED – Liz Harris – Communication Studies – San Jose State University**

**COOL4ED – Delmar Larsen – Chemistry – UC Davis**

See COOL4ED case studies by CSU campuses
See also more e-Portfolio case studies in Faculty Showcase, COOL4Ed

Research & Case Studies of Open Textbook Use in Higher Education

“White Paper: OER Adoption Study: Using Open Educational Resources in the College Classroom” (California OER Council, research study)

“CAOERC White Paper Researching Findings on Adopting OER” (Dr. Diego Bonilla, video)

“Peggy Brickman, Textbook Hero” (video)

“Affordable Learning Georgia” (video)
“The Use of E-Textbooks in Higher Education: A Case Study” (Doering, et al.)
“Adopting OER: A Case Study of Cross-Institutional Collaboration and Innovation” (Educause)

Three in Four U.S. Teachers Say Open Educational Resources Are Used More Often Than Textbooks + Infographic

Bibliography of Case Studies:

“A multi-institutional study of the impact of open textbook adoption on the learning outcomes of post-secondary students”

“The Tidewater Z-Degree and the INTRO Model for Sustaining OER Adoption”

Babson Survey Report – Findings regarding OER

“Fixing the Broken Textbook Market” (study)
Student Rights & Faculty Responsibilities — Elizabeth Mays, Zoe Hyde Wake, David Squires

When making open textbooks with students, faculty have a responsibility to keep student rights front of mind. Privacy, licensing, and digital literacy are among the main issues to consider. Also included in this section is a sample memorandum of understanding for student authorship of OER textbooks and materials.

- Privacy
- Licensing
- Digital Literacy
Memorandum of Understanding (MOU) for student OER authorship participation

Privacy & Anonymity

Privacy is also a concern, both ethically and legally, when embarking on Open Pedagogy projects.

Robin says she handles this by offering her students the option to use a pseudonym.

“You might have people who want to be in the open but they don’t want to develop their own digital identity attached to their real identity,” Robin said. “But if you’re going to allow that as an option you just have to understand enough about how privacy works on the web and data so that you’re not offering them some false sense of privacy that isn’t actually authentic.”

Steel said he is conscious of the students’ right to privacy under FERPA when building materials in the course of their education. He suggested several options to protect this federally mandated right of students.

1. Get FERPA waivers from the students.
2. Make the open resource and credit the students who contributed, but without identifying that they were part of a specific course.
3. Allow students to use pseudonyms when building the open resource.
4. All of the above.

He noted that not all students will feel personally passionate or attached to the things they build under their name in a course, and especially when projects are public, digital and archived in perpetuity on the web, they should not be forced to be affiliated with something they’ve done as classwork indefinitely.
David Squires, a visiting assistant professor teaching in Washington State University, who worked with his students to develop an OER textbook on social media, solved this attribution dilemma by crediting the students who built the open resource at the front of the book, rather than attaching individual students' names to the chapters they specifically worked on.

Licensing & CC Licensing Guide

Practitioners of Open Pedagogy generally recommend that students have agency in their choice of license for a class project. This means they should be educated on the nuances of the license and what that means for how their work can be used in the future. In addition, they should have a choice in the matter of which license is selected. And that choice should not impact their ability to complete the assignment for class credit.

Licensing Issues for Content Created in Class Projects

Key questions to consider:

- Can students in your class project choose whether to openly license their work or not?
- What implications might this have for the usability of the completed work?
- If they do choose an open license, can they choose which license to use?
- If they choose a restrictive license, will their contributions still be part of the finished book?
• Do all the students have to come to consensus, or can they choose the license for their individual contributions? What is the decision process when there are small-group contributions?
• How do students want to be cited and attributed in their work and future derivatives?
• What if they do not want to be cited at all and prefer to be anonymous or keep their work private?
• How can students use the work in their portfolios or professional websites, if desired?
• How will you take advantage of this topic to teach digital literacy to students around the concept of openness?

In a recent event at Rebus Community, we spoke with Robin DeRosa, chair of interdisciplinary studies at Plymouth State University, Steel Wagstaff, instructional technology consultant at UW-Madison, and Amanda Coolidge, senior manager of Open Education at BCcampus, about their experiences working with students to create open textbooks.

The three talked about pedagogy, faculty responsibilities, student rights, and agreements when students work on open textbooks and OER projects.

One of the key threads that emerged was the need for students to have agency over their choice of license—meaning they’re not forced into an open license without understanding what it is, and the alternatives.

Robin said she handles this by giving her students choices: They can choose whether to openly license their work or not, and if they do choose an open license, they can choose which license to use. (But if their chosen license is not compatible with the other licenses,
their contributions may not get into the finished book, she said, citing the more restrictive CC BY license as one example.)

Robin said over the three courses in which she has focused on open, she has only had one student keep their coursework fully private inside the LMS.

“I don’t think there’s any problem giving them all of that choice. It only works to reinforce the Open Pedagogy, which is that you are in the driver’s seat and you have control over what you do,” she said.

Steel also mentioned the students’ intellectual property rights (i.e. copyright) to what they create.

“In part I think Open Pedagogy is empowering them to say, ‘hey this is your content. What do you want to do with it?’” Steel said.

When publishing an openly licensed book, he said, “our strategy was that we wanted to obtain consensus on the license.”

He also talked with students about the attribution component of the license and encouraged students to think about how they wanted their work to be cited and attributed.

Steel noted that students should be able to choose not to use the open license and still get credit for the course and meet its educational goals.

Amanda said Open Pedagogy provides a great opportunity to teach digital literacy to students around the concept of openness.

“What does it mean to contribute back to the public good, and is that something you want to do or is that something you feel restricted by?”
Key Takeaways

- Get a librarian to talk to your students about the various types of licenses. You can read more in our Guide to Creative Commons licenses.
- Conduct an exercise in which students can pick their own license.

CC Licensing Guide

What is a copyright license?

Copyright restricts the use of creative works (written text, photos, graphics, music, film etc.) to the creator unless they give explicit permission to another person or company to use their work in a particular way – think of an author allowing their book to be made into a film, or an artist allowing their artwork to be printed on a t shirt.

These permissions are called licenses, and the resulting products are called derivative works.

Traditionally, these licenses have been granted on a case-by-case basis, and require every person seeking a license to contact the creator every time, for every use.
What are the Creative Commons licenses?

Creative Commons (CC) licenses give people “a simple, standardized way to grant copyright permissions to their creative work” (Creative Commons). Instead of requiring each person wanting to use, share or adapt the creative work to ask permission, a CC license allows the creator to indicate upfront what they will and won't allow others to do with their work.

There are several CC licenses, each of which grants different levels of permission to the public. Each of these licenses provides conditions for appropriate use, and can be differently suited to both specific kinds of creative content and the preferences of a work's creator(s).

**CC-BY: Attribution**

Anyone is free to **share & adapt** the work, as long as they give appropriate credit, provide a link to the license and indicate if changes were made to the original material.

![CC-BY License](image)

**CC-BY-SA: Attribution-Share Alike**

Anyone is free to **share & adapt** the work, as long as they give appropriate credit, provide a link to the license, and indicate if changes were made to the original material. **Any derivative works must share the same license as the original material.** This means that if someone remixes your work, or makes a new project that uses your work, they must also license that work under a CC-BY-SA license.
**CC-BY-NC: Attribution-Non Commercial**

Anyone is free to **share & adapt** the work for any **non-commercial use**, as long as they give appropriate credit, provide a link to the license and indicate if changes were made to the original material.

**CC-BY-ND: Attribution-No Derivatives**

Anyone is free to **share** the work, as long as they give appropriate credit, provide a link to the license and indicate if changes were made to the original material. **Any derivative works may not be distributed.** This means that you can make a remix or new project that makes use of the original work for private use, but cannot share or publish your derivative work.

**CC-BY-NC-SA: Attribution-Non Commercial-Share Alike**
Anyone is free to share & adapt the work for any non-commercial use, as long as they give appropriate credit, provide a link to the license, and indicate if changes were made to the original material. Any derivative works must share the same license as the original material.

**CC-BY-NC-ND: Attribution-Non Commercial-No Derivatives**

Anyone is free to share the work for any non commercial use, as long as they give appropriate credit, provide a link to the license, and indicate if changes were made to the original material. Any derivative works may not be distributed.

These are also referred to as “open” licenses, a category that includes other kinds of licenses used for things like open source software.

**Why are CC licenses important to Open Textbooks?**

Open licenses are critical to open textbooks because they grant the public, including students and faculty, the right to retain, reuse,
revise, remix and redistribute educational content without charge. These rights are referred to as the 5 Rs, and are the foundation for defining what counts as Open Educational Resources (OERs) (Open Content).

First of all, an open license guarantees free (unpaid) access to content for students. With the rising costs of textbooks, student loans, and costs of living, creating and supporting free educational materials is one way faculty and institutions can make a difference for their students.

An open license guarantees free (unpaid) access to content for students.

While reducing the cost of education is already a big deal, the most permissive CC licenses also allow faculty and students the freedom to adapt content to make it work for them. With the exception of “No Derivatives” licensed work (which is generally not recognized as “open” for educational uses), CC-licensed works can be pulled apart, put back together, changed, updated, localized, translated, re-ordered, re-worked, annotated, expanded, simplified, customized, combined* and turned blue at will.

Without a CC license, any of these uses could be a violation of copyright law.

What this means in practical terms is that textbooks can be adapted to suit the needs of any given course, rather than a course being adapted to a textbook (or only using a handful of chapters out of a $200 textbook). And faculty and universities don’t have to worry about the grey areas of copyright law, or the risk of a lawsuit.

*Note: different CC licenses may or may not be compatible for combining/remixing. See CC's license compatibility chart for more details.
Why use CC-BY specifically?

The CC-BY license is considered the gold standard for open textbooks because it allows the most freedom, and it is the only license that enables all of the 5 Rs without restriction.

- **Share Alike (SA)** can limit remixing potential with content under different licenses
- **No Derivatives (ND)** doesn’t allow derivative works, which means no revision or remixing, negating many of the advantages of open textbooks
- **Non Commercial (NC)** can create uncertainty as to what qualifies as a “commercial use” (e.g. selling a printed course pack)

CC-BY lets everyone working with openly licensed educational materials to get the most value, benefit, and use possible from the work we all put in.

What are my rights when I use the CC-BY license?

If you license your work under a CC-BY license for an open textbook project (or anywhere else!), you retain the copyright, meaning the work is still yours. The license can be thought of as “some rights reserved” rather than “all rights reserved.”

1. You have the right to be attributed correctly on all versions of your work, as well as any derivative works, and any changes made to your work are required to be identified.
2. You also have the right to not be attributed on your work or any derivative version of it, if at any stage you decide you don’t want to be associated with it.

3. Last, you have the right to change the license applied to your work at any time, BUT this will only apply to future users – anyone already using your work will retain the rights given to them in the original license.

All of these rights come with the caveat that once content is online it can circulate widely and be nearly impossible to trace. This means that practically speaking, while it is easy to remove your name or change the license on the original copy of your work, it is very difficult to do so on any other copies or derivative works. Keep this in mind at the start of your project when selecting a license.

Digital Literacy

This section offers an overview on Digital Literacy by educator David Squires.

Between Making and Integrating Digital Technology

Advocacy for digital literacy often falls along a spectrum from making to integrating computing technologies. We can see this tendency in the excitement over maker spaces and technology integration. Pedagogically, both have their value, as articulated in the representative statements from Educause and Edutopia:

“Makerspaces allow students to take control of their own learning as they take ownership of projects they have not
just designed but defined.”

“Technology, when integrated into the curriculum, revolutionizes the learning process. More and more studies show that technology integration in the curriculum improves students’ learning processes and outcomes.”

If maker spaces let students become better producers, technology integration lets them become savvier consumers. While maker spaces emphasize student agency and technical creativity, technology integration emphasizes student awareness and technical proficiency. Both, however, come with a high price tag, making them unfeasible options for many instructors. Creating Open Educational Resources (OERs) with students offers one possible synthesis for making and integrating at a scale that Paul Fyfe calls “mid-sized digital pedagogy.” Working with students on an open textbook promotes collaboration with affordable tools while also letting students stay focused on course content.

When students begin to produce open textbooks, they necessarily delve into the subject area of the course. The task demands at the outset a level of systematic thinking that course materials assume in advance. Textbook authors and college professors usually take responsibility for course design and so set the parameters for student learning. By contrast, creating open textbooks as a class project invites professors and students to enter into a collaborative process for deciding what content to feature and how to organize it. One of the most challenging—but also energizing—aspects of creating OERs in my experience came at the beginning of the project when students divided the chapter topics for a textbook on social media. They had to ask critical questions about what counts as comprehensive knowledge and how best to sequence learning from the fundamental to the more specialized. Before ever worrying about software for layout and publishing, students immersed themselves in the secondary literature and research materials. Importantly, they drew on previously published open textbooks where possible, which pushed the collaborative experience beyond
the walls of our classroom to a wider academic community. Students realized quickly that they had a responsibility to both the authors who went before them and the readers who might use their textbook.

Because I teach digital cultural studies my courses can unify digital literacy instruction with course content, perhaps more than other subjects. For my purposes, having students create an open textbook on social media encouraged them to explore aspects of everyday culture that they often overlook. For instance, as a class they decided that the textbook should include a chapter on the terms of service for using Facebook, Instagram, Twitter, and other popular social media platforms. That decision required them to study seemingly arcane details about computer fraud as well as details about their own (often eroded) rights as content creators. The section on copyright limitations echoed the discussions we had in advance about Creative Commons licensing and the various motivations underlying the move toward OERs. The exploration of terms of service left students with a new awareness for their own labor as content producers on platforms designed, in large part, for mass consumption. At the same time, writing textbook material let them reimagine their role in class as not simply knowledge consumers but also as knowledge producers. The goal of turning college students into knowledge producers is not unique to digital literacy curricula, of course, but digital literacy can help achieve that goal with a critical eye toward the broader context of content creation under commercially oriented copyright regimes.

Concerns over copyright and proprietary content extend to choosing a desktop publisher and distribution platform. Many of my students need to learn Adobe tools such as InDesign for professional reasons. Given the cultural studies focus on my courses, however, we picked a free, open source web application called Scalar. Scalar was designed to feature academic writing with media rich content. It lent itself to our textbook prototype because it works on the book model. As a digital tool, however, it also takes advantage of all that interactive media affords, including the ability to feature and
annotate images, video, sound, maps, and almost any web-based material with a stable URL. That gives Scalar an advantage over PDF publications, which my students exploited to incorporate primary examples from around the web, especially YouTube, in their original form. Admittedly, Scalar creates a learning curve that some students find frustrating. For instance, the platform lets users add media by linking it to specific parts of the text, rather than just dropping it between paragraphs. Although more complex, the benefit of creating media links is that the written analysis has a direct relationship to the object of study, making critical reading skills manifest in the organization of digital content. The added complexity encourages students to work outside their comfort zone as they think about the relationship between digital media and their own writing.

As a platform, Scalar exemplifies the synthesis of making and integrating digital media. Students become publishers in the process of writing their Scalar book even as they practice integrating digital media from various web sources. The assignment works to develop comprehensive mastery over the course material while students also ask critical questions about which materials get selected for study and which get excluded. Similarly, they can ask which tools become the defaults for learning and which get marginalized. One of my students wondered aloud during in-class discussion why textbooks have become a dominant tool from primary to higher education. It's a good question, although not one we were able to answer in that class. Having asked, however, the student offered us an expanded sense of literacy that includes working with a wealth of media technologies in addition to reading books and writing papers.

That broad view of literacy needs full consideration in an age when we're faced with choosing among an endless number of applications to solve any given problem, especially when many of those applications will threaten our rights as content creators and our privacy as consumers.
Memorandum of Understanding (MOU) for student OER authorship participation

The following agreement template can be used to clearly lay out the rights of students when participating in a collaborative open textbook project, and the responsibilities of the faculty member to their students. Its purpose is to make sure that students are informed about the requirements of the project and the implications of the license they choose.

Please feel free to adapt it or extend it as you see fit for the purposes of your class, and share any feedback that may improve the template for future uses.

Agreement to Contribute to Open Textbook – Prototype

The agreement below is provided as a template which can be copied, pasted, and modified as needed for OER textbook projects.

Agreement to Contribute to Open Textbook

I, _______________________________, agree to
participate in the creation of ___________________________________, an open textbook, in collaboration with my professor, ___________________________________. This work will comprise [part of] my coursework for __________________________________ [class/course name]. I understand that inclusion of my work in the final text is conditional upon my willingness to license my contributions under a CC-BY license.

I have read the Guide to Creative Commons Licenses and understand that a CC-BY license allows others to share, use and adapt my work so long as they attribute me as the original author.

I understand that I have the right to request that my name and/or work be removed from the original text, or change the license on my contributions at any stage prior to publication.

Signed: _______________________________ Date: ______________________

I, ____________________________________________, agree to work with my student ___________________________________________ on the creation of ___________________________________________, an open textbook in [partial] completion of ___________________________________________[class/course name].

I commit to supporting __________________________ throughout this project, and ensuring they have the knowledge and resources they need to be an informed contributor.

I agree that the student may request that their name and/or work be removed from the original text or change the license on their
contributions to this work at any stage prior to publication of the work.

I confirm that the student’s decision to change the license they place on their work or to not participate in the project will not impact on their course assessment.

Signed: _______________________________ Date: ______________________
4. Working with Learners

BARBARA ILLOWSKY, RAJIV JHANGIANI, NICOLE ALLEN, DAVID WILEY, JAIME MARSH, OPEN WASHINGTON OPEN EDUCATIONAL RESOURCES NETWORK, TACOMA COMMUNITY COLLEGE, JOANNE ELLER, JENNIFER SNOEK-BROWN, COMMUNITY COLLEGE CONSORTIUM FOR OPEN EDUCATIONAL RESOURCES, OPEN EDUCATION CONSORTIUM, SAMARA BURNS, MATTHEW MOORE, CHRISTINA HENDRICKS, JODY R. ROSEN, MAURA A. SMALE, SEAN MICHAEL MORRIS, PETE RORABAUGH, JESSE STOMMEL, ROBIN DEROSA, LYNLEYSHIMAT RENEE LYS, OPEN EDUCATION GROUP, AMY NELSON, AND OPEN PEDAGOGY NOTEBOOK

This section contains six parts – Student Spotlights, Learning with OER – Benefits to Students, Student Planning – CCCOER, Students as OER Contributors, Evaluators, Co-Authors; Open Pedagogy Notebook Examples, and Sample Assignments & Resources.

**Student Spotlights** offers student spotlights from students who have been involved in the creation of OER materials and textbooks. This material comes from *A Guide to Making Open Textbooks with Students: Project Ideas & Case Studies* – Rebus Community & Elizabeth Mays.

**Learning with OER – Benefits to Students** offers faculty and student perspectives on the benefit to students of learning with OER and Open Education. This material comes from Barbara Illowsky, Rajiv Jhangiani, Nicole Allen, David Wiley, Jaime Marsh, Open Washington Open Educational Resources Network, Tacoma Community College, JoAnne Eller, and Jennifer Snoek-Brown.

**Student Planning – CCCOER** highlights ways that students and student groups can initiate and support Open Education. This material comes from CCCOER, with further resources from BCcampus.

**Students as OER Contributors, Evaluators, Co-Authors** offers writings by instructors with extensive OER experience. These instructors offer suggestions, guidelines, and tested methods for engaging students in not only the use of OER materials, but also
the creation of materials. This information comes from a variety of educators, including Christina Hendricks, Rajiv Jhangiani, Jody R. Rosen and Maura A. Smale; Robin DeRosa, and Sean Michael Morris, Pete Rorabaugh and Jesse Stommel.

**Open Pedagogy Notebook Examples** offers selected materials from the Open Pedagogy Notebook, spearheaded by Robin DeRosa and Rajiv Jhangiani, including experience, guidelines, and suggestions by experienced instructors who use Open Pedagogy.

**Sample Assignments & Resources** presents a list of links to further examples, as well as materials from the Open Education Group for engaging students with Open Pedagogy, OER textbooks and materials, and OER projects.

- **Student Spotlights**
- **Learning with OER – Benefits to Students**
- **Student Planning – CCCOER**
- **Students as OER Contributors, Evaluators, Co-Authors**
- **Open Pedagogy Notebook Examples**
- **Sample Assignments & Resources**

**Student Spotlights**

This section offers student spotlights from students who have been involved in the creation of OER materials and textbooks.

- **Student Spotlight: Samara Burns, Open Logic Project**
- **Student Spotlight: Matthew Moore, The Open Anthology of Earlier American Literature, 2nd Edition**
Student Spotlight: Samara Burns, Open Logic Project

Throughout my graduate degree I had the opportunity to work as a student assistant for the Open Logic Project. The project began in the philosophy department of my home institution, The University of Calgary, and was motivated by the lack of intermediate logic textbooks available for professors to use. Those textbooks that were available were very expensive, and often confusing for students who were relatively new to logic. In response to this issue, the Open Logic Project created a collaborative, customizable open-source textbook.\(^1\) This kind of book has several advantages over traditional textbooks. Formal logic makes use of mathematical symbolism, but the symbols used vary from book to book. The customizable features of the Open Logic textbook allow faculty to choose the symbols that they wish to use. The book also gives instructors the ability to change the content as they see fit, and students do not have to pay for an electronic copy.

The book is written in LaTeX and stored on Github. Typesetting in LaTeX makes the customization aspect of the textbook easier. Important symbols and words have been tagged throughout the text and, if a faculty adopting the textbook wishes to change a certain symbol or word, they can simply alter one line of code rather than searching the entire document. Adding or removing chapters from the book is just as easy. The Github platform gives others the ability to make changes and “push” them to the main hub if they feel those

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1. Andy Arana, Jeremy Avigad, Walter Dean, Gillian Russell, Nicole Wyatt, Audrey Yap, and Richard Zach, eds. Open Logic Project (University of Calgary Faculty of Arts and the Campus Alberta OER Initiative: (2017), \texttt{http://openlogicproject.org/}.

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changes benefit the textbook overall. The collaborative nature of the project means that the book is continually being updated, expanded, and improved upon.

The project was instigated by my master's thesis supervisor, and I was one of several student assistants hired to help develop the text. I worked on several chapters in the textbook. In most instances, I was given class notes from professors affiliated with the project and was responsible for converting them into cohesive chapters. Each chapter turned out to be about fifteen pages in length. I was not only required to translate the notes into appropriate sentence/paragraph structure, but because of the format of the book, I had to remember to tag key words and symbols in order to accommodate customization. This led to some technical difficulties along the way. As the chapters progressed, new challenges would arise, such as the need to create and integrate diagrams into the chapters. This required extra research and time to execute correctly.

Ultimately, the key to success on the project, for me, was open communication with the two professors I was working with, and clear communication regarding expectations and deadlines. In addition to this, getting feedback on my work was extremely important, and I had to give myself enough time to make extensive revisions to my pieces. I discovered that writing a textbook is a different experience than writing an academic essay. The editing process was extensive, and was done both in-person and through email. In-person meetings were helpful, as we sat down down with a physical copy of the chapter and determined what sections needed revision or expansion. The GitHub platform facilitated online editing, as my professors had access to my work as I uploaded it. They could edit the chapters directly or contact me with their feedback.

My experience with the Open Logic Project has given me a new appreciation for teaching. I was lucky enough to have the opportunity to TA for a course where the book was used. This gave me the opportunity to see how students were responding to the text and gather feedback from them. Student feedback was
used to improve the textbook at the end of the semester and the changes were published on GitHub. Being part of the project gave me tremendous insight into which elements of a textbook are most important for student learning, which will be valuable knowledge as I continue to teach in the future.

**Key Takeaways**

- When conceiving a new project idea, look for existing gaps in the textbooks available for your field.
- Get graduate students involved!
- Clearly communicate your expectations and deadlines.
- Give students feedback about their work at various stages of the project.
- If you are using an open textbook in your classroom, don’t discount the feedback you receive on it from students. Try to contact the textbook creators if you discover elements that need editing or updating.

**Samara Burns** is currently finishing her master’s degree in philosophy at the University of Calgary, where she studies formal logic. She plans to pursue a Ph.D. in 2018.
Student Spotlight: Matthew Moore, The Open Anthology of Earlier American Literature, 2nd Edition

I was among the students who worked on professor Tim Robbins’ classroom project at Graceland University to expand The Open Anthology of Earlier American Literature. Enrolled in Tim’s Early American Literature course last fall, he introduced an assignment that would entail us contributing and expanding an open anthology of literature. Most of us must have pondered: “open anthology”? I know I did. Divided into groups, each of us took on various roles from writing introductions for literary works to researching biographical information to provide brief historical context. Although initially daunting, I don’t think I speak only for myself when I say that as a class this assignment offered rewards and payoffs both intellectually and communally; plus, it was just plain fun. My group in particular chose the works of Roger Williams to curate, write introductions to, and research Williams’ historical impact. Here, I quickly realized the importance of such an anthology. Williams’ work fought in defense of indigenous people’s rights in North America. Neither I nor the rest of my group had encountered his works or narratives in high school classes.

It became clear that this was more than just some group project reinforcing the value of collaboration or how to conduct proper research; the open source anthology plugged a handful of university undergraduates into a larger, reciprocal community between peers and instructors. Ultimately, however, that line began to blur. The autonomy and authority fostered in the students, and the fact that this project actively sought and utilized student perspectives, was empowering. Engaged with this digital pedagogy, given backstage passes to the world of academic anthologies, we curated works that seemed urgent for a new generation of students. In this way, it was our own critique of the traditional and reiterated canon that has been burnt into the retinas of undergrad English majors anywhere.
Within that space we included untold histories, suppressed narratives, and stories that didn’t make the cut. In a small yet surprisingly diverse university with students from all different cultural and ethnic backgrounds and who encounter literature in their own nuanced ways, the inclusion of these pieces was vital. It was less a matter of reprinting a time-honored magnum opus as it was a cultural responsibility to validate the works of quelled voices.

We also, indirectly, became acquainted with the bureaucratic side of anthologizing: working within open domain and the restrictions of copyright, which lent insight into the inner workings of the literary industry.

It dawned on me: in the larger picture, and with each contribution, we were opening access to academic material to a global community; possibly even to some without access to higher education. In that sense, we felt as if our positions of academic privilege, in this case, were used in a productive and egalitarian way, even if it may have been a small feat. Knowing that our contributions to the open source anthology would be read, understood, and interpreted by future readers from all avenues of life is a mesmerizing thought.

Having been led to believe in the authoritative role of the textbook, its glorified place in academia, this project turned that notion on its head and, instead, cultivated a community of student-to-student communication that was far more productive and valuable to some of us than purchasing a $150 textbook. From the university student who can’t afford the textbook, let alone grip the thing, to the literary nerd aimlessly scouring the recesses of the Internet in search of a literary text, the benefits of being open are many. With an anthology for students written by students, we break away from a precedent of reading these works in esoteric circles, and open new, inclusive frontiers of engaging with a text and, more important, having access to it.
**Key Takeaways**

- Bring in different perspectives from faculty and students while working on the project. In so doing, empower your students by placing their feedback on par with faculty reviews.

**Matthew Moore** is an English and studio art major at Graceland University.

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**Learning with OER – Benefits to Students**

This section offers faculty and student perspectives on the benefit to students of learning with OER and Open Education.

- **Faculty Perspectives on Open Textbooks**
- **Student Perspective: What Open Education Taught Me – Jaime Marsh**
- **Tacoma Community College: Student Guide to OER: OER Stories**

**Faculty Perspectives on Open Textbooks**

In the following two videos, you will hear from faculty who are using open textbooks and the reasons why.
Why use open textbooks? Benefits for students from BCcampus on Vimeo.

A Vimeo element has been excluded from this version of the text. You can view it online here: http://pressbooks-dev.oer.hawaii.edu/uhoerpuguid/?p=760

What instructors say about open textbooks from BCcampus on Vimeo.

A Vimeo element has been excluded from this version of the text.
Nicole Allen on Open Textbooks

In this video (2:44), Nicole Allen discusses the problems with the current textbook paradigm and the promise of open textbooks. She is the OER Program Director at the Scholarly Publishing and Academic Resources Coalition (SPARC), and was formerly the Make Textbooks Affordable Campaign Director at the Student Public Interest Research Groups (SPIRG).
The Tension of Open Textbooks

There is tension around textbooks. On the one hand, textbooks are considered an antiquated format, almost taboo to champion in the 21st century. On the other hand, textbooks are the most common educational material used in formal education, and a format with which teachers are very familiar.

At the same time some are pushing for abandoning textbooks, others see the textbook format as the best way forward for open educational resources.

Discussion Prompt

• If open educational resources become too closely associated with the textbook format, will it help or hinder their adoption? What do you think would be the best two or three strategies for proponents of open educational resources to use in encouraging their adoption?

Attribution: Adapted from Activities for From OpenCourseWare to Open Educational Resources and Open Textbooks by David Wiley and released under a CC-BY license.
What Open Education Taught Me

Jaime Marsh

A Keene State College undergraduate reflects on her experiences with Open Education:

So...for those of you just joining me on this 16 week journey through Tropical Marine Biology (and our 9 day trip to Turks and Caicos in 2 days), you might be wondering what all these blog posts are about, and why are we doing them? As a junior, and incoming senior studying Biology at Keene State College, several of my teachers have changed their teaching philosophy to open education. Open education is the philosophy and belief that people, even the world should produce, share, and build on knowledge that everyone has access to. It is believed that open education will promote a higher quality education and community that has been so limited by the textbook companies and licenses.
The first “open education” course I took at Keene State College was an Introduction to Neurobiology with Dr. Whittemore. I understood the concept, and like any other assignment, I did it, according to the guidelines given, and produced the work. However, I took it for granted. I didn't take advantage of the opportunity to take over my education like I should have. This past semester I am currently finishing up, I took two courses in which professors taught with the open education philosophy: Endocrine and Endocrine Disruption and Tropical Marine Biology. Noticing a trend in the upper level biology courses and professors new philosophy, I decided to give this open education philosophy a chance. I figured worse that could happen was that, I didn’t have to pay for yet another ridiculously expensive textbook. At first, I was hesitant to accept this change, but eventually adapted, and actually learned so much. So, here it goes, what open education taught me:

To Keep An Open Mind

The traditional methods of Powerpoint slides and textbook readings are slowly coming to an end, and that is okay. I was skeptical that this open education philosophy would work, questioned what I was going to learn, before I even gave it a chance. So, I learned to keep an open mind. Education isn’t a way single, one-way, narrow, dead-end street. It is open to possibilities, and many of them, it doesn’t have to be a specific way. Your education is what you make of it, no matter how you may learn, be open to new methods; it is okay.

To Take Control of My Education

Open education comes down to one word: accountability. As a student using the open education philosophy, you chose a topic, do
the research, compile it, and make a blog post, such as this one. YOU choose what YOU want to learn, and how YOU want to do it, and when YOU want to do it. Noticing a theme? This is your education, and for the first time, in a very long time, maybe ever, we have a say in what we want to learn. Granted, there are parameters and some guidelines we need to stick to, but the bottom line is, you get to learn what you want to learn, and that is huge; revolutionary maybe. The take away? Don't take for granted your education, and don't let an individual, whether a peer, professor, or textbook company, have more control over your education than you do.

That My Professors Are Still Learning Too

This might be one of the biggest take-aways I've gotten from the open education method. My professors are still learning too. After going to a talk with Dr. Bonnie Stewart, she said something that really caught my eye. “No teacher that is teaching with open pedagogy, is teaching the way they were taught. They are learning too.” When you think about it, it's true. This is not how a single one of my professors, whether teaching open education or not, were taught. Even those who are not teaching with this philosophy are still learning, however, these professors who are, are learning this new method of teaching at the same time we are. That really put it in perspective for me, and is an important concept to all open education philosophy courses. And also really awesome, if you ask me.

To Collaborate With My Peers

Being in a Tropical Marine Biology course with eight other students, each writing eight blog post, on the same general concept on coral
reefs, you tend to make connections in your writing with other's work. In several of my blog posts I was able to tag my peer's blog posts, in my blog posts, essentially making a spider web of connections, allowing us to collaborate, and expand our knowledge on the topic, and that is a huge part of education. I also had the opportunity to comment on my peer's blog posts, give them feedback, but more importantly constructive criticism. I also had several of my blog posts commented on and critiqued. Not only was I able to correct them, but it helped me develop my other blog posts and ultimately my E-port in ways, I would never have been able to if I didn't have an E-port or if I wasn't in an open education classroom.

To Trust the System

Another important lesson: to trust the system, don't fight it, accept it and take advantage of it. This system works, I can't even begin to tell you how much I learned, and will continue to learn outside the classroom. I have developed an in-depth portfolio for myself that will take me far beyond the classroom, into the work place and potential graduate school opportunities. Your professors, while they are learning at the same time you are, know what they are doing, and are full-heartedly behind the open education system because they believe not just in you, but in a better education for society and the world, and who wouldn't want to be apart of that?

To Be Proud and Confident In My Work

I have always been a student who hasn't been fully confident in my work. Constantly worrying if I put in enough time, enough effort, if I did this the right way, I essentially became a perfectionist. I do not like showcasing my work, I especially do not like getting up in
front of a classroom and presenting my work, and putting my work on the internet has been no exception. However, this has taught me that it is okay to be wrong every once in a while, and that I should be proud of my work. As any student does, I put in copious amounts of time and effort, you could even say blood, sweat, and tears (probably more tears than anything), but this work we do should be showcased for everyone to see, not just sent on a link to Canvas just for the professor to see. So, be proud and confident in your work!

To Put Yourself Out There and Make Connections

Recently, I had gotten some attention on a tweet I had sent out about Dr. Bonnie Stewart’s talk she had given at Keene State College. Individuals of all kinds including, doctors and professors, even from other colleges, had taken the time to like or retweet my simple tweet. From there, several of those individuals then followed me, so when I complete a new blog post, I have an audience, and hope those same individuals take the time to click on my link and read my post. And sometimes they do, and sometimes they comment! These connections we make today, or even tomorrow can help shape the rest of our lives, so despite how awkward or weird you may feel for putting yourself out there, asking people to read your post, and seeing what they think about it, do it; it can lead to connections, networking, and opportunities. Take advantage!

To learn more about open education, and hear from some influential individuals leading the way on open education, follow @karencang or @actualham on Twitter!
About Jaime Marsh

Jaime Marsh is currently a Senior at Keene State College in New Hampshire, majoring in Biology. You can read more about her at www.jaimemarsh.wordpress.com.

Tacoma Community College: Student Guide to OER: OER Stories

Source: “My OER experience” by JoAnne Eller, Tacoma Community College, from OpenWa, 2014, is licensed under CC BY 4.0

Source: “Four TCC Students on Why OER Matters” by Tacomacc4Reel, Tacoma Community College, 2012, is licensed under CC BY 4.0
Student Planning

An important stakeholder group and set of team members in most open education plans is students. Student groups, particularly student governments, are strong advocates for open education. More importantly, student groups can provide feedback on how open education affects their learning. There are a variety of ways that students can support open education efforts. Here are some suggestions for working with student groups.

Ask for Feedback

Students who take open education courses can describe how the change in learning resources affected their study habits, experience of the class, interactions with the teacher, and impacts on pocketbooks and grades. There are a variety of ways to ask students for feedback on their experiences with OER including surveys, focus groups, writing prompts, and interviews.
The OER Research Hub developed a set of survey questions that are openly licensed and can be adapted for use in student surveys.

Invite Students to Planning Committees

Students can be strong partners on advisory groups and in the planning process. Invite student participants to the committee. Remember that students can help in advocacy, because faculty, administrators, and staff members are heavily invested in student experiences. Students are impacted most heavily by expensive textbook costs, and inviting student groups to your planning process sends a message that the institution cares about textbook costs and student success.

Inspire Student Events

Students can plan events to talk about textbook cost and open education. Ask student groups to plan advocacy events that will speak to other students. Ask them to include faculty who have adopted open education. Inspire a more complete conversation that includes the Bookstore, faculty, and student groups. Be sure that the conversation is constructive and institution-wide.

Students are also adept at using social media tools to motivate one another. For example the #textbookbroke_campaign has sparked interest in open education worldwide. Student groups could be encouraged to add to an existing social media campaign on open education, or they could start their own.
Engage the Student Government

Student governments are the best allies in open education, because they often have regular meetings with institutional leadership and are often invited to committees throughout the institution. Also, student governments tend to have strong guidance in terms of exercising their student voice. The Student Government Resource Center published a helpful handbook that includes open education called “Making Textbooks Affordable.”

Further Resources

[OER Student Toolkit: A BCcampus Open Education advocacy guide for student leaders — Daniel Munro, Jenna Omassi, and Brady Yano [External Link]]

1. Step One: What Are OER, Why Are They Important, and What are the Barriers to Adoption?
2. Step Two: What Already Exists On Your Campus?
3. Step Three: How To Advocate On Your Campus
4. Appendix A: Resources
5. Appendix B: OER Repositories
6. Appendix C: #textbookbroke Information

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Students as OER Contributors, Evaluators, Co-Authors

This section offers writings by instructors with extensive OER experience. These instructors offer suggestions, guidelines, and tested methods for engaging students in not only the use of OER materials, but also the creation of materials. These instructors encourage you to think beyond the disposable assignment and beyond traditional concepts of rigor to the active engagement of students in their education. Make the most of the opportunities offered by the unique medium of OER to offer hands-on and student-directed learning. Included are short writings by Open educators on the role of students as OER contributors, evaluators, and co-authors. Further resources for project and planning suggestions are also included.

- **Students’ Vital Role in OER — Christina Hendricks**
- **Pilot Testing Open Pedagogy — Rajiv Jhangiani**
- **Open Digital Pedagogy = Critical Pedagogy — Jody R. Rosen and Maura A. Smale**
- **Extreme Makeover: Pedagogy Edition — Robin DeRosa**
- **Beyond Rigor — Sean Michael Morris, Pete Rorabaugh and Jesse Stommel**
- **Further Resources**

**Students’ Vital Role in OER — Christina Hendricks**

Through creating and spreading open educational resources, students learn more and make an impact on the world, writes Christina Hendricks.

CREATIVE COMMONS ATTRIBUTION-SHARE ALIKE 4.0
When I first started learning about open education and open educational resources about five years ago, I knew OERs were different than other educational resources in that they have an open license, but I thought of them as similar in the sense of being created by instructors in educational institutions. But it’s clear to me now that students also have a valuable role to play in creating and revising OERs, as well as in promoting open education more widely.

An open education movement with students is much more effective than without, and creating and revising OERs can be a valuable way for students to learn and to have their work make a larger impact than just earning them a grade.

Asking students to contribute educational resources that are made publicly available and openly licensed is a way to avoid what David Wiley, chief academic officer of Lumen Learning, calls “disposable assignments”: assignments that are marked for a grade and otherwise add no value to the world. Student work in many courses can be very useful to other students in a course, to community groups and to the wider public.

Wikipedia projects are one way for instructors to involve students in OER creation or revision while contributing to a widely used public resource. As one student put it in a quote on the Wiki Education Foundation website, “There is much gratification in leaving your personal mark on something that will help others to learn.”

In addition, writing for Wikipedia can help students gain important digital and information literacies, such as learning how to find and cite reliable sources and how to write for a nonspecialist audience. At the University of British Columbia in Vancouver, in Canada, students are editing Wikipedia in courses ranging from food, nutrition and health to Canadian literature and human ecology. The Wiki Education Foundation provides many useful
resources for those wanting to incorporate Wikipedia assignments into their courses.

Students can also provide valuable contributions to open textbooks – textbooks that are openly licensed and provided at no or low cost (printed versions usually have a nominal cost). It might seem that only upper-level students would be able to do so well, but that need not necessarily be the case. As Plymouth State University professor Robin DeRosa puts it, “Students are the perfect people to help create textbooks, since they are the most keenly tuned in to what other students will need in order to engage with the material in meaningful ways.”

One of the books DeRosa created with students is The Open Anthology of Earlier American Literature, in which students gathered public-domain texts, wrote introductions and created discussion questions and assignments to accompany them. One of the examples in a newly published “A Guide to Making Open Textbooks With Students” from the Rebus Foundation features students adding new chapters to The Open Anthology of Earlier American Literature, while in another example student lab instructors for a course in economics revised and added new content to an open microeconomics textbook from OpenStax.

The Open Logic Project, an international collaboration of people contributing to an open textbook in logic, includes a number of graduate and undergraduate students, and students also contribute to the open textbooks in the Libretexsts collection, including those in chemistry, mathematics and humanities.

Other Student OER Projects

Students are working on many other kinds of OERs as well. At the University of Edinburgh, a group of undergraduate students revised existing OERs to add materials on LGBTQ health for the medical education curriculum. Graduate and undergraduate students at the UBC Vancouver are writing open case studies that can be used in educational or other contexts. The UBC Vancouver geography department has a website showcasing student research projects on
environment and sustainability issues, including case studies, infographics and projects in geographic information science.

In addition, eCampusOntario (Canada) has recently established a student experience design lab, in which students work on projects such as a platform for students and faculty to create virtual reality experiences and a repository of student work done in courses – all of the outputs of this lab will be openly licensed.

Furthermore, the University of Calgary in Alberta, Canada, has developed a program to support OER adoption in which undergraduate students work to locate OERs that align with a number of courses at the university, and graduate students provide reviews of those OERs. Along somewhat similar lines, students at the University of Edinburgh in Scotland are working as open content curators “whose role is to repurpose materials created by staff and students around the university to ensure they can be released under open license and shared in places where they can be found and reused.”

Student Advocacy

Promoting open resources is a natural fit for student advocacy, given concerns about the rising cost of higher education. But students are not only interested in saving money; many are also excited about the opportunity for student work to have more of an impact by being made publicly available, reusable and revisable by others. I have found in my own work that student advocacy is crucial, as students often have powerful voices when speaking to campus administrators and government leaders.

The #textbookbroke campaign on Twitter and other social media, often organized by student governments, features images of students showing how much they spent on textbooks for a term in order to reveal how expensive textbooks are. In British Columbia, student leaders from Simon Fraser University, UBC Vancouver and UBC Okanagan launched #textbookbrokebc in 2015. The student association at the University of Saskatchewan in Canada has taken a somewhat different road to support OER adoption: last year the
association provided certificates of innovation for instructors who use OERs.

Student support for OER adoption and creation can have wider impacts on university policies and practices. In Scotland, the Edinburgh University Student Association's advocacy provided an important impetus for the development of an OER policy at the university that “encourages staff and students to use, create and publish OERs.” At the UBC Vancouver, student government leaders worked to get language into an important guide to promotion and tenure for faculty in the teaching stream at UBC. Faculty in that stream must engage in “educational leadership,” and the new language in the tenure and promotion guide clarifies that contributions to OER can be counted as one way to show educational leadership.

I can no longer imagine being an effective open educator without working closely with students, and I hope this article has provided inspiration for others to do so, too!

Bio

Christina Hendricks is a professor of teaching in philosophy and deputy academic director of the Centre for Teaching, Learning and Technology at the University of British Columbia in Vancouver. Other examples of student contributions to open education can be found in this blog post.

Pilot Testing Open Pedagogy — Rajiv Jhangiani

CC-BY-SA-NC

This summer, as has become usual practice for me, I adopted open textbooks for my Introductory Psychology and Social
Psychology sections (produced by NOBA and the BC Open Textbook Project, respectively); however, my desire to enjoy a semester entirely free from traditional textbooks was challenged by the absence of a high quality open textbook for Cognitive Psychology. Although I began by negotiating the price of the traditional textbook down by $75 (“just for you” I was told—because I am such a nice guy, I assume), I eventually opted to use the semester as a pedagogical cleanse and assigned my Cognitive Psychology students a selection of openly available readings and video clips (many from the terrific GoCognitive.net project). In total, my 140 students this summer (across four sections) collectively saved about $23,500.

Of course this is great news, but the greater challenge I had set myself for the semester was to shift away from traditional, disposable assignments (that my students see little purpose in and that I don't take special delight in marking) towards what different people have started to refer to as valuable/renewable/legacy assignments. Inspired, as always, by David Wiley's posts on the subject (see here and here), I was excited at the idea of harnessing the energy, potential, and especially the creativity of my first- and second-year psychology students. The challenge, though, was in designing assignments that would:

- allow my students to develop and exercise useful skills that aligned well with course and program learning outcomes
- produce something that would add value to the world
- produce something that would be openly available
- provide sufficient support so that the experience would not be terrifying for them (a serious concern, as I was asking them to step well outside of their comfort zones)
- build in enough latitude so that the assignment would constitute a creative project and not simple a recipe for the same product

With three different courses to teach, I had a lot of planning to
do if I wanted to make an omnibus shift away from disposable assignments. The two-pronged strategy I adopted was to utilize the principles of backward course design and to build on the ideas and practices of others. This is what I came up with:

1. Inspired by the [NOBA Project’s student video award competition](https://www brakes.org/), students in my two Introductory Psychology sections were tasked with producing 2-3 minute video clips. Their goal was to produce an engaging, memorable overview of a psychological theory or phenomenon. Their chosen topics required pre-approval to avoid duplication and so I could steer them away from topics that were either too broad or too narrow. At the end of the semester the revised video clips (which had to utilize openly licensed images and sounds) were all uploaded to YouTube or Vimeo and published under a CC-BY-NC license where they may now be reused, revised, and remixed by other formal or informal learners, or even instructors.

2. Inspired by the incredible work of Delmar Larsen and his colleagues at [ChemWiki](https://chemwiki.org) as well as by the [APS Wikipedia Initiative](https://www.apscience.org/wikipedia), students in my Cognitive Psychology course wrote, revised, and remixed openly licensed wiki articles for a range of course-relevant concepts, theories, and phenomena. The plan here is for these articles to live on a publicly accessible (but not publicly editable) Psychology Wiki that my colleague Levente Orban and I have received a little funding from KPU to launch (expected sometime in Fall 2015).

3. Inspired by the [Social Psychology Network’s 2014 Action Teaching Award Winner](https://www.socialpsychologynetwork.org/), students in my Social Psychology course sought to apply their budding scientific expertise to help address a social problem (e.g., cyberbullying, gang violence, environmentally unsustainable behaviours, etc.) by writing Op-Ed article and submitting these for publication in a local or regional newspaper. Although this assignment does not involve an open license and does not rely on OER (and
therefore does not fit the definition of open pedagogy), it still allowed me to ditch a disposable assignment while allowing the students to contribute empirically-grounded solutions to public discussions about complex social problems.

One feature that I embedded within all three assignments was a double-blind peer assessment procedure. Having conducted research on peer assessment, I am rather a fan of its positive effects on assignment quality, and especially of how it helps develop cognitive and metacognitive skills. Moreover, structuring each of the assignments to include draft submission, peer assessment, revision, and final submission phases also benefits students by structuring their time management over the semester and making a relatively foreign task appear less daunting.

So how did things turn out? Well, I was frankly rather impressed at the creativity of some of the student videos (see here, here, and here for a diverse set of examples) and was also pleased with the quality of the wiki articles (see here for an example) and op-ed articles. Given the diversity of the submissions, I also found the process of marking the assignments much more enjoyable. But what about the student experience? Well, as it turned out, the overwhelming majority of the students loved their assignment. Their most common comments (collected at the end of the semester) include the following:

- “I liked it more than having to write a paper/had more fun”
- “Working on this assignment was a mental break from other school work”
- “I had to learn the theory more thoroughly in order to explain it properly”
- “I like that it can be used outside of class by other people”
- “Overall, it took more time to produce than writing a paper”
- “Technical difficulties can be challenging to deal with when one is unfamiliar with producing videos”
Finally, one student indicated that they would have liked the option to write a traditional research essay instead (which I had not provided). Clearly I have work ahead of me as I seek to learn from this semester’s challenges and revise the structure of these assignments so that I provide more support to my students.

Final thought: In case you didn’t catch it, the title of this post is a slightly cheeky reference to David Wiley’s comparison of the under-utilization of the potential of OER to choosing to drive an airplane on the road. But although I have a ways to go before I fully get the hang of open pedagogy, my impression is that this initial pilot test was a pretty successful flight.

For further reading on the subject of open pedagogy, I recommend reading the recent reflections of Mary Burgess, Tracy Kelly, and Amanda Coolidge and of my fellow-BCcampus Faculty Fellow Christina Hendricks.

Open Digital Pedagogy = Critical Pedagogy — Jody R. Rosen and Maura A. Smale

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There seems too often to be an explicit agreement that instructors lead and students respond, that instructors advise as students seek guidance, that when instructors talk about their pedagogy, it should be outside of earshot of the students they instruct. Open digital platforms can break these implicit rules to make spaces for joint inquiry among all members of the college community in the spirit of Freirian ideals of critical pedagogy. Using open digital tools creates space for productive dialogue within and across courses and departments, allowing for critical co-investigation not just within a single course but in the college community. An open learning space in which everyone can work together enables browsing and viewing each other’s work, and empowers students to participate more fully in their education.
Open digital pedagogy is the use of cost-free, publicly available online tools and platforms by instructors and students for teaching, learning, and communicating in support of educational goals, can, as Kris Shaffer has argued, “facilitate student access to existing knowledge, and empower them to critique it, dismantle it, and create new knowledge.” This approach can bring critical digital pedagogy to higher education and equip students to actively participate in their education. Jim Groom and Brian Lamb describe innovative customizations of open digital tools in use at various colleges and universities, including the University of Mary Washington, the University of British Columbia, and other CUNY campuses like Baruch College. At our college – New York City College of Technology, CUNY (City Tech) – a grant has allowed us to develop the City Tech OpenLab, an open digital platform for teaching, learning, and collaborating. Also built with open source software, the OpenLab enables the entire City Tech community to take advantage of open digital practices in courses, projects, clubs, and eportfolios. Our examples here are drawn from the work that members of our college’s community have contributed via the OpenLab.

Students are empowered as learners if encouraged to act as co-creators of the platforms and learning spaces they use for their college work. Jason T. Hilton addresses this approach in his article on digital critical dialogue. Open platforms such as WordPress, Google Sites, Tumblr, and wiki software allow multiple users – students and faculty – to create and customize the online space used by a class or group. Used for individual eportfolios, these platforms allow students complete control over a site to document and showcase their college work, both for their own satisfaction as well as to show potential employers. When developing the OpenLab, our team involved City Tech students, who created our logo and initial design. Open platforms, as opposed to proprietary platforms, can provide these opportunities for customization as students participate in the construction of their own knowledge, and constructing the college.
An open system fosters opportunities for flattening hierarchies within a college community and enable students and faculty members to become critical co-investigators. Many open digital tools allow for non-hierarchical arrangements of students and faculty. For example, students and faculty can edit a Google Doc together, eliminating restrictive permissions built into other systems that could privilege the faculty member’s voice over student voices. On the OpenLab there are four member types: student, faculty, staff, and alumni, and although only faculty can create courses, that one content type is the exception, as all members can create projects, clubs, and portfolios. These non-hierarchical approaches allow all members to share their investment in what becomes necessarily collaborative work.

College spaces typically keep students, instructors, and administration in separate silos, without information and ideas passing easily among them. Virtual environments can replicate this separation, or they can invite permeability of their spaces through openness and visibility. The OpenLab's homepage, for example, features the most recent activity from all areas of the platform, broadcasting various groups’ content for all members and visitors of the site. In one space for faculty fellows in a professional development program focusing on general education, the program’s facilitator prompted an online discussion with the questions “What makes you curious? What do YOU do in your classroom to inspire learning among our students?” Several faculty members from a variety of departments reflected on sharing their passion for their subjects with students – and since the site was visible and open for anyone on the Internet to read and comment on, a City Tech student joined the conversation. He offered participating faculty members advice, encouraging them to share their reflections with their students as a way of showing that the syllabus is constructed for meaningful reasons. He wrote: “Until now, I thought you all just pick it because you KNOW it and you KNOW that it fits into your planned reading. Its good to know that you guys look forward to something when picking reads for us.” Here, the open space
provides the opportunity for a student to take on the role of teacher-student, advising instructors based on his lived experience as a student.

With the ability to work against the banking method of education by involving students and faculty as critical co-investigators, an open system facilitates engagement in a problem-posing education. As Liz Clark notes in a personal reflection in her collaboration with Emily Drabinski and Sarah T. Roberts, this use can lead to “self-education in the world of teaching with technology, learning alongside my students as we explore new technologies.” Open digital tools encourage opportunities for students and faculty to interrogate these systems – their construction, architecture, and intent – as they use them.

An open system can afford opportunities for members of the community to work not just on the site but also to develop it. This can be especially useful for students, who may gain valuable professional experience in website design and development during their work on these platforms, none of which is possible in a conventional, corporate LMS. If organized into group work for a course or internship, or a work-study job, students can apply the knowledge they have developed through hands-on experience – in collaborating with a team, conducting themselves in a professional environment, and presenting their work – as they pursue jobs in the field. City Tech students have worked with developers to transfer what they have learned in their courses into work that builds the OpenLab, such as designing site maps to track and shape the site’s information architecture.

In a First-Year Learning Community at our college, assignments for English and Hospitality Management courses took advantage of the public nature of the site and were developed with an actual audience in mind: fellow students. Students wrote about the transition to college, resources available on campus, and places to visit and foods to taste in the surrounding neighborhood. These students wrote not merely to fulfill their course requirements, but also to fill gaps in information they considered vital to new students.
Near the end of the semester, students felt empowered to organize an event to publicize the launch of the site, which helped them introduce their project, #TheGuide, an online compilation of written materials that serve the college’s community as a guide for a range of academic, support, and neighborhood resources and opportunities. Other courses have expressed interest in expanding the materials featured on #TheGuide, and the site has the potential to involve students from different courses, with different interests and expertise, and to exist far beyond the academic careers of the students who first contributed to it.

Using open digital tools in the college classroom allows students to bring in their lived experiences and prior knowledge more readily, working against the banking concept of education. Open digital pedagogy moves the expertise away from the front of the classroom, with what Pete Rorabaugh and Jesse Stommel call “its roomful of desks in factory-like face-front rows,” and distributes it among the students and instructors. Students and faculty have opportunities to interact with the world beyond an individual classroom, course, or college, and to more easily learn from and have an impact on it.

Last year, in my (Jody’s) Introduction to Fiction course, I experimented with a new assignment when teaching Toni Morrison’s Beloved that would take advantage of the benefits of open digital tools. Students selected what they felt were pivotal passages from the text and created a digital gallery on the course website of their visual interpretations of the text. Those who chose low-tech options such as sketches or watercolor paintings still needed to challenge themselves to photograph, upload, and embed the image of their creation; those who chose higher-tech options such as creating a YouTube video needed to learn to embed the video. Class time was set aside for students to ask each other questions and share their expertise both through conversation and ad hoc peer training. Once the projects were completed, students presented their visual interpretations to the class which, when posted on the course website, were each a contribution to the permanent online
gallery. My students and I were pleased with the results of this assignment, which emphasized the importance of pedagogy that makes space in the classroom for both students’ existing experience and their ability to collaborate to acquire new skills. This project and others like it on the OpenLab or other open digital platforms encourage the use of tools that can be added to or used alongside our system to facilitate the *bricolage* that Larry Hanley advocates for, drawing on the features of many tools and using them in a mash-up to facilitate learning and sharing knowledge. In using the various tools available to create this multimedia representation of *Beloved*, students became *bricoleurs*.

Open digital pedagogical tools can enter the classroom or its adjoining virtual spaces both by introduction from the students or from the instructors. When students bring technologies to the class they make visible their expertise, which they share with instructors and students alike, as the Introduction to Fiction students did with their *Beloved* digital gallery. This not only expands the group’s knowledge, it offers the presenters of the information opportunities to practice effective communication, either in writing or speech. When instructors bring technologies to the classroom, it can come from industry expertise that they can share with students, who can themselves experiment with the newly acquired tools.

Supporting and encouraging critical digital pedagogy necessitates professional development that bolsters the innovative efforts instructors make to move away from the banking model. For instructors, learning about new technologies for use in and around the classroom can come from students in classroom or online discussion, or via professional development opportunities that shift instructors into the role of student and that highlight best practices and community-building. This support for open digital pedagogy – through hands-on training and interactive discussion – asks instructors to reevaluate their practices, and challenges them to experiment with innovative classroom models.

Open digital platforms and tools are built, enriched, and experienced by students and instructors working together.
Instructors continue to develop opportunities for problem-posing educational opportunities, and students continue to accept those challenges and work along with instructors to seek solutions. It is not enough to encourage instructors to move toward open-ended, problem-posing assignments to realize Freire’s co-collaborator dynamics and to foster the flexibility for students to bring in and develop other expertise. Students need to know that they are empowered in these actions. Very often, students do not realize what working within an open system means, and do not understand that they have the authority — and the responsibility — to develop content for the platform, and the platform itself, to shape their college community. Open digital pedagogy can highlight these paths for students to learn as co-investigators so that they realize a model beyond the banking paradigm for their education.

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**Extreme Makeover: Pedagogy Edition — Robin DeRosa**

In this post, I am going to describe #Opensem, an Open-Pedagogy-powered First-Year Seminar (FYS) that I taught this past Fall at my small, public university in New Hampshire. While following certain
parameters set by the university regarding learning outcomes and goals for the FYS program, I ran the course as an experiment in radical OpenPed. I say “radical” not because it’s anything brand new or particularly edgy, but because it takes some of the basic principles of Open Pedagogy as I have been conceiving of them and puts them into practice in the fullest ways that I could imagine within the confines of my institution. Open Pedagogy offers so many possibilities for K12 teachers and college-level instructors, and most faculty will not find it suitable to their courses to adopt all of the OpenPed approaches that this course drew from, but I thought it would be helpful even to those who want to moderate their implementation of OpenPed to have an example of what happens when you push to the more extreme ends of the OpenPed continuum.

**Defining “Open Pedagogy”**

Part of the ethos of working “open” to me is to resist static definitions, since one presumption that open makes is that knowledge is always changing shape. That being said, it’s helpful to have a sense of the working definition that I was starting with at the outset of this course in September 2016.

I thought of Open Pedagogy as comprised of four basic guiding ideas:

1. **Open Pedagogy improves access to education, but this is access broadly writ.** We start by thinking of how OER drives down textbook costs, and note the impact that book costs have on student success (course throughput rates, for example). But we don’t stop there. We look at the issues raised by converting to digital materials (digital divide, access to devices, digital redlining, accessibility and universal design, etc.) and consider our pedagogies in relationship to every access issue we encounter as we teach.
2. **Open Pedagogy treats education as a learner-driven process.** Though we note the frequent marketing use of phrases such as “student-centered” to describe the classroom experience and course organization, we note that these phrases are often hollow, ill-defined, or attached to low-bar student involvement guidelines. Open Pedagogy asks us to rethink every aspect of the courses we build to consider how students can be empowered to move into the driver’s seat.

3. **Open Pedagogy stresses community and collaboration over content.** While acknowledging our own expertise as subject-matter scholars and the importance of the content that we cover, OpenPed works to connect learners to their fields, peers, colleagues, and mentors via healthy networks so that they can draw on those communities to continue learning past the end date of the course. This actually works to enhance content transmission over time, since much field content changes rapidly.

4. **Open Pedagogy connects the academy to the wider public.** We work to merge theory with practice, engage learners with “communities of practice” that matter to them and to the world, and make the educational system work for both students and the public good.

Don’t like those? Yeah, I might not, either. The slide with my OpenPed definition changes every time I give a presentation about it. Which is cool. But at least it gives you a sense of the kinds of things I was mulling over as I started thinking about my FYS last summer.

**First-Year Seminar**

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At my university, our First-Year Seminars are probably a lot like something you might have at your university or community college:

Each distinct section is organized around an individual question designed by a faculty member. Which of course, from an OpenPed standpoint, is already kind of a bummer. I wondered how to design a question that would allow students to craft their own question. Then I wondered what would happen if they all wanted to work on different questions; would that erode our community’s ability to collaborate? Then I wished they were all hanging out with me over the summer so they could help me figure out what to do. So that led me to create this question and course description:

I wondered if the course would ultimately be a course about OpenPed, or just a course that used OpenPed. Students
picked their sections of FYS and I ended up with 25 students in my section. When I say “students picked their sections,” what I really mean is that they ended up in the sections they signed up for, but a grand total of THREE of my students reported actively choosing my class because they were interested in the topic. I think I can safely say that this means I had a pretty random sampling of my university’s first-year students, not particularly attached to the idea of rethinking education.

**Building a Course Infrastructure**

On the first day, I introduced them to the idea of “Open Pedagogy,” and explained that I was really hoping that the class would build a FYS based on what they all thought they needed to learn. At that class, I also explained that we would not be using our Learning Management System (our LMS is Moodle) much, but that they would each have the option to build their own websites – ePorts – where they could present and publish their work. Students went home and read articles by Audrey Watters and Andrew Rikard, and we then talked at our next class about issues involved with student ownership of the course management spaces. Students got set up with Twitter and Hypothes.is to use as course communication tools instead of Moodle and university email, and we talked about assessing the tools for usefulness as we progressed and deleting or changing tools as necessary.

It was honestly discombobulated. We started with no real place to work, and I realized that we could have spent the whole semester just critiquing the prescribed Moodle arena and building our custom LMS. Instead of doing that, I presented some key articles and let them choose to design ePorts or opt-
out and stay in Moodle. They all chose ePorts, which we built at a reduced price with a special limited-time discount that existed from Reclaim Hosting (about $27 per student annually with domain protection). (Students can now get domains from my university’s Domain of One’s Own program, which are included in their tuition.) We decided to march forward with this trinity of tools (domains built with WordPress, Twitter for communication, Hypothes.is for online annotation), and use them as the infrastructure for our course.

You can check out some of our communications on our old hashtag, #opensem, which also became the nickname that we used to describe our course and our community as the semester unfolded.

I say “we” in that they had informed consent and opt-out possibilities and the freedom to work in other ways, but the reality was that I had a lot more knowledge in these areas, and most students were happy to follow my suggestions. Because all tools are ideological, it’s really loaded to lead students so forcefully into them; this is clear with the LMS and it was clear with my suite of tools as well. One reason I think institutions should talk about this stuff is that it would be helpful to have more courses participating together in OpenPed approaches, so then early courses could take (much) more time building a more authentically student-designed infrastructure and planning out how those infrastructures could work interoperably in future courses. Anyway, I would call the start to my OpenPed experiment exciting but also pretty-much a failure in helping empower learners to drive.

**Costs and Access**

The fact that the course was relatively inexpensive at $27 (which is, I should add, about $27 more than the fees in most courses that
I teach), we did have a high rate of participation right from the get-go, with nobody left behind in the first weeks, struggling to afford a textbook. Some students did not have devices such as laptops or smartphones, but I had managed to get a grant from our faculty technology committee to cover the purchase of ten laptops that could be checked out from the library desk just a few feet away from our classroom. This did still present some challenges, since with so many disparate tools and accounts, it can be tough for students who keep switching machines (no autofill passwords, no bookmarked pages). We were always up-front about showcasing the places where access was an issue, and this class helped me make the case for DoOO, which will now allow me to completely drop the course fee (and the requirement that students have access to credit cards—ugh, horrible, and I apologize for not seeing the issue there).

I’d like to see a laptop checkout policy that would allow students to check out machines for a week or more at a time (maybe for a semester); about 95% of our students have laptops at my university, so we should be able to find ways to more fully accommodate those who don’t. For those of you who teach in places where that percentage is much, much smaller, converting to OER or digital tools may augment the digital divide and increase costs for students rather than ameliorate the divide and lower costs.

It was also clear that the instruction to “create an account and play around in there” sounded very different to those who owned and regularly used technology and had continuous access to the internet, and those who didn’t. In another OpenPed class I taught this past Fall, I used peer mentors who staffed evening open hours to offer extra support to those who wanted to move slowly with the technology, and have a buddy next to them as they built and experimented. Despite me telling students that there was nothing they could break that we couldn’t fix together, it was anxiety-provoking for students who hadn’t used technology regularly and who had limited time to access devices and the web. #opensem didn’t have peer mentors, but it would if I taught it again. For #opensem, I basically just had continuous office hours. Because my
office is in the library where our course was, and because I was in my office four days a week from 8am-9pm, it worked well for drop-in support, and many students sat and worked in my office lobby so they could pop in when they needed me. Honestly, I loved that. But you know, I can imagine that is not for everyone. Basic lesson– and you already know this– the “digital native” thing remains a garbage idea, and if you care about access issues, you will need to meet each student where she is in terms of comfort with tech. That takes time, and labor, and it may not be practical or feasible for you given your salary or circumstances.

**Off We Go**

So off we went, mostly well-enough-equipped and armed with a ragtag arsenal of discombobulated tools. We used GoogleSheets to track assignments and posts, GoogleDocs to collaborate on and crowdssource our syllabus and assignments, ePorts to present our work, and Twitter to talk to each other. I am not sure these specific tools matter much, but the fact is that the cobbled hot mess produced a sense that we were grabbing tools as we went in order to do stuff we needed to do, and we could see immediately that the process would be iterative and dynamic. Lots of our systems emerged together over the course of the semester. It makes me wonder if building a course management system is a useful part of any course curriculum. How much learning is lost when we template out the course architecture and mindlessly work to populate the blanks that open for us there? Did students benefit from having to build, critique, rebuild, and cope with the systems that we built as we went? I think so. We were always meta-aware of HOW we learned, not just WHAT we learned. For a FYS aimed at least in good part on helping students be successful in college, that seemed a very useful part of the course.

**Collaborative Learning Outcomes**

After we had some basic plans in place for how we would communicate and where besides our classroom we would work, we started talking about content. What should we learn in the course? I presented the latest version of learning outcomes that I had
collected from the leadership of our campus-wide FYS program, and brought them to the table. We talked about them, and whether or not we should use them all (thank you, tenure– more about that later). Students wanted to use most of them, though we tweaked a few words here and there. Then I asked students to contribute their own learning outcomes, on the basic principle that learning outcomes for the course should not be cemented without participation from the learners. After making some brainstormed lists together, students blogged a bit about what kinds of outcomes were important to them. They ranged from highly skills-oriented, like this one from Jordyn Hanos, to those that leaned more toward connection and engagement, like this one from Skyla Dore.

We put all the outcomes we came up with into a GoogleDoc and students tweaked and revised and ultimately voted on them. I opened the online syllabus live at the front of the class when we finished and we updated the learning outcomes based on what they had created and chosen to upvote. Here’s what we ended up with:

![Course Objectives (Student-Generated)](image)

Some of these I love. Some of them I would probably never have
included myself. There are others I would have liked to have seen in here, but my suggestions were outvoted. I helped students understand that in our course, we would try to make the learning objectives guide our assignments, so that we were always working towards the things that we thought were important.

Some of you might be thinking that this exercise makes good sense in a FYS, where students are certainly qualified to help articulate what kinds of things they might need to learn in order to succeed in college. How could this work in a Physics course, an upper-level Latin American Studies course, a course on genetics for nurses? I think if instructors bring outcomes from accreditors and departments, and use their expertise to inform students about the kinds of content that will be crucial to their ability to move on in their learning, students can be asked to weigh in and contribute the kinds of ideas that only they would have. Students can be asked to contribute additional outcomes, or, better yet, they can be presented with the real requirements set forth by forces external to the course and then asked—just as faculty are asked—to wrestle with those and decide how they will be included in a way that feels compatible with learner-identified needs. Helping students see learning outcomes as inherently political, subjective, and worthy of critique seems to me a first step to helping them feel a sense of agency in their educational processes.

**Student-Generated Assignments**

Spending time on the learning objectives made a huge difference. Suddenly, we had a sense that the course wasn't going to just be about OpenPed, but about how to prepare our group to succeed in college going forward. We set about designing assignments to correspond to learning outcomes. For example, one group worked up an assignment to help us work outside our comfort zones (Learning Outcome #1, which was one that students created and almost unanimously agreed was important). They outlined this assignment in a GoogleDoc:

Trying to get students outside of their comfort zone has been a challenge for years. This assignment is designed to see whether you
can perform better when working in a work area that suits you. By reading the articles and finding out what could be your potential comfort zone it gives the reader a better understanding of what could come out of working in a place that they are uncomfortable or comfortable with. This skill is crucial in life to achieve your goals.

Students had a range of choices for this assignment, but those who liked this outline would click on the link below it and be directed to Jake McMaster's ePort for the full assignment. Here’s Lissa Perry’s blog post in response to this assignment prompt. We built all of this week by week, with a syllabus that started almost completely blank and got filled in as we went along.

**Cohesion, Collection, Curation: A “Textbook” Emerges**

As the course unfolded, we realized that we were really looking most often at research and ideas about what could help students do well, particularly academically, in college. I introduced the diction of “retention” and “student success,” which was vocabulary that was new to my students. For all the zillions of hours faculty, staff, and administrators spend researching and designing programs around these concepts, we spend very little time talking with students about them directly. Opensem started to focus our assignments more deliberately around the concepts, and incorporate more research into our weekly plans. Students would find articles and post them on GoogleDocs, then pore through them to choose which ones they actually wanted to read and write about. Sometimes they read an article and posted critique and summary, sometimes they extricated quotes that other students could use in larger projects later. Ultimately, the combination of student-generated learning outcomes, student-created assignments, and student-curated readings and summaries began to produce a cohesive body of work that was connected both to the institution’s framework for the course and to the individual learners that were enrolled.

The work was, of course, dispersed across my own website, multiple GoogleSheets and Docs (some made my me, others by students), and the student ePorts. About three-quarters of the way through the class, I offered the idea that we could collate and collect
our work into a kind of handbook of sorts, and offer that to future sections of FYS, both at our university and beyond. Students seemed excited that their hard work could be channeled into something that could have life beyond our course. I built a simple PressBooks shell for our work, and students divided into groups to tackle the different chapters that they wanted to write. This was so excellent, since it involved going back through the course and taking individual assignments and grouping them according to theme, and then ranking themes and posts to find out which ones we wanted to include. We also figured out where we had gaps and needed to do new research and write new content.

After about three weeks of collating, curating, editing, and writing, we ended up with OpenSem: A Student-Generated Handbook for the First Year of College. Every single piece of writing in it first appeared on the ePort of a student in the class, and every single piece of writing was connected to our student-generated outcomes and our student-created assignments. In cases where students openly licensed their work, I was able to do a simple cut and paste to bring that work into the “textbook.” When the ePorts were not openly licensed, students could either supply me with permission to use the work or choose not to be included in the textbook (these options were provided, but not ultimately needed since by the end, all had chosen to add some level of CC license on their ePorts). Every student who completed the course (including the one student who did not pass) ended up with material in the final book, even though we did not set out to make that happen on purpose. And here’s the magic: we offered this book up to the knowledge commons, and though it is rough and flawed in spots, it is a real contribution on many levels, to many fields, with
application for many courses and future students. Public university students generating great work, sending it off to the public to use it as they wish.

**Student-Generated Attendance Policy**

Before I conclude here, I wanted to say a couple of words about course policies, and about grading. Students created their own attendance policy for the course. I've done this for four sections of classes across different courses so far, and the policy is always different. Sometimes it's very strict, other times quite lenient. I've offered to have no attendance policy at all, but students have never chosen that option. This section chose this one:

_We should strive for perfect attendance. If we miss more than five classes, our final grade will be lowered by 1/3 of a grade. If we achieve perfect attendance with no absences, we will earn the ability to convert one missed competency to a pass._

Say what you want about its flaws. I certainly did. But I will say that the four sections with student-generated attendance policies seem to have slightly higher attendance rates than the ones where I just had my imposed policy. Anyway, I could talk about this all day long. And then into the night. Suffice it to say that if you want to, you can ask your students what kinds of policies they think will help them learn. My experience tells me that they usually try to answer that question authentically, and they seem to know better than me what the answer is.

**Student-Designed Grading Practice**

I find grading to be very antithetical to the kind of learner-driven space I am trying to build in my courses these days. But I also choose to teach in a public institution where I have little ability to resist the culture of grading (I have made some structural progress in an Interdisciplinary Studies program that I direct, which will move fully to a P/NP system next Fall). In OpenSem, I decided to let students design the grading process. It took a couple of weeks (while we simultaneously did other things as well) to hammer it out. Basically, they designed a competency-based model where they would have unlimited time within the confines of the course to
improve each assignment if it initially they did not “achieve the competency.” Achieving the competency would require them to meet all of the parameters of the rubrics, which were often designed by the students as they crafted the assignments. Competency would be achieved not at the conventional level of 60/Pass, but at more of a B level, with the idea being that as a connected course, we wanted all work to be share-able, and we wouldn’t want to share work that was just barely passing or below average because this would not be overly helpful to the knowledge commons or helpful to the student author who is trying to develop a readership or community of practice. In an OpenPed Composition section I taught, students had the ability to grade their own work using rubrics that we co-designed (the idea being that grading is a learnable skill just like anything else). OpenSem students did not want to grade their own work. They decided I would grade them, and they liked that arrangement as long as they could always revise after getting feedback and an initial grade. AGAIN, this topic could generate a 10-page blog post of its own. All I really want to say here is that OpenPed encouraged me to see every aspect of my course as open for rethinking and student involvement, and allowing students to help me set the grading procedures didn’t mean I couldn’t conform to the university’s grading requirements. All in all, the grading practice of the course led to a richer feedback model, a more collegial relationship between me and my students, and a low-pressure environment for learning. The grade distribution at the end of the course was not notably different from what I usually see in my courses, whatever that might indicate.

**Connecting Students**

In an effort to connect #opensem students with other learners outside of our course, we partnered with two other FYS sections at two other colleges. In collaboration with classes taught by Autumn Caines and George Station, we read an a
together, annotated it (check out the annotations here), and organized a day-long slow Twitter chat. You can read Autumn's post here about how she and George got it off the ground. It was excellent all around, but I especially loved how my students were able to insert their own blog posts into the chat and immediately gain new readers and commenters, which added a thrilling dimension to their sense of authorship. This Twitter chat helped my students understand how to call external participants into their scholarship and thinking, and we used many of the lessons of that small collaboration as we talked about building Personal Learning Networks, working online in public, and contributing our own ideas to the knowledge commons.

**Student Feedback**

If this kind of info is important to you, the course evaluations were very positive. The course received a 4.4/5 for overall value and a 4.6/5 for contributing to the students' intellectual growth. As an instructor, I received a 4.9/5 for “overall effectiveness,” which I find interesting considering how often OpenPed gets misunderstood as a pedagogy that de-emphasizes teachers; I think OpenPed de-centers teachers, critiques some kinds of teacherly authority, and binds learning to learners rather than to courses or instructors, but none of this means that teachers don't matter or that we can't be
highly effective. Here are three comments from the evals that I think resonate in part with what I have talked about here:

We discussed what we all thought, as a group, was the most valuable to learn through this course. We worked through these skills all through the course and it helped very much being a first year student and new to this environment. We used new technology to learn, which made it fun and educational.

i thought the work was extremely helpful and I will be able to carry what I learned from this class with me in the real world. I wish more classes were set up like this!

I expected this course to be easier than it was.

I am hoping some of my #opensem students will write reflections on our experience (we got so busy at the end of class with our book, we just didn’t have time to do that as part of the class). If they do, I’ll link to them here.

A Word About Tenure

As I fervently conceptualize it, tenure doesn’t exist to protect lazy people. It doesn’t exist to protect bullies. Tenure exists to protect faculty who work on the cutting edge of research, who speak knowledge to power, who critique their institutions so they will better serve students and the public, and who take risks in their teaching in order to facilitate learning. I feel pretty happy with how #opensem turned out for those of us who were part of it, but when I started and at certain points along the way, I was aware that it could have imploded on a number of levels. I believe– I want to believe– that my tenure offered me the protection I needed to take these risks. I am aware that tenure is tenuous all across the U.S. right now. I am also aware that many of my colleagues in the contingent labor force don’t even have basic tenure protections at all, tenuous as they may be. Assess your level of risk before you take these risks with your teaching (or your writing, or your online digital and public identity). And those of us with tenure protections must fight to extend them to those who need them, defend them against those who would strip them away, and resist new HigherEd cost-savings measures that “innovate” without consideration for the importance
of academic freedom to teaching and learning. Just a short word
to those who like these ideas but don't feel safe enough, for many
reasons, to try them: I see you, and you are right to be both cautious
and angry.

tl;dr

Your students can work with you on course learning objectives
and policies. They can help build a course management system to
organize the learning and work. They can design assignments and a
grading process. They can curate readings and other course content
to shape what they learn, within whatever given parameters exist.
They can publish their research to help them connect with their
communities of practice, and they can publish educational materials
to help the next generation of learners. As a teacher, you can do
all or some of these things, depending on what you think will best
serve your students and their diverse identities and circumstances,
your academic discipline(s), your institution, and your sanity. And
you are not alone. I jumped in with two feet over the last year, and I
am happy to share my mistakes and challenges, as well as stuff that
led to the moments of joy that enlivened me along the way. Tweet
me and let me know how I can help.

Sorry this is rambling, but classes start next week and I got things
to do! Wishing you a great semester, filled with learning outcomes
you couldn't begin to plan for yet.

My thanks to the following for inspiring me with specific work that
has informed both #opensem and this post:

Chris Gilliard on digital redlining.
sava on how open tends to privilege the privileged.
Gardner Campbell on personal cyberinfrastructures.

On student-centered grading practices, I draw fromCathy N.
Davidson, Dave “just because we have to assess it doesn't mean it
can be assessed” Cormier, Chris Friend, Jesse Stommel, and Starr
Sackstein.

There are a lot of people who have contributed to my ideas about
OpenPed, but here's just a short list of people whose links I ALWAYS
Beyond Rigor — Sean Michael Morris, Pete Rorabaugh and Jesse Stommel

Intellectually rigorous work lives, thrives, and teems proudly outside conventional notions of academic rigor. Although institutions of higher education only recognize rigor when it mimics mastery of content, when it creates a hierarchy of expertise, when it maps clearly to pre-determined outcomes, there are works of exception—multimodal, collaborative, and playful—that push the boundaries of disciplinary allegiances, and don’t always wear their brains on their sleeves, so to speak.

Hybrid Pedagogy focuses on creating conversations within and outside institutional structures that often eschew multimodal, collaborative, playful work. Through projects like MOOC MOOC and Twitter vs. Zombies, we’ve begun to explore a new sort of communal rigor for the networked learning landscape, which depends on engagement, reflection, and curiosity.

“Play is critical inquiry.”

The voices that decry collective, playful learning, often do so from the soapbox of rigor: How can this sort of wild learning—that doesn’t aim at specific objectives, that focuses on dialogue and creativity instead of content mastery—ever pass muster as meaningful academic work?

In truth, it cannot. But not because the product of playful learning isn’t meaningful, but because our notion of academic rigor is irrelevant to that product. We must move past our traditional definition of rigorous academic work, and recognize that a learning experience or a pedagogical methodology can be both playful and also have the qualities of the best academic work, if not the reagents...
of traditional rigor. We hear “rigor,” and the word feels vague and unnerving; or worse, exclusionary. The work we’re describing here is expansive and not exacting — experimental and not insoluble — the moment before (and even anathema to) understanding. This is work where excellence is measured by exception.

Neurologist and teacher Judy Willis states in her book, Research-Based Strategies to Ignite Student Learning: Insights from a Neurologist and Classroom Teacher, “The highest-level executive thinking, making of connections, and ‘aha’ moments are more likely to occur in an atmosphere of ‘exuberant discovery,’ where students of all ages retain that kindergarten enthusiasm of embracing each day with the joy of learning.” Play, experimentation, and collaboration can all lead to important discoveries and deep intellectual inquiry. Yet the results of play are often overlooked because the process leading to them can’t be evaluated within traditional academic models for assessment. (In these cases, the problem is wrongly assigned to the experiment or approach, instead of to the assessments designed to measure the outcomes of a less playful approach. We faced this issue with MOOC MOOC, when outcomes were unpredictable due to the extemporaneous learning that took place. How do you “objectively” grade a Wordle?)

An unhealthy attachment to outcomes discourages experimentation. In Deep Play, Diane Ackerman writes, “We may think of play as optional, a casual activity. But play is fundamental to evolution.” At its best, play functions not as a methodological approach toward a set of outcomes but as the outcome in and of itself. (Elsewhere, we’ve made a similar argument about community.) What is rigorous, then, is not process but our curious examination of the (unforeseen, unexpected) results and their effectiveness.

We must redefine rigor (and find practicable alternatives to rigor) for the connected learning environment. If we begin to parse the learning environment itself, we can determine where rigor lies outside academic standards, and this may help us understand how to revise our digital pedagogies.
Rigor in a networked learning environment emerges when that environment is:

**Engaged:** Meaningful work arises from genuine inquiry. When we arrest learners’ interest, their work bears the marks of higher critical thinking precisely because the subject resonates with their own concerns and preoccupations.

**Critical:** We can’t be afraid to critique our own circumstances, our own context. In MOOC MOOC, for example, we saw participants playfully deconstruct not just the MOOC, but the systems we were using to examine the MOOC (our online learning environment, Canvas, and the digital tools we asked participants to compose with).

**Curious:** A rigorous curiosity underpins the most fruitful work scholars do. However, we often forget that our interests, as those thoroughly enculturated by academia, don’t need to be grafted on to students. Better that we model our passion to know something thoroughly than to merely transmit content or knowledge.

**Dynamic:** A genuine process of inquiry invites unexpected outcomes – indeed, it does not assume outcomes other than a resolution to the inquiry (which may look a lot like the need for further inquiry). The work we do is framed but also emergent, crowdsourced during and not prior to its unfolding. The rigor is apparent in the framework, in the expectation of what can or may be learned and discovered, but is no less apparent in the creative ways that framework is interpreted and reinvented.

**Derivative:** A rigorously derivative work is aware of its sources but does not handle them with excessive reverence. (In mathematics, a derivative measures the rate of change as one variable influences another.) A derivative learning environment is attentive and alive, responsive not replicative. It emerges, like the Twitter Vs. Zombies community, across a series of iterative experiments.

In his Introduction to On Critical Pedagogy (2011), Henry Giroux writes, that a commitment to critical pedagogy “provides tools to unsettle commonplace assumptions, theorize matters of self and
social agency, and engage the ever-changing demands and promises of a democratic polity.” Giroux’s assessment is apt for anyone wanting to address the changing landscape of online education; it also speaks to connectivist scholars and digital pedagogues interested in digital literacies. We are, when we are at our best, meant to unsettle assumptions, to reorganize our ideas of agency, and to push the boundaries of what is possible in a connected learning environment. How to do this without framing education the way it first appears to each of us: bounded by playgrounds and punctuated by bells for recess?

It’s impossible to ignore that new media practices are changing (have changed) the collaboration and knowledge sharing within and outside of institutions of higher learning. In “Rhizomatic Education: Community as Curriculum”, Dave Cormier writes, “the foundations upon which we are working are changing as well as the speed at which new information must be integrated into those foundations [...] Information is coming too fast for our traditional methods of expert verification to adapt.” New media practices – of researching, composing, testing, surveying, and publishing – are developing so quickly that waiting on the traditional publishing cycle to verify knowledge is insufficient. Scholars of digital culture and practitioners of digital collaboration must resort to new methods of knowledge creation, including relocating that creation to spheres outside their own. Vast pools of knowledge are being filled by non-experts, for example. Cormier suggests rhizomatic education – constructing and negotiating community knowledge through a series of interdependent nodes – as a pedagogical solution within quickly changing fields of information. In other words, by connecting to each other, no matter our expertise or station, knowledge grows.

Stephen Ramsay argues, in “The Hermeneutics of Screwing Around; or What You Do with a Million Books,” “there are more books, more ideas, more experiences, more relationships worth having than there are hours in a day (or days in a lifetime).” What this means for learning is that a new kind of order emerges when
we consider the content of a course to be the connections that form within and beyond that course. We may provide the content, but this is no different today than scattering LEGOos on a table: what happens next is not up to us. Both the content and the practice of our teaching must shift from a traditional model of schooling to one more compatible with the realities of the digital landscape. Experimentation, inquiry, and play are both the research tools we must use to create online and hybrid classrooms, and also the methodologies best employed within those classrooms.

As educators, the three of us have worked to acclimate students and colleagues to social media environments, encouraging a breaking down of the divide between the work we do in classrooms and the work we do in the world. Testing and canonical content are less vital to the new media landscape than interactivity, play, and relevant application. The online class portal and the brick-and-mortar classroom each have valuable lessons to teach the other, and both must adapt to the developing principles of 21st century education. Online teaching practices especially should encourage these principles – that students “show up,” be curious, collaborate, and contribute. The digital has reminded us that learning happens unexpectedly, and so should our approach to learning be unexpectant. We must return play to education, to pedagogy, and to all scholarly practice.

**Some Examples of the New Rigor:**

“A Comics Dissertation”: Nick Sousanis, a doctoral candidate at Columbia Teachers College, is writing his dissertation in the form of a comic. This interview reveals the reasoning and approach behind his playful reinterpretation of an academic staple. In a blog post, Sousanis discusses “Comics as a Tool for Inquiry.” Not surprisingly, his presentation notes were, themselves, graphic.

**DS106:** Digital Storytelling is a well-known, highly-respected open-access course offered at University of Mary Washington. This year, DS106 is running a “headless classroom,” without a teacher – an experiment that invites communal rigor in a very real way.

**Rap Genius:** Rap Genius started as a site for open annotation of
rap lyrics but has evolved into a robust community platform for critically analyzing many sorts of text.

Field Notes for 21st Century Literacies: This book was produced by graduate students in a course with Cathy N. Davidson. The text of the work is itself rigorous, but what we find most intensely rigorous is the way the reader is brought into the book’s ongoing creation through simultaneous publishing on communal platforms like Rap Genius, HASTAC, GitHub, and Google Docs.

#arthistory: This project by Charlotte Frost makes #arthistory physically manifest and invites participants to tag, photograph, and share 3-dimensional hashtags. See some additional examples of the #arthistory tag in action on Tumblr.

Last but not least, several seeming larks that, in fact, function as incisive commentary: MOOCthulhu, Feminist Ryan Gosling, and “On the Predominance of Cupcakes as a Cultural Form”.

Further Resources [External Links]

Open to Creativity: OEP in the College Classroom – Christopher Barnes
The Non-Disposable Assignment – eLearning, Camosun College
The Non-Disposable Assignment – Enhancing Personalized Learning
Open Digital Pedagogy: Creating a Game-Based Workshop – Charlie Edwards, Jody Rosen, Maura Smale, and Jenna Spevack
Critical Digital Pedagogy – Digital Pedagogy Lab
How Did They Make That (Digital Tools) – Miriam Posner

The (Critical) (Instructional) Design of Digital Pedagogy Lab – Sean Michael Morris
The OpenLab at City Tech – City University of New York
Open Pedagogy Notebook Examples

- Why have students answer questions when they can write them? – Rajiv Jhangiani
- Collaborative Syllabus Design: Students at the Center – Amy Nelson
- Student-Created Open “Textbooks” as Course Communities – Robin DeRosa

Why have students answer questions when they can write them?

Rajiv Jhangiani

I recently trialled a new assignment in my Social Psychology class: During each of the 10 weeks when there was no scheduled exam I asked my students to write multiple-choice questions. That’s right, they wrote questions instead of merely answering them.

From a pedagogical perspective, I really wanted my students to achieve a deeper level of understanding (e.g., the level it takes in order to craft three plausible distractors). However, this assignment also served a pragmatic purpose in that the open textbook that I use for this course (and that I helped revise) does not yet have a readymade question bank. By asking my students to craft and peer-review multiple-choice questions based on the concepts covered that week (and scaffolding this process over the semester), I considered I had a budding open pedagogy project on my hands.

Here’s how it went:

1. The students were asked to write 4 questions each week, 2 factual (e.g., a definition or evidence-based prediction) and 2 applied (e.g., scenario-type).
2. For the first two weeks they wrote just one plausible distractor (I provided the question stem, the correct answer, and 2 plausible distractors). They also peer reviewed questions written by 3 of their (randomly assigned) peers. This entire procedure was double blind and performed using Google forms for the submission and Google sheets for the peer review.

3. For the next two weeks they wrote two plausible distractors (the rest of the procedure was the same).

4. For the next two weeks they wrote all 3 plausible distractors (the rest of the procedure was the same).

5. For the remainder of the semester they wrote the stem, the correct answer, and all the distractors.

I adapted existing guidelines about how to write effective multiple-choice distractors and how to provide constructive peer feedback and produced these two brief guides:

Guidelines for writing effective distractors for multiple-choice questions
Guidelines for providing constructive peer feedback

The result? My small class of 35 students wrote 1400 questions in the span of 10 weeks. And although I wouldn’t consider this a polished question bank ready for use by other instructors, I still consider this assignment to have been a success because the questions steadily improved over the semester (the experience of serving as peer reviewers was especially useful to the students when constructing their own questions). The students were also buoyed and motivated by my practice of including a few of their best questions on each of the three course exams. Looking forward, I plan to have my next cohort of Social Psychology students revise and add to this bank. I figure that it will take only a couple of semesters for us to provide the commons with a high-quality question bank, something that will enable even more instructors to adopt this open textbook.

If you have attempted something similar or would even like to
collaborate with me on this assignment, please write a comment below or otherwise get in touch. Your feedback is very welcome.

This post is a copy of the blog post Why Have Students Answer Questions When They Can Write Them? which was published under a Creative Commons Attribution-NonCommercial 4.0 International License.

Collaborative Syllabus Design: Students at the Center

Amy Nelson

“Democratically co-creating learning outcomes with students, based on their goals for the class, situates them at the center of your pedagogy.” – Christina Katapodis

I have been meaning to write about collaborative syllabus design for ages. This week's workshop on learner-centered syllabi in GEDI / Grad 5114 combined with a very cool article by Christina Katopodis on Writing Learning Outcomes with Your Students finally got me going. (Thanks to Meg Mulrooney for sending Christina's article across the Twitterverse a couple days ago.)

We are used to thinking about the syllabus as a kind of “contract” that explains what the course is about, specifies what the requirements are, lists what kind of assessments will be used, and sets out a schedule of activities, lectures and assignments. While these documents serve a purpose, they are often formidable and make for dry reading. And they can marginalize students from courses they should be co-creating rather than taking.

In keeping with a broader shift that I made several years ago to
build more collaboration and interaction into the classes I teach, I now think about syllabi as “invitations” to join a learning community. I use the first person plural to indicate that we are all in this together. I set “priorities” for the semester but indicate that the group will have a say in determining how we achieve those goals and that we may identify other topics or issues that warrant exploration along the way.

I decided to take this approach one step further for a course I taught on Contemporary Russia a while back, by asking the students to help develop the learning objectives and identify the skills and dispositions they needed to succeed. I did this in part because I was interested in how students would respond to the invitation to help map out the course. I knew what I wanted them to learn, but I wanted to know what their goals were as well. And because the course focused on Contemporary Russia, which by virtue of its youth is still an emerging topic of historical inquiry, I thought there might be some synergy between the evolving subject of the course and a dynamic course design process. This was a small class (about 20 students).

On the first day, I distributed a “preliminary syllabus”, and told the class we would work on “finishing it” over the next couple of weeks:

Course Description (This stayed the same through all three iterations of the syllabus)

“No meteor hit Cheliabinsk, it blazed across the sky, spewed out its shards, and then sank quietly into a lake. That’s what many hoped the breakup of the Soviet Union would be like. It would end with a compliant Russia as benign as the rock that is now sitting in Cheliabinsk’s museum. That has not occurred. The shards continue to resurface, and their ripples are felt far and wide.”

Anne Garrels (2016)

Twenty-five years after the demise of the Soviet Union,
the legacy of the Soviet project remains palpable in the Russian heartland and across the post-Soviet space, even as new political, economic, technological and environmental challenges shape the societies of our globalizing world. In this course we will explore contemporary Russia from a historical perspective, seeking insight on the present by better understanding the past on which it is built. In particular we will examine how efforts to reform the Soviet Union ended in its dissolution. We will consider how the Soviet legacy informed the efforts to transform the social, political and economic structures of Russia and the former Soviet Republics. And we will develop a deeper understanding of the historical context and current salience of contemporary issues and challenges in what Anne Garrels calls “Putin Country.”

Next came the **Learning Community Invitation**, which gave students a sense of what I had in mind and how I imagined our relationship evolving. (Note that the Athenaeum is the name of a digital humanities classroom that was just being finished when this class was offered.):

This syllabus is labeled “preliminary” because it needs your input. I have designated some objectives for the course (see below), and invite you to help me articulate how the group would like to achieve them over the first few class sessions. The tentative class schedule lays out a road map for topics and standard readings (from the required texts), and I have identified some “tangibles” for everyone who completes the course (see Course Requirements). I also have assembled a suite of digital tools and resources to help us leverage our collective efforts and take advantage of the Athenaeum's affordances (some of which will be arriving or coming on line in the next few weeks). I invite you to help me finalize the particulars in accordance with the interests, aptitudes and preferences of the group. There is a portion of the material
that will serve as a common core for everyone. In addition, each learner will develop expertise on a particular issue or event that interests them. Once the group has agreed on all of this – and I have approved it – we will “finalize” the syllabus.

Then I set out my objectives for the course:

1. Cultivate an intellectually robust, collaborative and networked learning community focused on understanding contemporary Russia.
2. Develop your skills in historical analysis
3. Develop your skills in identifying, using and citing historical sources
4. Develop your understanding of the key issues, developments and dynamics of Russian history in the post-Soviet era

The course requirements:

- Interest in the historical context of Contemporary Russia and a commitment to learning more about it
- Reading, thinking, writing about Russia
- Developing your knowledge and sharing it with others.
- Willingness to explore collaborative networked learning by completing the required web work and participating in F2F class sessions
- Completing two annotated chronologies: one on the Collapse of the Soviet Union and the other on the shift from Yeltsin to the Putin regime.
- Developing interest and expertise in a particular topic – your “news beat” as it were.
- Completing a web-based project on your chosen topic

And my perspective on grading and framework for evaluation:
I find that conventional assessment schemes interface poorly with the kinds of learning and habits of mind this course is designed
to cultivate. We will talk in person about the kinds of feedback and evaluation that are best suited to our needs this term, and you will have a voice in defining those mechanisms. As a starting point, this is how I see the assessed components of the course breaking down:

- leading discussion, contributing to discussion, responding to other learners’ work and ideas 25%
- two annotated chronologies 30%
- demonstrating proficiency with digital tools and working in networked environments and / or participatory cultures 20%
- Developing Issue / Topic expertise and final Project 25%

**Next Steps and Logistics:**
Running the idea of “collaborative syllabus writing” by the class generated a fair amount of buzz. “What is she up to?” and “This might be fun….or not....” their faces seemed to say. But when I picked the conversation back up on the second class meeting, I was impressed with how readily the group leaned in. We had done some reading on the collapse of the Soviet Union (which they, of course, do not remember!) and that discussion easily segued into a pretty vigorous conversation about why people were taking this course and what they wanted to get out of it. So, we did some group work on a google doc where they could respond to the prompt: What do you want to learn in this course? Then we massaged that document into a list of “Class-Generated Learning Objectives” that addressed my fourth LO: “Develop your understanding of the key issues, developments and dynamics of Russian history in the post-Soviet era.” Once everyone agreed with this list, we added it to the syllabus:

| Class-Generated Objectives Elaborating on the above, particularly 1 and 4. |

1. Place Russia in current / contemporary context
2. Better understand relations between Russia and West
3. Better understand the role and significance of Vladimir Putin; perceptions of him in the USA vs. popularity in
Russia; Role in upcoming presidential elections; Putin’s long-term goals for Russia; What might post-Putin Russia look like.

4. Better understand the complexity of the Russian government

5. Better understand Russia and post-soviet space (former Republics and Eastern European “Satellites”)

Generating these LO’s helped me understand several things: what students were interested in; what they thought was important; and how limited their sense of “Russia” was. They were very concerned about international relations, and perceptions of Russia in the United States. They had little sense of the society, culture, or even key events and personalities beyond Vladimir Putin. And geographically they conflated the Russian Federation with all of what had been “Soviet” space, including most of Eastern Europe. But identifying these issues helped me know where and how to start. Discussing why they cared about these things piqued their interest about other issues, and it laid a good foundation for my first LO: “Cultivate an intellectually robust, collaborative and networked learning community focused on understanding contemporary Russia.”

We were off to a good start. But I quickly realized that this would take a fair amount of time to do properly. I wanted us to discuss and agree on expectations for grading, appreciation of the kinds of skills people would need to develop to succeed in the class, and our expectations for everyone’s contribution to the learning community. I initially thought we would finalize the syllabus after the fourth class session, but that just wasn’t practical. The class met twice a week for 75 minutes, and I decided to devote 20 minutes / week to the syllabus. I wanted writing the syllabus to energize the class but not hijack it, because we had a lot of content work to do. On the 20 minute / week plan we finalized the syllabus at the end of the week 4. (I did generate a stage 2 document at the end of week 3.)

The Final Version of our Collaborative Syllabus is [here](#). (It should
be accessible for screen readers, but please forgive the formatting issues, which derive from a current spat between Acrobat and MS Office that I don’t have time to mediate today.)

You’ll see that we put a lot of emphasis on our expectations for each other. There is a section on “Class-Developed Expectations for “A” work in participation (leading and contributing to discussion, responding to others’ work and ideas). This was worth 25% of the final grade and ended up being fairly detailed. I started working on this section by asking everyone to think about and write down what they would consider “A” work in this area, and then we formatted (with color and emphasis) the items that had the most salience in the individual responses. I loved everything about what we came up with here, but the overwhelming commitment to cultivating conversations that were informed and respectful is definitely my favorite part.

Thinking through the kinds of tools and skills needed to do historical research for the course also generated some important reference points, both in terms of raising awareness around how the research process works (asking students to reflect on how they learn and explaining my own process to them) and the relationship between developing content knowledge and proficiency with affordances that give us access to and help us order information and materials. Having these discussions early in the term and building them into the final version of the syllabus helped articulate the connections between critical thinking skills (evaluating a source, recognizing bias, understanding context) and the ability to generate high level research questions. It also helped the students see how tools like Zotero or Hypothes.is could help them be better researchers and thinkers, and how collaborating on a project could leverage everyone’s strengths.

Since we spent so much time talking about what students expected of themselves and each other, it seemed reasonable to spell out some instructions for the instructor as well. I had the group do this without me present so they would feel less constrained by what I might think of their individual preferences.
They came up with great list, that kept me motivated all semester:

**What We Expect of the Instructor:**
- Assignments that help the class to understand certain aspects of Russian history better.
- Leading the previously mentioned discussions, making sure that it does not go off topic.
- Be a moderator for us and a source of information when we need help on a topic.
- Lay the groundwork for discussions and conversations about all of these concepts/themes/etc.
- Support and facilitate discussion and identify relevant readings, films, audio clips for us to work on in class.
- Be open to suggestions from others about topics we should pursue as a group.
- Provide more / or less scaffolding for assignments as the group suggests.

Because the discussions of expectations kept expanding, I ended up including sections devoted to student goals for content expertise (what they would know about Russia at the end of the term) and learning preferences (which helped us acknowledge that everyone has preferred learning modalities, class formats, assignment preferences, etc.). I also included a list of “Concerns we have / Challenges to Acknowledge and Overcome” in the final document because these items were important and served as a reminder of the student perspective.

I’ve written SO many syllabi over the years, but this one is definitely my favorite. It might not be as polished or sophisticated as some, but it did help put students and their goals and concerns at the center of my pedagogy. It was produced by and belongs to that particular learning community, and it helped frame a wonderful semester devoted to Contemporary Russia.

**Student-Created Open “Textbooks” as Course Communities**

Robin DeRosa

I have found that my most rewarding practices in Open have involved creating OERs with students. This short post will gather together some of my writings and examples related to student-created OERs.

I started this work by building [The Open Anthology of American](...)
Literature with a group of undergraduates and recent alums from Plymouth State University. The project started as a simple way to save about $90 for each student enrolled in my Early American Literature survey course, but it gradually morphed into an exciting experiment in Open Pedagogy. You can read a description of how the project blossomed from a simple exercise in cost-savings to a full-on vibrant endeavor based around student contributions in my blog post, “My Open Textbook: Pedagogy and Practice.” This project was featured in the Open Pedagogy showcase at OpenEd17 and in an article at Inside Higher Ed; most excitingly, it has been picked up by Rebus Community and is currently being greatly expanded. When the new Managing Editor, Tim Robbins, completes this work with his team, I expect that the anthology will be a stellar replacement for the Norton Anthology, the Bedford-St. Martin’s, the Heath, and all of the other commercial offerings in Early American Literature. And students really got it all in motion!

Once I saw such success and fun with that project, I realized that a course “textbook” could almost always be created with or by students, even when public domain literature was not at the core of my course. I taught a First-Year Seminar focused on Open Pedagogy (the course was actually called “Whose Course Is This, Anyway?”) and the students created a cool OER textbook focused on student success and retention...from a student’s perspective. You can read about the OpenPed approach to the course in my blog post called, “Extreme Makeover: Pedagogy Edition”, and you can check out the OER that the students made, “OpenSem: A Student-Generated Handbook for the First Year of College.”

Those two projects were me getting my feet wet. Lots went wrong with both of them, but they really helped me see the possibilities and value of creating OERs with students. The project I am working on now is a little more than halfway to its first finished version. Currently, I am the director of an Interdisciplinary Studies (IDS) program at a regional, rural, public university in New Hampshire. The program has been refocused around Open Pedagogy in the last four years since I have been the director. You can read about
the program and its connections to Open in my blog post, “Open Pedagogy at the Program Level: The #PlymouthIDS Case Study.” At the core of the courses in our IDS program is our collaborative OER, “Interdisciplinary Studies: A Connected Learning Approach.” It’s a patchbook of work by: leading thinkers in Interdisciplinary Studies and Connected Learning; me and other faculty and administrators in our IDS program; and introductory and capstone students in our IDS courses. It’s evolving every day, and in many ways, it’s as much a gathering and conversation space as it is a “textbook.”

I’m fond of saying that there is nobody better to write virtually any textbook for any course at any institution of higher education than the students currently enrolled in or just finishing the course. Most content in textbooks is not proprietary, and students keenly understand what is challenging about the material, how to explain it to their peers, and what explanations will resonate with new learners. The pedagogical benefits to the student authors is also hard to overestimate. Of course, there are always exceptions and this may not work for you or your discipline. But I’m so grateful for coming to this pedagogical redefinition of the “textbook.” It’s enlivened my courses, engaged my students, and made a difference to my academic fields. And it’s fun!

Sample Assignments & Resources

  - Section of OER Textbook – Teaching Guide / Lesson Plan to Expand an Open Textbook
- Critical Edition Assignment Implementation Guide
  - Guide materials used for Spanish textbook co-creation involving students
• **Critical Edition Assignment Implementation Guide: Appendix G Checklist**
  ◦ Guide materials used for Spanish textbook co-creation involving students

  ◦ Guide materials used for Spanish textbook co-creation involving students

• **A Guide to Making Open Textbooks with Students: Assignment; Create An Open Textbook**
  ◦ Section of OER Textbook – Assignment / Lesson Plan to Create an Open Textbook

• **Open Education Week**
  ◦ Offers examples of OER Enabled Pedagogy & Projects

• **Open Pedagogy Notebook: Examples of Open Pedagogy**
  ◦ Offers examples of OER Enabled Pedagogy & Projects

• **Open Faculty Patchbook: A Community Quilt of Pedagogy**
  ◦ Offers examples of OER Enabled Pedagogy & Projects

• **Open Education Group: OER Enabled Pedagogy**

**OER-Enabled Pedagogy — Open Education Group**

**OER-Enabled Pedagogy** is the set of teaching and learning practices only practical in the context of the 5R permissions characteristic of open educational resources. Some people – but not all – use the terms “open pedagogy” or “open educational practices” synonymously.

The purpose of this page is to provide a list of concrete examples of how OER-enabled pedagogy, is implemented in the real world. (We appreciate earlier efforts to collect examples like this one by Working with Learners | 225
We've kept our descriptions brief and, where possible, linked directly to the artifacts students have created or to articles that provide more information on what they did. Please send additional examples to David Wiley and we will add them to this list with a credit.

Please see this article for further thoughts on a definition of OER-enabled pedagogy.

Examples from the Real World

Students write or edit Wikipedia articles

- **Murder, Madness & Mayhem** assigned students to edit (and if necessary create) Wikipedia articles about lesser known Latin American authors.
- **Azzam** assigned fourth-year medical students to edit and improve Wikipedia articles related to public health topics.
- See additional Wikipedia-based assignments [here](#) and [here](#). Also, see this report that 6% of edits to science articles in on Wikipedia in April 2016 were made by students.

Students remix audiovisual materials to both entertain and inform

- **Blogs and Wikis** combines existing video with new audio to describe the difference between blogs and wikis.
- **Rick Noblenksi: Blasting Caps Expert and Wiki Advocate** combines existing video with new audio to advocate for the use of wikis in the teaching.
- **District Policies Regarding Blogs and Wikis** combines existing video with new audio to warn teachers about how their desire to use social media may run afoul of school district policies.
Students create or revise/remix entire textbooks

- The Open Anthology of Earlier American Literature was created by Robin DeRosa and her students.
- Project Management for Instructional Designers was created by David Wiley and his students as an adaptation of an existing open textbook written for a different audience.

Students openly license supplemental materials they create for each other

- Teachers at Mountain Heights Academy encourage students to create openly licensed study guides, review games, tutorial videos, and other materials which they review and integrate into their courses.

Students create test banks

- Jhangiani describes a Social Psychology course in which 35 students created over 1400 test questions for a quiz bank.

Students create their own assignments

- DS106 has students create (or remix) and share assignments, together with worked examples, difficulty ratings, and tutorials for how to successfully complete the assignment.

Additional Ideas

Here are some other ideas for engaging in open pedagogy that we haven't yet seen in the real world. If you've seen them, let us know.

Students create tutorial videos

- Students can create tutorial videos for a particular topic or
assignment. These tutorial videos could cover a wide range of topics such as teaching specific skills, summarizing key concepts, providing worked examples, or creating connections to student lives.

**Students create summaries**

- Students can create written or video-based presentations that summarize key aspects of the storyline, character, interpretation, symbolism, etc. These summaries could be both used by and improved upon by future generations of learners.

**Students create worked examples**

- Students can create worked examples that provide other students with step-by-step templates of how to do problems (these are particularly popular in math), like this one, specifically in topics that have proven troublesome to students in past semesters.

**Students connect principles with popular culture**

- Students can explain how principles studied in class are exemplified in popular media like movies, television, music, or books.

**Students create games**

- Students can create games to be played by future generations of learners to help them prepare for, or deepen their learning on, specific topics.

**Students create guided notes**

- Students create guides to direct other students through readings or lecture.
This section presents a self-paced course on becoming an Open Educator. Materials are sourced from the Opening Educational Practices in Scotland (OEPS) course. Topics include definitions and practices of Open Education, benefits of practicing Open Education, how to find and use OER materials, how to create and share OER materials, and what Open practice, theory, and praxis look like. Learn more at your own pace.

### OEPS 1.0 Course: Becoming an Open Educator — Opening Educational Practices in Scotland (OEPS) & The Open University

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  • 4.5 How can I share my resources with others?
  • 4.6 If you want to know more

• 5. Putting Open into Practice
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  • 5.3 Using social media in your context and open tools
  • 5.4 Measuring impact
  • 5.5 Over to you
  • 5.6 If you want to know more

• Acknowledgements
This course was developed as part of the Opening Educational Practices in Scotland (OEPS) project funded by the Scottish Funding Council, which supports and builds best practice in open education in the Scottish HE, colleges and third sectors. Except for third party materials and where otherwise stated, when individual resources included in this course have other licenses, this course content is made available under a CC BY 4.0 license.

Welcome to the course

• Do you want to know more about how using free and openly licensed materials might develop and enhance your own practice or the practice at your institution or organization?
• Do you use others’ materials to help with your teaching, inspire your own practice or to facilitate learning opportunities for your colleagues or clients?
• Are you interested in how to effectively share your materials and practices with others?

This course, which was produced as part of the Opening Educational Practices in Scotland (OEPS) project is aimed at anyone who is curious about how ‘free’ and ‘open’ might change our approach to teaching and learning and has been designed for administrators, educators and facilitators in all sectors. It asks you to consider a range of questions. For example, how do I find open
resources and what benefits might they bring? Does openness change our relationship to the content I create, the people I create content for, others with whom I share the material, and our own everyday practice and context? And if so, what impact, if any, does openness have on these practices and relationships?

This course is divided into five sections, each with an accompanying ‘If you want to know more …’ section, which thematically presents supplementary material and resources on the topics for that section. You can use the course in any way that you choose. You can also reuse, reversion and remix this course.

The course begins with the basics of open educational practices (OEP) and open educational resources (OER). Section one of the course explores what ‘open’ means and what open practices and resources are. It also introduces the concept of an ‘open licence’ and what this means. Section two focuses on developing earlier discussions of open educational resources (OER) and explores why one might want to use OER or incorporate more open practices, both as individuals and at an institutional level. In addition, the course looks at the importance of developing both your own, and learners', digital literacy.

Sections three and four of the course focus on the practicalities of using OER. Section three looks at using OER, where to find open resources, what factors might influence your resource choice, how to attribute a resource and introduces the idea of curation. Building on the introduction to using OER in section three, section four focuses on remixing open resources, what you will need to consider when you create OER, how to share your resources and how to choose the most appropriate licence for your context.

The final section of the course focuses on the importance of measuring the impact of what you create and explores a range of other practices you might want to consider. It also offers a range of different suggestions for ideas you might want to try before encouraging you to build on your work so far in the course to consider where you want to go next in your ‘open’ journey!
Learning outcomes

By the end of the course you should be able to:

- find and identify different open-licensed resources and be able to use them
- create your own OER and understand best practice for incorporating open resources
- plan appropriate practical steps for continuing your own ‘open’ journey.

How to use the course

This course is self-paced and designed to be taken as a ‘whole’. However, you might find that some sections of the course are more relevant for your context than others. If you do not have a facilitator or teacher role, for example, you might want to focus on sections one and two of the course which look at the basics and arguments for using open educational resources (OER) and open educational practices (OEP).

Course material has been structured so that there is a range of supplementary material to explore at the end of each section. Course activities make use of a reflective log where you can make notes and develop ideas that will provide the basis for reflecting on ‘where next’ in your open journey at the end of the course and in the future.

Using the reflective log

Many of the activities in Becoming an open educator ask you to make use of a reflective log, a downloadable Word file that contains all the
activity questions plus space for you to write your responses and thoughts as you work your way through the course. The log keeps all your ideas and thoughts in one place whilst making it easier to review them at any point. You might also like to use it as evidence of what you have achieved and of your development.

You can download your own copy of the course reflective log. As you work your way through the course you’ll need to make frequent use of it. Save a copy somewhere easy to find and ensure that the filename is something memorable.

1. What Is ‘Open’ Education?

- 1.1 Introduction
- 1.2 What does ‘open’ mean?
- 1.3 Open educational resources and open educational practices
- 1.4 The practice of open educational resources
- 1.5 Open licensing
- 1.6 If you want to know more

1.1 Introduction

This section of the course will look at what meaning ‘open’ might have in different contexts, what makes an educational resource or practice ‘open’ and open licensing.

- What does openness mean and how does it impact on practice?
- What is an ‘open’ educational resource or practice?
- What does an open license look like and what does it do?
Learning Outcomes

- have a better understanding of what makes a practice or resource open
- understand what are the different types of educational resources
- have an awareness of the different types of Creative Commons licences.

1.2 What does ‘open’ mean?

What does it mean to describe an educational practice or educational resource as ‘open’? In part, this depends on the definition of ‘open’ you are using, but it also reflects the context you are working in or referencing. To start thinking about openness, let’s introduce some of the characteristics usually associated with this concept.

Access

Open is often associated with increased access to resources. In particular it is associated with open access and the drive to ‘open up’ academia by publishing research outputs on an open licence. Access to research is increased because resources might not have previously been available and potential users do not need to pay to view or use materials (e.g. resources are not behind a paywall). Increasing access to a resource can also refer to the way a resource is displayed or presented. For more on accessibility see Section 3.5.
Transparency

‘Open’ is often associated with increased transparency, for example in relation to one’s own practices or data. This is particularly the case when one shares data, research and materials with others and by doing so enables public scrutiny of processes, outputs and assertions. For example, making datasets openly available allows others to check for errors, carry out different or the same analyses and ultimately develop and improve research further.

A wide range of government bodies, organisations and foundations support increased or open access to research or data through policy or by funding projects, networks or initiatives that develop open materials or practices. These include the Scottish Funding Council which funds projects such as Opening Educational Practices in Scotland (OEPS) and Open Scotland which is supported by The University of Edinburgh and other organisations, including OEPS. The Wellcome Trust and Research Councils UK (RCUK) have open access publishing policies. Open Knowledge Foundation Scotland is a third-sector organisation that promotes, connects and supports open education initiatives across Scotland.

Free

The term ‘free’ is often used in relation to open educational resources (OER). But what does ‘free’ mean within the context of ‘open’?

As noted above, increasing access to resources often involves removing the need to pay for a resource at the point of use. This type of ‘free’ has been described as ‘gratis’, as the user is not charged a fee to access or use the resource. Any costs associated with a resource’s creation and/or maintenance are absorbed elsewhere, for example by the creator or funder. (OER projects and providers
are often supported by philanthropic organisations such as The Hewlett Foundation or the Gates Foundation.

Another meaning of ‘free’ within the context of openness is ‘libre’. If a resource is ‘libre’ it doesn’t have limitations on the way in which you can use it. Within the context of openness this refers to the potential of openly licensed materials to be reused. However, different licences afford the user different levels of reuse, and some are not considered to be ‘free’ in the ‘libre’ sense. Open licensing is discussed in more detail in Section 1.5. In the meantime, if you are interested in finding out more about the distinction between ‘libre’ and ‘gratis’ and the controversy over open licensing you can read more in ‘Is OER actually open? Gratis vs libre’.

Sharing

In these cases, increasing access to resources through sharing, particularly when material is shared digitally, often means that resources are able to go beyond the original contexts and boundaries intended by their creator.

In Section 1.6 you will find some examples and further reading for each of the above characteristics associated with ‘openness’.

Start of Activity

Activity 1A

Start of Question

The course will explore the meaning of ‘open’ educational resources and ‘open’ educational practices. To begin with,
however, let’s focus more broadly on what kind of qualities might be associated with openness.

- Do the above characteristics (sharing, free, transparency and access) resonate with you? Which of these do you feel are particularly relevant in your context and why?
- How would you characterise openness?

Write down your thoughts in your reflective log. You may find it useful to revisit these observations later in the course.

1.3 Open educational resources and open educational practices

Having thought a bit more about what ‘open’ means, let’s now take a closer look at what is meant by practices and resources that are ‘open’. To start with, let’s focus on a particular kind of resource that will help us make sense of openness in practice: open educational resources (OER).

Educational resources are anything you use to help with your teaching or learning. A video you’ve used in class, a lesson plan, a register, a presentation, a textbook or chapter from a book or a model that you use to illustrate an example ... the list is endless!

You might have looked for resources online or in the library to accompany your lessons or a presentation. You might have used an online video or found an image which helps illustrate a point you want to make. Maybe you have searched TES Resources or BBC Bitesize for inspiration when planning your lessons. Often there are copyright restrictions on how you can use resources that you find,
but within an educational context you are able to use these due to what is described as ‘fair dealing’ or ‘fair use’.

What makes an educational resource open?

An open educational resource (OER) is a resource that, because of the licence it has, gives you explicit information and permission to reuse the resource without needing to ask the content’s author. The permissions given via an open licence state how you can reuse the resource (e.g. whether the author just needs to be attributed, whether you cannot use it for commercial purposes or whether you can make changes to the material) and how you should attribute it. OER are not necessarily always digital, but those that are made available online, for example via repositories, also give users the ability to remix the resources in situ.

From an author’s perspective, releasing your material as an OER and not requiring potential users to seek your permission for reuse can lead to interesting outcomes. You can find out more about ‘what happened next’ in relation to a variety of OER in Alan Levine’s True Stories of Open Sharing.

However, let’s first explore in a little more depth what is meant by an OER. Defining OER is important, as what is meant by ‘open’ within this context provides a good foundation for thinking about the things that you need to do when creating an OER and how this might change your own practice.

UNESCO defines Open Educational Resources as:

‘... any type of educational materials that are in the public domain or introduced with an open license. The nature of these open materials means that anyone can legally and freely copy, use, adapt and re-share them. OER range from textbooks to curricula, syllabi, lecture notes, assignments, tests, projects, audio, video and animation.’

Another way of thinking about what makes an educational resource ‘open’ is to think about what an ‘open’ resource enables you to do with its content/material. David Wiley, a well-known open education advocate describes OER as enabling you to do five things
with material: Retain, Reuse, Revise, Remix, and Redistribute. These are also known as the ‘5 Rs’. According to Wiley, facilitating all of the ‘Rs’ enables an educational resource to be described as ‘open’. There are certain considerations that need to be taken into account to make this happen, and these are discussed in more detail later on in the course.

As you can see, just like copyrighted educational resources, OER can be all kinds of different materials you might use in your teaching or learning. OER can be both online and offline and in all kinds of formats: many YouTube videos, presentations on Slideshare or photos on Flickr are often openly licensed, whilst whole textbooks in a range of subjects are often openly available (these are called ‘open textbooks’).

Open education

The idea of ‘opening up’, or giving greater access to educational opportunities, is not a new one. Removing barriers to knowledge and increasing access (the process of ‘democratizing knowledge’) can be traced back to the development of the printing press, for example prior to compulsory education being introduced in the late 19th Century (1880 in England and Wales and 1872 in Scotland), philanthropic and charitable endeavors provided educational opportunities to working class children in the form of Ragged Schools and other initiatives.

The term ‘OER’ came into common usage in the early 2000s and has received support from many different individuals and organizations. Read about the types of commitments made by different organizations and individuals in the Cape Town Open Education Declaration from 2007 and the 2012 Paris OER Declaration. The Scottish Open Education Declaration of 2013 broadened the scope of the Paris OER Declaration by focusing on education as a whole.
You might be familiar with the open source movement, which was a forerunner of the OER movement. Open source means that code, software and tools are openly available so that people can improve and build on others’ work, as well as access the tools and software for no cost at the point of use. Examples include Moodle, Drupal, Ubuntu and Linux.

This ethos of community, sharing, increased access and collaboration underpins the open education movement and can be described as an ‘open educational practice’.

What does it mean for an educational practice to be ‘open’?

As a range of different practices could be described as ‘open’ and support the use of OER, there is no definitive definition of open educational practices (OEP). However, looking closer at two working definitions of OEP will assist in understanding the difference between OER (open resources of a particular type) and OEP (which is more focused on the context and action to engender the use of OER and the outcomes from doing so).

Building on Conole’s (2010) definition of OEP as ‘...the set of activities and support around the creation, use and repurposing of Open Educational Resources’ and the associated ‘contextual' dimensions of this, Ehlers and Conole (2010) developed a definition of OEP to reflect both the collaborative aspects of open practice and the reasons why all kinds of people might use OER:

‘Open Educational Practices (OEP) are the use of open educational resources with the aim to improve the quality of educational processes and innovate educational environments.’

Other definitions of OEP are broader and emphasize the social
justice elements of openness. For example, the working definition used by the Opening Educational Practices in Scotland project:

We think of Open Educational Practices as those educational practices that are concerned with and promote equity and openness. Our understanding of ‘open’ builds on the freedoms associated with ‘the 5 Rs’ of OER, promoting a broader sense of open, emphasizing social justice, and developing practices that open up opportunities for those distanced from education.

Open education as ‘disruptive’?

Discussion on the rapid ascendency Massive Open Online Courses (MOOCs) such as Coursera, edX and FutureLearn over the past few years has often been framed within the context of their potential impact on formal education and the narrative of disruption. The idea of ‘disruptive innovation’ originates from Bower and Christensen (1995), and you can read more about this in relation to MOOCs and open education in the JISC CETIS publication MOOCs and Open Education: Implications for Higher Education. Christensen, Raynor and McDonald (2015) revisit and clarify the idea of disruption in ‘What is disruptive innovation?’.

In responding to such claims about the impact of MOOCs there has also been discussion about how ‘open’ such resources are and determining what the difference is between OER and MOOCs. In answer to the latter question, an OER can, for example, refer to any type of open resource, not just a course. However the ‘openness’ of MOOCs in particular is often in question and MOOCs are often perceived as having a slightly different conception of ‘openness’ than that exemplified by Wiley’s ‘5Rs’. For example, whilst being free to take course or access a resource, you might only be able to view the materials if you sign up. Often MOOC content is not openly
licensed, so you won’t be able to remix or reuse the materials used
to make up the course.

Similarly, material might only be available for a limited time
between the start and end dates of the MOOC and may not be
released as OER afterwards. MOOCs are often acknowledged as
being ‘open enrollment’ but they may not necessarily be open in
terms of their content. However, there are exceptions, for example
the Open University’s FutureLearn MOOCs are released on
OpenLearn after their final presentation as perpetually open
courses (see for example Introduction to cyber security).

Activity 1B

Before moving on to look at open licenses and openness
in a little more detail, let’s take a few minutes to explore
some explanations of what open educational resources are
and why open matters. There are a selection of
descriptions and videos to choose from in Section 1.6, but
to get started watch the short video ‘The OERs – open
educational resources’ – you can watch it below or open it
in a new window or tab in your web browser.

Watch the video at YouTube.com.

View transcript – Uncaptioned interactive content

Now use your reflective log to write down your thoughts
about your own context and what kinds of resources could
be open. Why might it be important to have educational
resources that are open?
1.4 The practice of open educational resources

The next sections of the course will explore open practice as ‘use’ and situate the discussion within the context of finding and reusing open educational resources (OER). However, it is first worth remembering that in order to be able to ‘use’ an OER someone first needs to have shared the material and openly licensed it. Indeed, without sharing something with others it is not possible to widen access to that resource, meaningless to choose to make something free or low cost and impossible to increase transparency, as the material is not accessible. Sharing is therefore an important fundamental enabler or characteristic of ‘openness’ (see Section 1.2).

The cycle of creating, reusing or re-versioning material and then sharing it back is sometimes referred to as a ‘virtuous circle’ (see ‘Sharing and reuse in OER: experiences gained from open reusable learning objects in health’). Research has shown that, although a large number of students and educators use or adapt OER, they do not necessarily share the resources they have created on an open license, nor share back reworked versions of resources they have found (see OER Evidence Report 2013–2014). This course looks at finding and reusing OER in Section 3 and what you need to do to effectively share material in Section 4.

Start of Activity

Activity IC

Reflect on the following questions:

• What kind of resources, if any, do you share?
• Who do you share with?
• Do you know what happens to what you share?
• Do others share with you and if so, is this an important source of finding new resources?

Write down your responses in your reflective log.

View discussion – Activity 1C

Now let's take a look at what enables open practice to take place within the context of OER: open licenses.

1.5 Open licensing

As noted in Section 1.3, UNESCO defines OER as ‘... any type of educational materials that are in the public domain or introduced with an open licence...’. Open licences tell the user who made the material and give clear instructions as to how, and in what context, the creator would like the material reused (making reuse ‘legal’). OER are also made available at no cost to the end user.

There are different types of open licence, but the most common types used for a range of resources are those produced under a Creative Commons (CC) licence. According to Creative Commons, during 2015 over one billion items will have been given Creative Commons licences!

Let's now take a closer look at the different possible components of a Creative Commons licence and what they mean (Figure 1.5).
Figure 1.5 Creative Commons licenses for flipped educators (Creative Commons, CC-BY)

As you can see in the bottom right-hand corner of the infographic above, the different components of licenses can be combined in different ways to create specific licenses with different types of instruction or permissions regarding their reuse (so, for example, the license CC-BY-NC means that you can reuse the resource in...
any way you like if you attribute the author and do not reuse it for commercial purposes). Visit Creative Commons to read more about what the different license types mean for your practice.

Section 4.4 looks in more depth at what license you should choose when you’re creating an OER and Section 3.4 looks at how to attribute a license correctly.

Activity 1D

Now that you have been introduced to Creative Commons licenses what are your initial impressions of the different license components?

Can you think of situations where you might use openly licensed materials in your role as a teacher, facilitator or organizer of learning opportunities? Would one kind of license combination be more appropriate than another?

Write down your thoughts in your reflective log.

1.6 If you want to know more

Each If you want to know more ... section of the course thematically presents additional material and resources on the topics included in that section of the course.

Understanding open practices and open educational resources

Explore different perspectives on openness in this playlist created by the OER Research Hub or take a look at the ‘Understanding OER in 10 videos’ playlist.

For a more detailed and systematic exploration of ‘openness'
Chapter Two, ‘What sort of open?’ of Martin Weller's book *The Battle for Open* is highly recommended. You can [download the book for free](#).

**Access**

For an in-depth review of the open access movement, its motivations and impact, read [this post from opensource.com](#). The article also highlights a 2012 book about open access by long-time advocate Peter Suber, and you can download a copy and find out more on the MIT press website. See also Peter Suber's more recent reflections from 2013 in ‘[Peter Suber on the state of open access: where are we, what still needs to be done?](#)’

Read through the section on [open access publishing](#) and the selected resources in P2PU’s Open Research course or the Public Library of Science (PLOS) on [open access](#). The Jisc is in the process of developing best practice advice for open access. Read ‘[Unpicking the open access lock](#)’ for suggestions focused on the HE sector. Creative Commons collates different examples of the [impact of open licensing](#). See in particular examples of [social justice](#).

**Transparency**

Since 2011, the [Open Government Partnership](#) has co-ordinated the international effort to help ‘governments [be] more open, accountable and responsive to citizens’. As of April 2016, there were 69 members of the partnership, including the United Kingdom.

Since 2005, [UK Research Councils](#) have required recipients of funding to publish open access, stating that ‘Free and open access to the outputs of publicly funded research offers significant social
and economic benefits as well as aiding the development of new research.’

In some countries, greater transparency has had a massive impact on reducing corruption (see ‘Why conduct research in the open?’). This has also helped in disaster situations, see ‘How open map data is helping save lives in Nepal’.

Free

Open textbooks are the type of OER that have gained most traction in the United States due to the high cost of proprietary materials and the potential cost savings for students. Read more about the impact these are having across the USA in this opensource.com blog post: ‘How does your state use open educational resources?’.

In October 2015 it was announced that the Affordable College Textbook Act had been reintroduced for consideration by the United States Congress.

Sharing

Katy Jordan blogged the results of her research on MOOC completion rates. Find out what happened next.

The OER Research Hub is an open research project examining the impact of OER on learning and teaching that shared its methodologies, data and tools in the open. This has enabled others, such as the ROER4D project, which investigates the impact of OER in the Global South, to review and reuse their approach (see ‘Question harmonisation process’); and other researchers to reuse their data (see Robert Schwer’s post ‘Data reports OER research hub’).
Open education

For a quick overview of open education and its benefits, read this overview from the Scholarly Publishing & Academic Resources Coalition (SPARC). You can also see how open education developed on the Open Knowledge Foundation's (OKF's) crowdsourced timeline of important events. The OKF has also produced the Open Education Handbook, an invaluable resource that covers many of the topics contained in this course.

For a comprehensive look at recent developments in open education, read John Casey’s article ‘Taking care of business? The political economy of MOOCs and open education’. If you're interested in finding out more about the history of The Open University (UK), browse the History of the OU project blog.

Massive Open Online Courses (MOOCs)

An opensource.com article charts MOOCs, and their development from being openly licensed and open enrolment to being increasingly non-open in terms of course material.

Another exploration of this dual meaning of ‘open’ comes from Timothy Vollmer on the Creative Commons blog.

Using open educational resources (OER)

The Right to Research Coalition produced a series of ‘Open Access 101’ webcasts for conference participants to introduce people to the concepts of open access, open data and open education. Watch them here.

OER Policy for Europe has produced an OER Mythbusting! resource which helps answer common questions.
about OER and addresses some of the misconceptions about this type of resource. University College London’s (UCL’s) Why Use OER? also provides a more HE-orientated list of reasons to use OER. You could also look at Commonwealth of Learning’s ‘A basic guide to open educational resources (OER)’ or explore different definitions of OER in this Creative Commons wiki entry: ‘What is OER?’

A number of courses on using and reusing OER are available. These include Commonwealth of Learning’s short course called Understanding Open Educational Resources, the ExplOERer project’s facilitated course Learning to (Re)Use Open Educational Resources and Open Washington’s How to use Open Educational Resources.

Explore the relations between different facets of open knowledge by reading the Open Education Working Group’s Open Data as Open Educational Resources: Case Studies of Emerging Practice (eds. Javiera Atenas and Leo Havermann) or take a closer look at the development of open knowledge by exploring this joint Open Knowledge Foundation and Finnish Institute in London crowdsourced map.

Delve deeper into issues around the term ‘open’ within the context of OER by reading Vivien Rolfe’s blog post for ALT: ‘OER: a languishing teenager?’. Review JISC’s ‘Case studies of OER use’ in Higher Education or read the UKOER/SCORE Review Report – Journeys to Open Educational Practice.

Open licensing

For a concise introduction to Creative Commons licenses read Jane Park’s overview: ‘What is Creative Commons and why does it matter?’ or watch Paul Stacey present an overview of Creative Commons licenses (recorded as part of the BC campus course Adopting Open Textbooks).

If you’re interested in how to look for images that will meet the filter requirements of school PCs, or in devising activities with
colleagues to encourage children to explore Creative Commons licensing, find out more in Open Knowledge Foundation’s post by educator Jo Badge.

The DigiLit Leicester project, in partnership with Leicester City Council, has produced a series of resources, including Understanding Open Licensing. Find out more about the project and the project’s other resources.

If you'd like to find out more about how to utilize open licenses, check out examples of Creative Commons license use.

Now go to Section 2 of the course.

Activity 1C Discussion

You might already share materials you have created with colleagues or friends or discuss your ideas informally. In most cases, you probably don't mind how the materials are reused, as you are familiar with the context and reasons people might be reusing the materials you share. For example, perhaps one of your lesson plans provides a great starting point for a new colleague to develop a plan for their own class. Or a colleague could reuse an activity you developed with clients in a workshop.

However, although you might not mind how others use the resources you share, how do you know it’s OK to reuse resources? This is where an open license has an important role, as it includes clear instructions to a potential user of a resource about who created it and how it can be used. Even if you don't mind how someone uses material you have
created, it is important to consider others and enable ease of use.

2. Why Use Open Practices and Resources?

- 2.1 Introduction
- 2.2 The meaning of ‘open’ in open licensing
- 2.3 Why use open educational resources (OER)?
- 2.4 Why openly license my own materials?
- 2.5 Digital literacies
- 2.6 If you want to know more

2.1 Introduction

This section of the course focuses on the reasons why you should use open educational resources (OERs) or develop ‘open’ practices within your context. You'll take a closer look at what the ‘open' aspect of open licensing means and how this impacts on finding and attributing openly licensed materials. You'll also look at why you might use open educational practices (OEPs) and openly license your own material. This section closes with a look at digital literacy within the context of open educational practices (OEPs) and open educational resources (OERs).
By the end of this section of the course you should be able to:

- understand some of the reasons why you might use open educational resources (OERs) for teaching and learning
- explore reasons why you might want to openly license your own material and what the challenges might be
- understand the importance of digital literacy in relation to openness
- explore the meaning of ‘open’ in open licensing in more detail.

2.2 The meaning of ‘open’ in open licensing

Before looking at some of the reasons you might want to use open educational resources (OERs) or adopt more ‘open’ practices, let’s pause briefly and take another closer look at the concept of ‘open’ within the context of (re)using OER. Copyright is primarily concerned with what you cannot do with material and restrictions on its use, whereas an open license offers the possibility of reuse and remixing without having to seek the creator's permission or needing to pay a fee for using the material.

Section 1 of the course revealed the variety of characteristics usually associated with ‘openness’ and how people define ‘open’ in different ways. Moreover, in addition to the diversity of contexts that could be described as ‘open’ there are not just open or closed practices, but many different shades of open behaviors or practice: what is described as a ‘continuum of openness’.
Section 1.3 introduced one definition that is commonly referred to when exploring the idea of ‘openness’ within the context of the use and creation of OER: the ‘5 Rs’ that David Wiley, a well-known advocate of open education, has developed (see Figure 2.1). The 5 Rs highlight the benefits and freedoms, rather than restrictions in place, on a resource with an open license:

- Retain – the right to make, own, and control copies of the content.
- Reuse – the right to use the content in a wide range of ways (e.g. in a class, in a study group, on a website, in a video).
- Revise – the right to adapt, adjust, modify, or alter the content itself (e.g. translate the content into another language).
- Remix – the right to combine the original or revised content with other open content to create something new (e.g. incorporate the content into a mashup).
- Redistribute – the right to share copies of the original content, your revisions, or your remixes with others (e.g. give a copy of the content to a friend).

According to Wiley and this ‘rights’-based framework for understanding what an open license enables you to do, if a resource fulfills all these criteria and therefore is explicit in giving you the ‘right’ to remix, retain, reuse, revise and redistribute a resource, then it can be described as an open educational resource (OER). By
and large, open licenses are used to convey relevant information associated with the 5Rs: this is because open licenses such as Creative Commons act as a shorthand to giving permission for reuse, are widely used and easily understood.

As can be inferred from some of the Rs listed above, openness in this context also involves changes to the way you might approach or create material, or collaborate with others. For example, with an OER you are able to circulate or use copies of material without seeking the author's permission to do so. You can also develop new material based on existing open content under the permissions granted by the original author. In both instances, because an OER should clearly state the reuse criteria, you can save time and money, as you do not need to wait for author permission to reuse a resource and you don’t need to spend time creating your own resource from scratch when someone else has already created something you can reuse or modify for your own purposes.

Creating new resources with OER might enable collaborative experimentation with colleagues, highlight the benefit of sharing resources and good practice, enable iterative improvement to resources, or even highlight social justice by opening up new opportunities for those not currently engaged in, or distanced from, formal education. One example of using open resources to engage with the wider community is Strathclyde University’s widening participation strategy, which ‘aims to remove barriers for under-represented groups to get to university’. More on how this was developed is discussed on the OEPS hub.

However, it’s not just about your ‘right’ to do certain things with material that is openly licensed. Implicit in the idea of the 5Rs and in order for the ‘right’ to remix, reuse, redistribute, revise and retain to be possible, you also need to enable others to do the same (so they have the same ‘rights’ as you) by sharing back your remixed material or original content (in other words, facilitating the ‘virtuous circle’ noted earlier in Section 1.4: The practice of open educational resources).

One component of this is the license. As described in Section
1.5 there are different types of licenses giving different types of permissions for reuse. These different licenses can be understood as a ‘continuum of openness’, as some are more liberal in their reuse permissions than others. Figure 2.2 below shows licenses placed along a scale of ‘least free’ to ‘most free’ and correspondingly ‘not OER’ to ‘OER’ (note ‘free’ is understood as ‘libre’ within this context, see Section 1.2 for further explanation.)

If you need reminding of the license types, check out Creative Commons.

Figure 2.2 ‘Finding and using open educational resources (OER): implementing the Creative Commons CC BY license (slide 4)’ (Paul Stacey and Hal Plotkin, CC BY 4.0)

As you can see from Figure 2.2, there are some Creative Commons licensed resources that are not considered to be OER and are described as the ‘least free’ of the open licenses (the CC-BY-ND and CC-BY-SA-NC licenses). This is because these licenses include ‘ND’ or the ‘no-derivatives’ instruction. In other words, when using the resource it can only be used ‘as is’ and not modified in any way. This prohibits any adjustment, changes or building on the resource,
either so that it reflects better your own context(s) or to combine it with other OER or materials you have created. Therefore, the ND license fails to fulfill the ‘revise’ and ‘remix’ criteria of Wiley's 5Rs.

There are arguments for and against using different types of Creative Commons licenses, in particular the NC or ‘non-commercial’ license. In the instance of NC-licensed materials, some people argue that prohibiting commercial use of resources can stifle innovation. US educator and co-author of the open textbook Introductory Statistics, Barbara Illowsky, explains why their textbook is CC-BY:

I wanted to talk about commercial aspects... So one of the interesting comments we have, is how could you not put the NC on your license, how could you agree to a CC-BY because somebody else can take your work and make money. That’s true, but if we didn’t put that BY on there, there wouldn’t be other innovations. So, for example, another college... their bookstore wouldn’t be able to sell the book because they earn a profit on the hard copy of it. WebAssign... Collaborative Statistics was the first Open Ed Resource that they hooked up with to do a homework system with. Before they were working only with major publishers. But when I was starting to present at national conferences, and faculty said I love this book but I would never adopt it because I don’t want to go back to grading homework... The trade-off of a student spending $200 for a book that comes with a homework grading system, or me having to grade homework, they are going to buy the book.

So I approached WebAssign – it’s a fabulous company – but it does cost the students $25. So I tell the students, I recommend it but you don’t have to buy it. If you want to turn in the hard copy paper with your problems worked out to me you can, but I think that the WebAssign has a learning system that goes along with it, they have the videos integrated, they have the books integrated... if you get stuck...
on a homework problem, it takes you back to the book if you want [etc.]... So I think this is a valuable learning tool, not just making my life easier for grading ... now I've only had two students who started out turning in a hard copy paper and they eventually ended up buying it. So that's a company that is doing innovation, but if I had the NC license on it, they wouldn't.

A more in-depth exploration of the NC license is also available here. Many national or international organizations that support the use of openly licensed materials argue for the use of the CC-BY license; for example the Wellcome Trust, as this type of license gives 'much greater use – and therefore impact – of the research we fund and the content we produce.'

Later in the course you will look at developing your own resources and return to look at David Wiley's 5Rs to help you understand what you need to do to enable others to easily find, use, remix and adapt resources you choose to share.

Activity 2A

This section has explored shades of openness within educational resources that are described as ‘open’ or OER. However, the idea of ‘open’ is also applicable to other contexts, including everyday practice.

Think about your own context and use your reflective log to write down:
2.3 Why use open educational resources (OER)?

There are many reasons why people deliberately look for open resources when searching for materials. Resources with open licenses can provide valuable and interesting additional or primary teaching materials, or the basis for a workshop or study group, at low- or no-cost. Within a variety of situations OER can provide content where there was none previously available or replace expensive proprietary material (for example textbooks, where cost savings can be an important motivating factor in OER adoption).

OER can be utilized at short notice and do not require payment or permission for their use. Open materials can often be modified to suit your specific context, so you can create unique resources based on others’ expertise. Some OER are produced by well-known institutions or shared by educators who are experts in their subject. In addition, resources are often peer-reviewed by others online or during their production process, when OER are produced at scale (as in the instance of open textbooks, see OpenStax College for one example).

Whilst the outcomes of using OER are important motivators for their use, there are also potential impacts on educator practice. Some of the possible changes in practice are implicit in in this summary on reasons for using OER produced by Glasgow Caledonian University:
• ‘You can take existing resources and develop them in ways that suit your needs.
• You can develop high quality resources on your own or with a small team of staff.
• You can save time and duplication of effort.
• You can build on best practice by experts in your subject area.
• You can use resources which you may not have the software, equipment or facilities to create yourself.’

Research conducted by the OER Research Hub on the impact of OER found that educators are better able to accommodate diverse student needs and can be more experimental in their teaching approaches. They are not restricted to using specific resources and can develop their own materials from existing resources or find resources that they are not able to create themselves or which have interesting ways of conveying points. Open resources might provide inspiration and ideas when developing one's own resources or expose one to different practices or approaches.

Using OER and engaging in more open practices can yield a range of institutional benefits. A JISC-funded study supplemental Good Intentions by McGill, Currier, Duncan and Douglas (2008) maps a range of stakeholder aims against different ‘sharing’ strategies, including an ‘open’ option. The open approach was described as having the potential to have ‘significant impact’ on nine out of a possible 15 ‘benefits for educational institutions’ (with ‘possible’ or ‘some’ impact possible in the remaining six areas):

• ‘Maintaining & building on institutional reputation globally
• Attracting new staff and students to institution – recruitment tool for students and prospective employer partners
• Increased transparency and quality of learning materials
• Shares expertise efficiently within institutions
• Encourages high-quality learning & teaching resources
• Supports modular course development
• Supports the altruistic notion that sharing knowledge is in line
with academic traditions and a good thing to do

• Likely to encourage review of curriculum, pedagogy and assessment
• Enhancing connections with external stakeholders by making resources visible.

‘Openness’ therefore has the potential to raise standards, increase engagement and widen participation. For example, OER Hub collaborative research revealed that 32 per cent of learners using The Open University’s OpenLearn platform felt that their use of OER on the site influenced their decision to register for their current course of study (N=934). Research by Wiley, Hilton III, Ellington & Hall (2012) revealed that implementing the use of open resources according to the ‘successful model’ they developed as part of their two-year research study, can offer institutions significant savings when compared with the use of proprietary materials.

Open and Public Domain resources enable you to reuse materials without asking permission as long as you attribute their source and the type of license the resource carries. OER can also change your practice by enabling you to access and rework materials, experiment with them and tailor them to your needs.

However, there are also possible questions and concerns regarding OER use. OER Mythbusting by the OER Policy for Europe project addresses the main concerns, including the quality of resources, compatibility with the curriculum, sustainability and time.

Activity 2B

Read two of David Wiley’s blog posts, ‘Evolving “open"
“pedagogy” and ‘The real threat of OER’, which look at unravelling open practice within the context of teaching and the reasons educators use OER, respectively. As David notes at the start of ‘Evolving...’ the key question to consider is:

“What can I do in the context of open that I couldn’t do before?”

Now that you have read David’s posts, look back at your reflective log notes from earlier in the course, review your notes on how and why you share and what kinds of practices you consider to be ‘open’. Now consider the following questions:

• What does or could openness facilitate in the contexts you work in?
• How could you incorporate more open material or practices?

Write down your responses in your reflective log.

2.4 Why openly license my own materials?

The last section explored some of the reasons to seek out and utilize OER. However, in order to facilitate ‘open’ best practice it is also good to share material you have created too (and therefore complete the ‘virtuous circle’ mentioned in Section 1.4). After all, materials can’t really be called ‘open’ unless they are both shared and when they're being created they are made as reuseable as possible (e.g. by providing creator information and details of how you would like them to be reused).
There are many reasons for sharing materials. By releasing material on an open license you might increase the visibility and reputation of your work, find new audiences and networks, or receive increased feedback on what you are doing. Often people are altruistically motivated and become involved in different open practices such as openly licensing their own materials and sharing their resources in order to ‘open up’ or increase participation or widen access to otherwise closed environments and information. By widening access to information, knowledge can be shared more effectively, particularly with people who might otherwise be unable to access materials (e.g. for reasons such as cost or geography).

When thinking about whether or not to openly license your work, you might have some reservations. For example:

- Do I have the skills or knowledge to license my material?
- If I blog about my research might someone steal my ideas?
- Are my resources good enough?
- What will my colleagues and students think?
- Am I allowed to release my teaching materials on an open license?
- Do I have the technical and digital skills to create OER?

The sketch note above (which was produced as part of a visual recording of Josie Fraser’s keynote at OEPS Forum 4) shows the results of an ‘ask the audience’ exercise. Josie asked the audience to respond to commonly heard reasons educators give for not using or sharing materials in the open.
Some of the challenges noted above may resonate with you, or you may have heard of some from colleagues. Pause for a moment and write down any thoughts or responses to these, or note down any questions you’ve heard that are not on the list or in the sketch note above, in your reflective log.

Whilst using or incorporating OER into your own practice might not always be visible or impact on others in an obvious way, becoming more open in your practice and sharing your material or resources openly may lead to unanticipated changes to your current practice. You might develop different working strategies, take a different approach to designing the materials themselves or collaborate differently with colleagues if you choose to co-develop openly licensed materials. Letting colleagues and students know that you are using an open resource and explaining what it means can also raise awareness and open up discussions around ‘open’.

Your own, your institution and/or organization’s approaches to sharing and openness will also have an impact on how you move toward more open ways of practice. Experimenting with releasing images you have created in your own time (for example, holiday photos) openly on Flickr is a great place to start. Depending on your institution’s approach and view of open practices, openly licensing your course materials or resources created in work time might be a more complex matter, particularly in relation to intellectual property and ownership of the resource. To resolve copyright issues, some Scottish Universities, including the University of Edinburgh and Glasgow Caledonian University, have introduced policies to encourage their students and educators to release material in the open.
Reflect on your own institution or organization and using your reflective log, write down your responses to the following questions:

- Would it be appropriate to share outputs or resources you have created on an open license?
- In what ways, if any, does your institution or organization support the use and creation of open resources?
- Is there a specific person or team you can ask for assistance? If so, note down their name(s) and details. If you are not sure whether there is any support available to you, you may want to check with colleagues or if you work in a college or university, with library staff.
- Does your institution or the organization you work for have a policy on OER and/or OEP?

2.5 Digital literacies

Changes in how information is shared, whilst dependent on who has control of the mode and means of dissemination, can enable increased access to information. The development of the Internet, in tandem with increased access to, and development of, technology to access the web, has enabled people to find, share and exchange information beyond national boundaries. For example, European
Commission research in early 2016 revealed that '95% of 16–24 year olds in the EU are regular Internet users'. With access to technology and the knowledge of where to find resources, open education has made materials more accessible and can potentially widen access and participation.

Yet could these '95% of “regular Internet users”’ be described as digitally literate? In other words, do people have the confidence and knowledge to find, appraise and use the resources they find online? Although students and learners may be using the Internet, their levels of digital literacy are likely to differ. Subsequently, this may affect their ability to engage with the increasing amount of educational material that is now available and accessible online, and which can be accessed, reused and studied in both informal and formal contexts by people who may be studying or facilitating learning or just simply interested in finding out more about a particular topic. JISC’s (formerly the Joint Information Systems Committee) ‘quick guide’ ‘Developing students’ digital literacy’ provides a good overview of ‘next steps’ for thinking about developing learners’ digital literacies and the reasons why this is an important consideration. JISC also provides top tips for different groups of users and a wide range of resources to help understand and develop digital skills across institutions and organizations.

Digitization can reduce individual transaction costs and enable information to be shared easily between interested parties, for example, paywalled research articles or downloaded materials are often shared, in spite of restrictions such as publisher agreements or the mechanism for sharing the material in the first place, e.g. virtual learning environments (VLEs). The possibility for learning outside an institution is potentially increased if one knows where to find materials and resources. There are even examples of people crafting their own curricula through OER and Massive Open Online Courses (MOOCs).

The channels by which students can find information have also increased. In addition to asking fellow students or their teacher, going to the library or using a hard copy encyclopedia or printed
resources to find out information, learners today use search engines, most likely Google, or Wikipedia to find out more about a topic. Research by Head & Eisenberg (2010) conducted with US college students revealed ‘over half of the survey respondents (52 per cent) were frequent Wikipedia users [during their course] – even if an instructor advised against it’, with a further 22 per cent reporting using the open, crowdsourced encyclopedia ‘occasionally’.

The availability of information and learning resources can be seen as a challenge to, or conversely, an opportunity for, formal learning. After all, the two are not mutually exclusive. What if educators were to incorporate and use online platforms and materials into their lessons, or to encourage students to critically assess material on (rather than ban the use of) platforms such as Wikipedia, share and develop ideas online and utilise YouTube, Twitter and other platforms? Rather than prohibiting the use of resources such as Wikipedia, there is arguably the opportunity to develop learners' digital literacy skills as part of embracing openness in education.

For an example of how an educator helped to develop learners' digital literacy skills read how Natalie Lafferty, Head of the Centre for Technology and Innovation in Learning at Dundee University enabled students to become co-creators of OER.

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**Activity 2E**

Think about the learners you work with.

- What level of familiarity with technology do they have?
What kinds of digital skills do they have?
How could what you do in the classroom, at a workshop or elsewhere help recognize and develop the skills your students have?

Write down your thoughts and strategies in your reflective log.

2.6 If you want to know more

Each If you want to know more ... section of the course thematically presents additional material and resources on the topics for that section of the course.

The ‘open’ in open licensing

If you're interested in exploring the ‘continuum of openness’ and what this means in practical terms, read Hilton III, Wiley, Stein & Johnson’s The Four R’s of Openness and ALMS Analysis: Frameworks for Open Educational Resources.

Benefits and challenges of open educational resources

If you're interested in taking a closer look at the wide range of reasons for using OER or engaging in OEP, there is a range of research available, including the UKOER Synthesis & Evaluation report, which has a section on motivations. This section of the report explores the idea that reasons for engaging in OEP/OER can be categorized by stakeholder group. The OER Impact Study: Research Report by Liz Masterman and Joanna Wild looks at reasons for using OER within the UK's HE sector.

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Take a closer look at some of the benefits and challenges of OER in this series of posts:

- ‘Benefits and challenges of OER for higher education institutions’ (Cheryl Hodgkinson-Williams).
- ‘The financial benefits of OER’ (Rob Farrow).
- Watch ‘Open education matters: why is it important to share content?’
- The OER Research Hub has researched some of the challenges for people using OER. Read their 2013–2014 report.

If you're interested in the potential issues with regard to sharing openly licensed resources, these posts might be of interest:

- ‘The danger of using Creative Commons Flickr photos in presentations’.
- ‘Koppie Koppie sells photos of your kids to prove you shouldn’t post them online’.
- ‘Flickr is about to sell off your Creative Commons photos’.

OER policies

Leeds University's OER policy (which has been used as a basis for, or reviewed, by other institutions such as Glasgow Caledonian University and the University of Edinburgh as part of their own development of an OER policy) and The Open University (UK)’s open educational media operating policy are useful to review.

Digital literacy

Read ‘Focus on data literacies and ICT proficiency: the importance of digital capabilities’, which highlights the need for ‘training and
support' in preventing incidents such as that which occurred in September 2015, when a London clinic accidentally released via email personal information of HIV positive patients and other patients visiting an HIV drop-in facility.

In ‘The death of the digital native: four provocations from Digifest speaker, Donna Lanclos’, the author begins her provocations by arguing that it’s a ‘dangerous assumption’ to consider learners inherently digitally savvy.

If you are interested in improving your digital literacy skills, you can participate in the badged OpenLearn course *Succeeding in a digital world*.

Now go to *Section 3* of the course.

3. Using Open Educational Resources

- **3.1 Introduction**
- **3.2 Where can I find OER?**
- **3.3 Choosing a resource**
- **3.4 Attributing a resource**
- **3.5 Curating OER**
- **3.6 If you want to know more**

3.1 Introduction

This section of the course focuses on where you can find open resources, what factors might influence your choice, how to attribute a resource and the importance of how you remix to provide the best possible experience for learners.
Learning Outcomes

By the end of this section of the course you should be able to:

- find relevant open resources suitable for your own context
- understand how to attribute a resource correctly
- have a better understanding of best practice for integrating open resources.

3.2 Where can I find OER?

Open educational resources (OER) can be found in many places, but it is not always immediately obvious where to find material that gives you explicit permission to reuse it or how to find the most relevant material for your context. Some of the more familiar places to find resources, such as Flickr, YouTube or Google, include filters so that you can show only openly licensed images or videos.

For example, when you are searching for an image on Google you can choose to see images with specific types of permissions for their reuse. To do this, once you have searched for a particular image, go to the ‘Search tools' tab and choose ‘Labeled for reuse' before selecting what type of license you would like to see.
However, you can also see what kind of license an individual video carries. As you can tell from the licensing information provided in Figure 3, this video is available for reuse, can be edited, and remixed on YouTube.

There are two ways to find openly licensed videos on YouTube. When searching for videos, you can choose to add a range of different ‘filters’, and this includes ‘Creative Commons’ as a ‘Feature’ of the type of video you are seeking.

Figure 3.2 ‘YouTube filters’ (Beck Pitt, CC-BY), based on https://www.youtube.com/watch?v=Gxi78MxbdX0

However, you can also see what kind of license an individual video carries. As you can tell from the licensing information provided in Figure 3, this video is available for reuse, can be edited, and remixed on YouTube.
You can find more detailed instructions on how to find OER on Google and YouTube and other platforms in this presentation by the ROER4D project: ‘How and where to find OER’ or by looking at Glasgow Caledonian University’s guide to finding Creative Commons licensed images.

There are also specific repositories that only contain OER. Whilst JORUM, the UK-based repository for sharing OER across all sectors is no longer maintained, other collections are available, such as the College Development Network’s site. OpenCNX (formerly Connexions) is a repository of OER where learners and educators can share and remix materials. The OER Quality project has created and crowdsourced a list of repositories around the world, and members of their project have been involved in creating a map of repositories.

You could also explore searchable and curated spaces offered by OER Commons or the European Commission’s Open Education Europa portal.

Sometimes it can be difficult to find the resource you need for your own learning, or to help others. In the instance of OpenLearn, The Open University’s OER repository teams in Scotland and Wales have created themed ‘learning pathways’ to help learners navigate their way through materials, develop their interest in a particular area and build their confidence, whilst introducing them to higher education (HE) study. You can read more about how the Pathways program was developed in Scotland and Wales. Helping learners...
navigate their way through materials is an important factor in enabling effective learning, and Section 3.5 on curation will look at this in more depth.

Activity 3A

Think of a situation where you need to use an image created by others. Use an appropriate site such as Flickr or the search tool on the OEPS hub etc. to find a relevant openly licensed image.

Write down in your reflective log a brief description of the situation, the resource's URL, what license it has and explain why the open license works within your context and the purpose you intended to use it for.

3.3 Choosing a resource

The last section gave suggestions for how and where to find content. If you are facilitating learning, looking for inspiration, putting together a reading list, encouraging learners to engage in independent study, rewriting a course or simply looking for inspiration, these factors will influence your choice. You will also be thinking about the type of learners you have, their context and desired learning outcomes.

In addition to sites such as YouTube, that offer both openly licensed and non-openly licensed materials, some websites offer openly available materials that are not openly licensed. For example, the BBC-hosted website BBC Learning has lots of useful resources,
and Massive Open Online Courses (MOOCs) from providers such as FutureLearn or MITx provide whole courses that might be useful and which anyone can sign up to. As resources from these sites are not necessarily openly licensed, you will need to check before reusing them.

When you are choosing an open resource, quality might initially be a concern. MOOC platforms and curated content sites are often part of an organization’s public engagement strategy, and institutions ensure that their courses are developed in accordance with defined quality criteria. Examples include The Open University’s OpenLearn, The University of Edinburgh’s OpenEd and The University of Nottingham’s U Now. These can be good places to start looking for open content. To help other users and provide feedback to the resource’s creator, some platforms enable you to ‘rate’ a resource or comment on it.

Yet what does ‘quality’ mean to you when you're planning to adapt something to your own context? As David Wiley argues in his post ‘Stop saying “high quality’”, references to quality when discussing OER often ignore the critical point that:

‘...the core issue in determining the quality of any educational resource is the degree to which it supports learning.’

In other words, your choice of a resource will take into account the needs of the learners and relevance to the objectives of the activity, course or learning journey.

Activity 3B

Use your reflective log to list the most important factors for you in choosing an educational resource. What would
you describe as a ‘quality’ resource? For example, do you look for resources that have been reviewed positively by others, explain ideas clearly or do you look for material with additional resources, such as a lesson plan or associated activities, etc?

3.4 Attributing a resource

In Section 3.2 you searched for openly licensed materials that you might want to incorporate or use in your everyday practice. You also identified the resource’s license and what this means for how you can reuse the resource. The next stage is to look at how to attribute the resource when you are reusing it within your own context. This is good practice for two reasons: not only to ensure that you have appropriately accredited the authorship and license of the original material, but also so that people using or reviewing the resource you have created are able to reuse the material in their own context.

A quick and easy way to remember what information you need to include when reusing resources is by remembering an acronym: TASL. This stands for Title, Author, Source, License. TASL tells you what you need to include to ensure that you are appropriately acknowledging the source of the OER that you are using.
Let’s illustrate this with an example. If you follow this link to Flickr you can find the above picture of a cake, which was found using a Google search and filtering images for ‘labeled for reuse' (see Section 3.2 for more on how to do this), and has been uploaded to Flickr by its creator. How will we correctly license this resource using TASL?

First, what is the resource’s title? In this instance it is labeled as ‘Pink rose birthday cake.’ So that others can see the origin of the resource we also need to provide the URL (https://www.flickr.com/photos/rexness/5920122416/in/gallery-123856341) of the page on Flickr where the image is hosted.

Who created the resource? The author or creator of the cake photo is Rexness. We can view Rexness’s Flickr profile by clicking on his name and clicking on the dropdown menu labeled ‘More’ on the right-hand side of the page and choosing ‘Profile’. This reveals further information about Rexness and we will use this URL as part of our attribution.

What is the source of the resource? In this instance the source of the image is the same as the URL we are using for the resource’s title.

What license does the image have? To see an image’s license information on Flickr, click on the ‘Some rights reserved’ text below the date the image was created. This reveals that the image ‘Pink rose birthday cake' has been licensed CC BY-SA 2.0 by Rexness.
We are also redirected to Creative Commons license information automatically. This is the URL we need to include so that others can find out the correct license information.

So what does the final attribution look like?

‘Pink rose birthday cake’ by Rexness is licensed under CC BY-SA 2.0.

For further advice on attribution, consult the Creative Commons Wiki guidelines on best practice for attribution and Glasgow Caledonian University’s guide to Reusing Content for more advice and examples.

When you decide to use an open resource that someone has provided, it is also good practice, where possible, to let the creator of the resource know how you have reused it (for example via the comments section on the relevant webpage etc.). In instances where the author has listed the license but not explicitly linked to the relevant license deed, you should provide an explicit link to the license when reusing.

One issue for creators of OER is how to measure the impact of the resources they openly license: once ‘in the wild’ or freely available, it is extremely difficult to track how and in what contexts they are reused. You can read more about tracking the impact of resources in Section 4.6.

Activity 3C

Use the guidelines above and previous sections’ suggestions to help with the following activity.

In Section 3.2 you looked at finding resources you might want to incorporate into your own practice and considered whether the way they were licensed was most appropriate
3.5 Curating OER

The notion of the teacher or facilitator as curator is helpful when working with open and online resources (Siemens, 2007) and reflects the possibility of education moving away from the ‘transmission’ of knowledge from teacher to learner, to a more constructivist approach which acknowledges the value of education created by the learner. Earlier in this section of the course we focused on one aspect of the curation process: choosing OER and what factors are important to you when selecting resources.

When using OER it is important to consider how you will integrate material into the learning process, particularly if you are blending together material that has been used in different situations (e.g. online or face-to-face). You will need a clear structure with guidance on outcomes, sequencing and, (where appropriate), you might want to consider including opportunities to collaborate with fellow learners. For example, providing your learners with a set of URLs to useful resources, however relevant and interesting, will not necessarily give sufficient context or information on why the learner should read further. You might want to consider introducing peer support (again, where appropriate), and study groups might be one option for bringing people together to discuss course materials.

Even if your learners are confident and have advanced digital literacy skills, without the OER being integrated into a broader framework or by providing support to navigate materials, it might be difficult to follow and engage with the content as a whole. Ensuring
that any open resources you choose to utilise are smoothly mixed together is an important element of good open educational practice. In addition, you might want to encourage students to create OER as part of their studies (see Section 2.5) or work with students to rewrite course material or textbooks. As Natalie Lafferty of Dundee University noted in an interview published in February 2016, if you plan to incorporate learning activities that involve students in creating digital assets, it’s important to ensure that there is appropriate advice, information and support to get started. The next section of the course will take a closer look at curation as ‘remix.’

Activity 3D

Take a few minutes to review your reflective log. In light of what you’ve learnt so far in the course, consider if you want to develop the ideas you’ve noted for developing your practice any further. If so, add your new ideas and thoughts, as appropriate.

3.6 If you want to know more

Each If you want to know more ... section of the course thematically presents additional material and resources on the topics for that section of the course.
Understanding open practices and open educational resources

The DigiLit project at Leicester City Council in the UK has produced a series of guides to help educators, particularly those teaching in the compulsory education sector, to understand and use OER. These include G1 Open Education and the Schools Sector and G2 Understanding Open Licensing for more information on open licensing and what OER is.

If you'd like to spend a bit more time looking at Creative Commons licensing and how to use them, you can participate in a free open online course at Peer 2 Peer University (P2PU) called Get CC Savvy. P2PU also run courses called Open Detective and Intro to Openness in Education that will help you understand different types of openly licensed material.

If you're interested in looking in more detail at different license types (including those for open source software), it's worth looking at this comparison of free and open-source software licenses or reading more about open source licensing.

To find out more about connectivism, read George Siemens's 'Connectivism – a learning theory for the digital age' (2005) or watch '10 minute lecture – George Siemens – curational teaching'.

Using open educational resources

Here are some more ideas for where to look for openly licensed resources:

- An Open Education Working Group blog post ‘Illustrating open education’ (by Marieke Guy) has
a useful list of places to look for openly licensed content.

You can search for OER by subject or look at specific subject repositories. The Royal Geographical Society highlights a number of sources for OER in geography, for example.

Read more about how the OER Assistant is helping educators find OER according to learning objectives.

There are some useful guides to developing online teaching and learning available, including:

- ORBIT: The Open Resource Bank for Interactive Teaching.
- University of Leicester’s ‘Writing and structuring online learning materials’.

Now go to Section 4 of the course.

4. How to Create and Share Open Educational Resources

- 4.1 Introduction
- 4.2 Remixing OER
- 4.3 What do I need to consider when creating or remixing an OER?
- 4.4 What license should I choose?
- 4.5 How can I share my resources with others?
- 4.6 If you want to know more
4.1 Introduction

This section of the course will look at how you can create your own open resource, including what is meant by ‘remixing’ open materials, what to consider when creating your own open resource, how to choose a license and ways you could share your OER.

Learning Outcomes

By the end of this section of the course, you should be able to:

• understand how the license you choose for your resource impacts on how others can reuse it
• understand how to effectively share your resources and open practices with others so they are reusable and visible
• understand the advantages and potential issues with openly licensing your materials
• be aware of who owns a resource you have created and why this matters.

4.2 Remixing OER

So far the course has looked at what characterises an open educational resource (OER) and how to find, identify and reuse open materials ‘as is’. Yet, as you have already seen in previous sections, some open licences also enable us to change, improve and
develop OER to make them more appropriate for your own context and purposes (this is called 'localisation'). You could, for example, build a new course out of existing tried-and-tested content, or make changes to open content and/or combine them to create a new resource. This is often described as 'remixing' content (see Section 1.6 on Wiley’s 5Rs and Creative Commons). In Free to Mix: An educator’s guide to reusing digital content, the National Library of New Zealand Te Puna Mātauranga o Aotearoa summarises remixing as:

‘Remix can refer to any sampling and overlaying of print, music, video and images

Collage, photomontage and documentaries are early forms of remix

Remix requires similar skills to traditional literacy, only using multiple forms of media content

Creating, quoting and referencing for multiple media content are similar to printed content. Both involve convention and law.’

How to remix materials

Some examples and ideas of how to remix materials include:

Adding text to a diagram or picture you are reusing.

Taking several different open resources and adding your own commentary or narrative to create a new resource.

Taking an existing textbook and remixing it or working with others to remix it. You could even make collaborative remixing a learning activity that helps demonstrate the fundamentals or a particular aspect of what you teach. For example,
David Wiley’s students improved, rewrote and extended their existing open textbook on project management, as part of practically demonstrating their new project management skills. Read David’s blog post ‘The best OER revise/remix ever?’ to find out more.

Swapping examples in a resource for ones that are more relevant to your own context.

Adding narrative and additional material to existing open video footage to make them more applicable to your own context and demonstrate differences in practice. Read Igor Lesko’s article on how videos were repurposed for different contexts in ‘Examples of OER in health remixes from the African Health OER Network’.

If you want more ideas or suggestions for how to remix, The Daring Librarian (aka Gwyneth Jones) reviews well-known popular culture remixes and spin-offs, how to remix and ways to use social media as part of ‘project based learning’ in ‘Secrets of the remix, mash-up, YouTube generation’.

Authoring tools

There is a range of user-friendly authoring tools that can assist with remixing content. Examples of OER remixing and authoring platforms include:

- OERPub
- Pressbooks
- OpenStax CNX
- OER Commons.
Choosing a license

When remixing different OER it is important to pay attention both to the license of the material you are going to reuse, as this may restrict how you can reuse it and how differently licensed materials affect what license you are able to give the new resource you create. It is also important to keep track of what resources you are using. One method of noting the details of resources is to create an asset log, where you document the source URL, the resource’s license information and the way the author wants to be attributed (see TASL in Section 3.4). You will need to include all this information as part of your new resource.

You might want to include material in your new resource that is licensed on a less ‘open’ license than the rest of the content you are using. In these instances it is useful to remember that you can always link out to more restrictively licensed materials (e.g. by providing a link in your remix to the original resource rather than embedding it within your new creation). You can then summarize the resource so that it’s contextualized within your remix and the learner has sufficient information to know why the material is of relevance and how it fits with what precedes and follows it.

Let’s begin by looking at what kinds of materials you can adapt or remix. Creative Commons has provided some great resources to help you understand what you can and can’t do with differently licensed materials. Table 1 below tells you whether one CC or Public Domain resource can be remixed with another: ‘To use the chart, find a license on the left column and on the top right row. If there is a check mark in the box where that row and column intersect, then the works can be remixed. If there is an ‘X’ in the box, then the works may not be remixed unless an exception or limitation applies.’

If you need reminding of the license types, check out Creative Commons.

Table 1 Table showing which license types can be remixed with
Let’s take a closer look at a few examples. As seen in Section 2.5, one of the most restrictive Creative Commons licenses you can apply contains the ‘no derivatives’ (ND) instruction: CC-BY-ND or CC-BY-NC-ND. Look at Table 1 above; as you can see all the rows that contain a license that includes a ‘no derivatives’ instruction cannot be combined or remixed with other licenses. These licenses are not
considered to be OER (see Section 2.2), although you can use the resource ‘as is’ with attribution and in the instance of a resource labelled CC-BY-ND, for commercial purposes.

License combinations

But what about the other license combinations? Let’s look at a CC-BY-NC and CC-BY-SA combination. Why can you not remix material that is for non-commercial use with another resource that is Share-alike (SA)? This is because adding a non-commercial condition conflicts with the Share-alike (SA) instruction of the CC-BY-SA license. The Share-alike requires you to share a remix of the resource on the same license (in this instance as CC-BY-SA) or a license where the terms do not conflict with the Share-alike restriction (e.g. if the other material is Public Domain or CC-BY licensed). Share-alike also enables some non-Creative Commons openly licensed materials to be remixed with CC licensed works.

Now that you are able to identify what types of material can be licensed with other differently licensed types of materials, it is important to ensure that you license any new material correctly. Table 2 below comes from a brief guide to remixing differently licensed content from Creative Commons and gives a quick overview of different licenses, in addition to explaining why and how you can remix different types of Creative Commons licensed materials.

Reading the table from the left-hand column, those marked green/with a tick can be licensed using the adapter’s license indicated across the top row. Those marked yellow/’not recommended’ are technically permitted, but not recommended by Creative Commons. Those marked grey/with a cross are not permitted.

Table 2 ‘Adapter’s license chart’ by Creative Commons and licensed CC BY 4.0.
<table>
<thead>
<tr>
<th>Adapter's license chart</th>
<th>Adapter's license</th>
<th>BY</th>
<th>BY-NC</th>
<th>BY-NC-ND</th>
<th>BY-NC-SA</th>
<th>BY-ND</th>
<th>BY-SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>BY-NC</td>
<td>Not recommended but technically possible</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>Not recommended but technically possible</td>
<td>Not recommended but technically possible</td>
<td></td>
</tr>
</tbody>
</table>
As emphasized in the CC document, and seen in the overview above, you cannot give a less restrictive license to material that was originally licensed more restrictively, for example you cannot give a new resource a CC-BY license if the material you are incorporating was originally licensed CC-BY-SA.

Both tables 1 and 2 clearly show the impact of licensing your own material CC-BY: this gives the biggest potential for the resource to be reused in different contexts. As seen earlier, licensing material with the ND license means that no one can create a new version of your work or remix it. This has implications for practice: if someone wanted to change some of your examples, to make them more pertinent to their own context, this would not be allowed under the ND license.

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**Activity 4A**

Read these two posts from the Open Learning Network (OL.net) on [20 different reasons why you might want to](#)
remix OER and on ‘What are the barriers to reusing/remixing OERs?’

It’s useful to reflect on potential challenges and issues when remixing or reusing OER. These might help clarify what considerations need to be taken into account when creating an OER.

Use your reflective log to write down your responses to the following questions:

Which of these motivations and ‘barriers’, if any, resonate with your experiences and thoughts about remixing OER?

What might motivate you to share material you have created?

What challenges might you, or have you, faced?

How could you, or did you, overcome these?

Who could you ask for help or advice?

Could these challenges be addressed at the time of creating the resource?

4.3 What do I need to consider when creating or remixing an OER?

You’ve looked at a range of OEP, locating and attributing an OER, and using and curating and reusing others’ materials to create a new
OER but what about when you have material that you’ve created and you want to openly license it? Earlier the course looked at reasons educators might openly license their resources. The following sections of the course will look at how to openly license your work. However, beforehand, there are a few key questions to consider before you give a resource an open license.

Is it appropriate to go open?

Depending on what type of material you are thinking about openly licensing, you need to consider whether it is appropriate to apply an open license to a resource you’ve created. Issues of confidentiality and lack of control over reuse might be a concern, particularly if you are encouraging students to work in the ‘open’ or are involved in research. Or perhaps you are concerned about how your resource or material might be reused: what happens if someone reuses your work within a context that you find offensive? Have you any grounds for redress?

As mentioned earlier, once a resource is ‘in the wild’ and available for download/reuse under open license terms, it is very difficult to track its reuse, as people may retain copies of the material. This is why you cannot retract an open license; your only recourse is to remove the original resource so that nobody else can reuse it.

With regard to using material in contexts that the creator does not support, CC has a number of guidelines and suggestions on how to approach this issue, should it arise, as you are not necessarily endorsing reuse of your material. Read the Creative Commons guidelines ‘Considerations for licensors and licensees’ and ‘Frequently asked questions’ for more on these questions and more general considerations before openly licensing material.
Copyright or Intellectual Property

Once you have decided that you want to openly license a resource it is important to first ascertain whether the resource(s) or materials you intend to license actually belong to you or whether you need to seek permission to openly license the resource you want to include. For example, if you create material at work is it considered to belong to your place of work or you? In other words, who owns the intellectual property (IP)?

Ultimately, and because of the different and varied rules at different organizations and institutions, the best approach is to seek expert advice and consult with an appropriate person at your institution or place of work regarding the rights and intellectual property (IP) of materials you create at work. See the further reading section of the OEPS course for resources on these topics and Section 2.4 for examples of institutional open licensing policies.

Facilitating reuse of your OER

Are you happy to go ahead and openly license that resource and sure that you hold the copyright? That is great! However, before you start thinking about what kind of license you want to apply to your material, it’s worth taking time to think about how best you can facilitate reuse of the resource. To create a resource that can be easily found, reused and remixed can involve more than just openly licensing the material and ensuring that the open license will ‘travel’ with the resource.

David Wiley’s 5Rs which highlighted characteristics of OER (see also Section 2.5) are useful to consider when thinking about best practice for sharing OER and how one can best facilitate ‘openness’ and make it easier for people to use OER. For example, how can you help facilitate the redistribution of the resource you create? Or how
do you ensure that an OER can be remixed or reused? Moreover, how can you facilitate ‘ownership’ of a resource (the ‘retain’ of the 5Rs)? Take a look back at the matrix in Section 4.2 to consider how the material you choose to remix impacts on this.

In part this depends on what type of material you are openly licensing. If you share material online, how can you make it visible so that others can find it and easily determine that it meets their needs? For larger resources (e.g. courses) you will also need to make it easy for others to find specific content within the resource that they might want to reuse by providing an overview or summary. Think about how you can make your resource accessible to others, for example by providing it in different formats or by adding a transcript to a video?

It is useful, and often saves time, to address this type of question at the time of producing a resource (if you are making a resource from scratch or remixing/including OER in a new resource). To help make your resource visible and to facilitate reuse, here are some things to consider:

Inclusion of clear licensing and creator information within the resource itself and when you label the resource. This helps people to know who created the resource and how they would like it used. Remember that given the resource is ‘open’, if possible you want to provide this information in a way that will ‘travel’ with the resource as it is reused. If you have used others’ material this might limit how you can license your own resource (see Section 3.3) and you will need to ensure that you have included appropriate attribution in your own resource (for example with the material itself or in an acknowledgements section in your OER).

Appropriate metadata (labelling or description, e.g. tagging) will help people find your resource.
How can you make your resource stand out? Find out more about metadata.

If appropriate, learning outcomes and a summary of what topics are covered by a resource can be useful to help people find material and decide if what you have created is right for them to reuse. What information do you look for when you are searching for documents or resources? Remember, not everyone has time to review documents in detail before deciding whether or not to download them.

What format(s) will you provide your resource in to make it easier for others to use and reuse? Can the resource be provided in a variety of formats? It is difficult to remix material that is in PDF format. It is also important to consider that not everyone has access to what might be considered ‘common’ software packages. Find out more in this guide: ‘FOSS open standards/comparison of file formats’.

How can you make your resource accessible to others and where will it be hosted? It is important to ensure that as many people as possible can use your resource. Your institution or organization may already have guidelines on accessibility. If not, you might want to review The Open University’s accessibility guidelines or read more about accessibility and OER in Section 4.6.

Ideally, in order to fulfill the practice of 5Rs, you want to make sure your resource is easy to find and use, has clear instructions on how to reuse it and its copyright (the open license), in addition to giving some kind of overview and tagging to indicate what the resource includes (if appropriate). If possible, providing your resource in a few formats will also help facilitate reuse.
Activity 4B

Reflect on the following questions and write down your thoughts in your reflective log:

What kind of information do you think it would be useful to include with a resource?

What challenges or concerns do you have about releasing your own material?

How could you mitigate/address these?

4.4 What license should I choose?

Earlier sections of the course covered some considerations and issues that might arise when thinking about whether to openly license your material. As seen earlier, some institutions and organizations advocate the licensing of materials as CC-BY to facilitate reuse or have developed clear guidelines on intellectual property (IP) and copyright, which may or may not stipulate use of a specific license. More generally, licensing some material on restrictive open licenses such as the non-derivative (ND) CC license means that people can reuse the material ‘as is’ but not remix it. Similarly, a non-commercial (NC) license means that the resource should not be reused within a commercial/for-profit context. However this arguably inhibits some types of reuse (see Section 2.2).

The last section briefly looked at some of the concerns you might
have regarding openly licensing your material and where to go for advice on your questions and concerns. However, once you are happy to openly license your resource, the next stage is to choose the most appropriate license. The section ‘The right license for the job’ from the Get CC Savvy course on Peer 2 Peer University (P2PU) guides you through the main considerations. The course also includes the Creative Commons step-by-step chart to guide you through what you need to consider when choosing an open license. Section 4.6 also includes advice on best practice when licensing specific types of resource (e.g. images, videos).

Activity 4C

Earlier in the course you thought about the type of OER you might look for and what kind of license would enable you to reuse a resource most effectively for your context.

Now it’s time to think about how you would license the kinds of resources you might create and share. Use the table in your reflective log to describe your resource idea, your chosen license and explain why you chose this license (e.g. what restrictions – if any – does this put on the material's reuse potential?). Don’t worry if you’re not sure how you will make your resource available yet; Section 4.3 of the course looks at ways you can share your material with others.

Table 3 Choosing a CC license
4.5 How can I share my resources with others?

So far this course has considered how to create an open resource and which open licence would be most appropriate. But although open resources are not necessarily available online or in digital format, it is important to think about how to share the resource appropriately to facilitate reuse.

If your resource is for a particular subject, you might want to share it back on an appropriate subject-orientated repository. Or if you take a photo or other resource from a website, let the author know how you reused it by commenting on it and providing a URL. If you remixed a resource using existing content, you might want to share it back to the same site as you found the original resource upon which it is based.

Section 3.2 looked at different places to find OER. Many of these repositories and sites are also places to share your open materials,
or enable you to openly license your content as part of the upload process (e.g. YouTube and Flickr). For example:

- Humbox (humanities materials)
- OpenLearn Works
- Open Library of the Humanities.

Many repositories such as OpenStax CNX (formerly Connexions) and OpenLearn Works have been developed so that they showcase not only the original resource but also additional assets or modified versions of original course materials that have been created by others. This enables you to see how a resource has developed, as well as potentially saving time by being able to reuse a version that may be more appropriate for your own setting than the original.

Concise information so that people can review your resource quickly and a less restrictive license that enables creative reuse help to facilitate this process.

In some instances, sharing materials has resulted in communities being developed around a resource, with people contributing add-on materials to a core resource. One good example of this is the open textbook *Introductory Statistics*, which one of its co-authors, Barbara Illowsky, described as becoming a ‘community’ resource, as so many people using it have contributed suggestions, additional examples and test banks, etc., to it. You can read more about the textbook and the backstory to its creation in this interview.

Other open textbooks have been collaboratively created, for example by using the ‘sprint’ method, where colleagues in the Canadian province of British Columbia created a Geography textbook during a period of four days as part of their Open Textbook project. The educational technology organization Siyavula in South Africa adopted a similar approach when creating materials.

Activity 4D
Do you have particular websites or repositories where you share materials openly with others (e.g. Flickr or Slideshare)? Do you have any recommendations for places or ways to share? To help us crowdsource ideas, share your suggestions on the OEPS course community forum.

Now take a moment to review your table from Activity 4C and, if you haven't already done so or want to add further suggestions, note down some ideas about how you would share your resource.

4.6 If you want to know more

Each If you want to know more ... section of the course thematically presents additional material and resources on the topics for that section of the course.

Understanding open practices and open educational resources

Watch these two videos, produced by the Orange Grove Repository, which explain how to find and remix OER: ‘Creating OER and combining licenses – full’ (part one) and ‘Creating OER and combining licenses part 2’ (part two). Part two of the video in particular takes a look at more ‘restrictive’ licenses such as the non-derivative license (ND), which does not allow remixing of material.

Here are a range of resources that explore some of the best
practices, issues and challenges concerning the creation and remixing of OER around the world:

**OER: An Asian Perspective** brings together a range of case studies on the varied use of OER across Asia.

To find out more about what has been happening by geographical location take a look at Creative Commons (CCs) country-by-country list of *the most compelling OER projects and implementations of CC*.

Where OER was created, the implications of a resource’s origin and the need for reversioning or ‘localizing’ material for different contexts is discussed in depth in: ‘The role of OER localisation in building a knowledge partnership for development: the TESSA and TESS-India teacher education projects’ (Buckler, A. Perryman, L-A. Seal, T. & Musafir, S. (2014).

‘Cultural issues in the sharing and re-use of resources for learning’ (Littlejohn, A & Margaryan, A. 2006) takes a closer look at barriers and solutions to reuse.

Using, reusing and remixing open educational resources

Here are some resources to help answer questions you might have about openly licensing your own material:

The Creative Commons wiki on ‘Considerations for licensors and licensees’ provides an in-depth overview of what you need to think about when openly licensing a resource or using OER.

Becoming an Open Educator – OEPS 1.0 Course | 303
The Creative Commons wiki FAQ provides useful background reading on Creative Commons as an organization and also general information on using CC materials and licenses.

Browse New Media Rights ‘Legal and how-to guides for independent creators, internet users, nonprofits and small businesses’ for advice on creating online media.

If you are based in the UK, it is worth familiarizing yourself with the UK government guidelines in ‘Exceptions to copyright’.

Here are some resources to help you remix differently open licensed resources:

- Some OER repositories provide users with the ability to remix material directly on their platform, for example ‘Creating a remix on OER Commons’.

- The Open Education Handbook lists a range of tools that you could use to remix OER, including repositories such as OpenStax CNX, see ‘Editor tools for building and remixing OERs’.

- Test your understanding of different license combinations and play David Wiley’s OER Remix Game.

- Although written for the New Zealand context, this Digital New Zealand Mix and Mash guide is a great resource and contains information on the history of remix and copyright, why acknowledging your sources matters, ways to discuss remix with your students, places to look for different types of OER and how to remix photos and create infographics. Read more about the background to this document and check out lesson plans for teaching CC to students in
The STEM OER Guidance Wiki brings together a range of documents regarding the creation, use and sharing of OER from HEA/Jisc OER projects. Further resources and articles you might want to explore:

If you're interested in exploring the facilitation and possibility of remix and, by extension, mash-ups, read ‘Dr. Mashup or, why educators should learn to stop worrying and love the remix’ by Brian Lamb.

Find out more about the rationale and outcomes of OER remix in ‘An OER online course remixing experience’ (Mallison, BJ & Krull, G. E.) OpenPraxis, 2015, 7 (3).

Now go to Section 5 of the course.

5. Putting Open into Practice

- 5.1 Introduction
- 5.2 Sharing processes and outcomes
- 5.3 Using social media in your context and open tools
- 5.4 Measuring impact
- 5.5 Over to you
- 5.6 If you want to know more
- Acknowledgements

5.1 Introduction

This section of the course takes a closer look at a range of open practices, why and how you might want to consider measuring the
impact of the resources you create or use, and suggests some ideas for next steps in developing your own practice.

Learning Outcomes

By the end of this section of the course you should:

- have explored a range of other open practices
- have a better understanding of the challenges and benefits of measuring the impact of a resource you create or use
- considered a range of possible next steps and planned your own ‘open’ journey for the next few months.

5.2 Sharing processes and outcomes

Earlier in this course you looked at different interpretations, or characteristics, of ‘openness.’ Openness can refer to how one does something (in other words the processes or tools that are used) and the outputs produced, but it always takes place within a specific context.
Sharing methodologies, data, practices, ideas and processes

Creating OER involves sharing resources you have created, but what about sharing the progress of a project, idea, research or sharing data?

For example, you may work on a project. How do you let others know about the project’s progress and share outputs? Often these are shared only with selected audiences. Unless there is reason for not sharing the project’s progress and documentation beyond identified stakeholders (e.g. for confidentiality reasons, see Section 4.3), would being more transparent help the project to develop, engage new audiences and/or receive feedback?

Making blogging or tweeting part of your everyday practice might involve an initial change in how you work to ensure that you make time for this type of activity. You can read more about open dissemination in the ‘Open dissemination’ and ‘Reflecting in the open’ sections of the OER Hub course Open Research.

Open research and open access

Maybe your role has a research component or you have an interest in research? You might be familiar with the terms open access and open research. The former aims to make data and research outputs such as peer-reviewed research papers available openly so that everyone, regardless of whether they are based at an educational institution or have a subscription, can access them. You can browse a Directory of Open Access journals (DOAJ) to find out what journals exist in your subject areas. It is also worth remembering that you can often upload a pre-proof version of journal articles to sites where you can showcase your research, such as ResearchGate and Academia.edu. Open peer review of journal submissions rather than
anonymous closed review is also gaining traction, with an October 2015 study revealing that reviewers were ‘more constructive’ and offered ‘slightly higher quality’ appraisals of work when the review process was public.

Open research is about making public not just the end results of research but the process, methods, instruments and tools that are developed as part of the research process. Social media and blogging is often key to this process (find out more about digital scholarship). You might already use social media such as Twitter or have a blog, but these can be utilized in ways to share and develop ideas before they are published formally. Where appropriate, anonymized datasets are also shared as part of the open research process. You have an ethical obligation to ensure that data is anonymized appropriately, and you will need to ensure that you have done this before uploading a dataset (perhaps to a repository such as Figshare).

5.3 Using social media in your context and open tools

Section 2.5 highlighted the importance of digital literacy. This section explores the role of social media and open tools in open practice and highlights good practice examples.

Blogging, Twitter, open badges and social media

Another example of ‘opening’ up processes is, where appropriate, the development of open online courses or incorporating social media or blogging into a course’s activities. Some universities host courses on WordPress, for example. Katie Sykes at Thompson Rivers University developed Lawyering in the 21st Century on WordPress
so that students could develop ‘a roadmap for [their] legal career’ whilst participating in regular ‘partner meetings’ and collaborating on a range of projects. The University of Dundee’s Medical School has also utilised WordPress, whilst the University of Mary Washington has developed *A Domain of One’s Own*, enabling students and teachers alike to host courses and blogs. To help support teachers in the effective use of WordPress, educators at the University of British Columbia have developed an open course on open pedagogy: *Teaching with WordPress*.

You could use Twitter or other social media (e.g. Pinterest) as a resource, as suggested by the University of Dundee’s Natalie Lafferty:

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**Using Twitter for teaching**

Effective use of social media in teaching is critical and Natalie spoke at length about how her own use of Twitter helped inform the way in which she encouraged students to engage with the platform:

And I think it’s partly because of how we, we think – oh! Let’s use Twitter in the classroom – without really thinking about how we use it as professionals. And as professionals we use it as a networking tool and that’s where my learning network is. I pose a question and I learn so much from people. And students have their Facebook groups but they don’t look more widely.

So it’s interesting when I’ve looked at Twitter more recently what I’ve tried to do is to say: Twitter is a place to filter and search for OER that’s validated by professionals.

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And I did a teaching session recently with some medical students who are doing a BMsC in Teaching in Medicine and I said I want you to look up this hashtag #FOAMed and see what you see. And it was like ‘Gosh! I just didn’t realize there was this stuff on Twitter.’ And it opened their eyes to it because they’d been really put off as to how they’d used it previously in the curriculum. And they saw straight away that there was all this stuff that was really relevant and the fact that it was being shared by doctors and consultants and professors. And they realize that actually there is a sense of peer review and validation.

Because I think that’s always the issue people have around OER, is that well actually is it accurate? You know, all this kind of stuff. And I think certainly from the FOAMEd community what you do see there are people constantly giving feedback, people are improving and changing things. And things get updated much more readily than a textbook. And I think the challenge for me is how do we broaden what we’ve learnt in medicine across the institution ...

Extract from ‘Setting the standard: students as co-creators of OER at Dundee University’ – interview with Natalie Lafferty

Other educators create videos as part of their course, or even use the videos to deliver lecture content with face-to-face time then
dedicated to practical activity. Bernd Porr at the University of Glasgow has adopted a ‘flipped’ approach to his Digital Signal Processing (DSP) classes. Read Bernd's story on the OEPS Hub, including tips for creating open access videos.

While awarding a badge or statement of participation to learners for engaging with course materials and activities is not necessarily an open practice, if you are developing open material with an assessment element attached to it you might want to consider using open badges as a way of acknowledging your learners' achievements. Borders College in Scotland is using open badges ‘...for best practice in Moodle use’ by educators and learners. You can read more about Borders College, and different badging platforms in JISC's ‘So what are open badges?’ or review open badging platforms such as Mozilla Open Badges and Credly.

Perhaps, while developing your materials, you might want to get a range of perspectives on the course content and decide to solicit feedback through open peer review of your material (as in the case of this course) before you publish your finalized course. Or perhaps your students could use blogging or other social media for assignments? If you're not sure where to start, check out the short presentation ‘An introduction to Twitter for teachers’ before moving on to Section 5.6.

Use open tools

The Open Source Movement, which promotes collaborative development of openly available code, software and tools was mentioned briefly at the start of the course. You might look to explore, use and even develop this type of resource as part of your everyday practice. Using open source tools and software ensures that everyone has access to the software packages they need when accessing materials. For example, Moodle, the learning management
system used by many universities, is open source. You can find a list of open tools in Section 5.6.

5.4 Measuring impact

Pinpointing the impact of a specific factor (e.g. whether or not your performance has been affected by recent training or if the introduction of a new scheme or resource is making a difference) when there are many variables involved, can be difficult. The difficulty of measuring the impact of OERs can be intensified further, as it can be challenging for creators to track what happens with their resources, how and where they are reused and what kinds of changes are made to them as they develop. This is why it's good practice, wherever possible, to share back how you have reused someone's materials with the creator, for example by leaving a comment where you found the original resource and by writing a review of resources in OER repositories if such a facility exists. (You can rate and review resources on a number of platforms, for example OpenLearn Works or OpenStax CNX). Long-term evidence for the impact of using a resource or learner/student feedback could also be shared or reported on.

There are a number of circumstances where measuring impact is important. You might want to see if changing resources increases retention or test scores in your class. Or you might be training a group of colleagues and wonder whether people make any changes to their own practice as a result of their participation. Assessing what kind of impact any changes to practice might have is an important consideration, and can provide evidence for best practice whilst building up a body of evidence for the impact of a resource in a particular situation. Understanding impact is also important for reflecting on what one might do differently or improve on in the future. Impact data is particularly important in relation to OER as there is an emergent body of evidence and a constant need to
explore the multifaceted impact that open material has on learners and teachers alike.

But while it’s obviously important to measure impact, it is not necessarily clear how one can do this effectively; the diffuse nature of OER means that tracking a resource's use is tricky. Tools that can help you to do this include that is embedded in an OER and enables reuse to be tracked. Two such examples are Track OER and CaPReT at MIT. A feature has been developed for OpenLearn Works that alerts the creator of content when their OER is copied to a new course in OpenLearn Works. Some people look at metrics such as the number of downloads or page views. Others conduct surveys. If you have badged your resource or issued a statement of participation, you could use the number of badges or certificates you award as a measure of engagement. However, do these methods constitute measuring impact? What metrics are most effective for particular resources or practices? And what about other variables or factors that might be making a difference?

Further, there are types of impact on practice that are difficult to measure. The OER Research Hub looked at a range of impacts that OER might have on educator practice and found, for example, that ‘78% of community college respondents felt that using OER encouraged them to collaborate more with colleagues’.

Activity 5A

Reflect on the following questions:

• What metrics are, or could be, important for the resources you create or use?
• Would measuring impact change the way you design a resource?
How might measuring impact change your practice?

Look back at the factors you considered important when creating your own OER. Has thinking about measuring impact changed the way you could approach OER creation? Write down any thoughts in your reflective log.

5.5 Over to you

Throughout this course, you've explored many facets of open practice whilst also looking in more detail at the practicalities of open licensing within the context of OER. So what's next? Here are some resources for activities you might want to try and some examples of sharing best practice to start you thinking about next steps you could take to make your own practice more open.

Get started ...

• Join a community! Ask questions and share ideas about open practice. Start by looking at the OEPS Hub.
• Look at and contribute to mapping OER practice or contribute to and explore OER impact evidence and policy.
• Can you incorporate OER into your own work? Could you make a resource using openly licensed material and share it with others?
• Commit to sharing a percentage of your own material in the open.
Try something different …

• Share your own experiences by blogging. Read ‘Blogging as reflection’.
• DS106 (Digital Storytelling 106) has a Daily Create where people share their own makes/responses to a fun task that’s posted each day. See also the Daily Create as a P2PU Challenge.
• Create an open course using a platform such as OpenLearn Works or Peer 2 Peer University’s Course in a Box (P2PU).

Remember if you make something, to share or publicize it so that others can use it too.

Spread the word …

• Discuss OER with colleagues or get together to explore the potential of OER at your institution or organization.
• Work with colleagues or students to repurpose or create materials. Good examples of different types of practice can be found via Siyavula and BCcampus (see Section 4.5) and Byron High’s creation of their Statistics Course and the University of Dundee’s Medical School.
• As well as talking with colleagues about using OER, you can also talk with students or clients about the types of resources you are using. What makes them different from resources you previously used, why are you using them and what impact (if any) does it have on your students? For more ideas, check out P2PU’s course Teach Someone Something with Open Content.
Throughout the course you've reflected on different types of ‘open’ practice and considered different ways openness might impact on everyday practices. Review your reflective journal and consider the following questions:

- In what ways could you incorporate OER and/or more open practices into your own context?
- What could you do in the next 24 hours? The next week? The next month?
- What kind of impact might these changes have?
- Have you got any suggestions or ideas for ‘going open’ that are not included above? Share your ideas on the [OEPS Hub Forum](#) and let others know how you get on with planning your own ‘open journey’.

Write down your responses and ideas in your reflective log. Is there a colleague or friend with whom you can share your ambitions or ideas?

5.6 If you want to know more

Each *If you want to know more* ... section of the course thematically presents additional material and resources on the topics for that section of the course.

Understanding open practices and open educational resources

To develop your understanding of OER and OEP further, you could:
• Delve deeper into the concept of ‘openness’ and where ‘open’ changes your approach to different (e.g. open access, open data or open research) Peer 2 Peer University (P2PU) offer a great range of courses developed and run by the community on different topics such as copyright and open licensing.

• Work through the Creating open educational resources course on OpenLearn.

• Take a look at Edutopia’s ‘Open educational resources (OER): resource roundup’, which gives an overview of how and where to look for different types of OER, or open material for particular occasions or themes (e.g. national holidays).

Using open educational resources

Here is a selection of resources to explore:

Measuring impact

• This CETIS publication gives great advice on how to measure the impact of OER (see p. 69).

• The OER Research Hub researches the impact of OER on learning and teaching and also curates other evidence for OER impact.

• The Open Education Group’s Review Project brings together peer-reviewed research on OER.

Open pedagogy

• Viv Rolfe reflects on open pedagogy and her participation in the University of British Columbia’s course Teaching with...
WordPress in ‘The pic-a-mix of open education’.

- Check out ‘The pedagogy of open learning’, a section of the Creating open educational resources course on OpenLearn.
- You may remember Natalie Lafferty from earlier in the course. Read her presentation on ‘Students as producers of open learning’, which gives more background and insight into Dundee University’s medical school students as co-creators of OER.
- Jesse Stommel’s presentation ‘Open door classroom’ explores ‘... the ethical and pedagogical considerations in having students use open resources but also on learning in public, doing public work, and engaging with open learning communities.’ If you’re interested in more hands-on activity and maker spaces, read Laura Fleming’s ‘A librarian’s guide to OER in the maker space’.

Twitter, blogging and social media

- The European Commission funded Open Education Europa is curating and compiling a list of best practice from across Europe.
- Find out more about ‘30 innovative ways to use Google in education’.
- Interested in improving your Twitter skills? Read ‘Tweet like a ninja – updated!’ by Gwyneth Jones, aka The Daring Librarian.
- Interested in external and internal engagement at your organization or institution? Read Dave Webster of the University of Gloucestershire’s ‘Lessons learned: how departmental social media use in universities needs to evolve and grow’.
Open research and digital scholarship

• The OER Research Hub course on Open Research on P2PU covers the meaning of open research, how to be ethical and open and disseminating and reflecting in the open.
• ‘Why open research?’ takes you through the main reasons for ‘going open’ whilst providing lots of great practical advice and resources.
• The P2PU course Open Science: An Introduction course explores what open science is.
• Curious about what specific terms mean? The Right to Research Coalition has created an Open Research Glossary for you to consult.
• Thinking about ethical issues? Read ‘The ethics of digital scholarship’ by Martin Weller, or download his book The Digital Scholar: How Technology is Transforming Scholarly Practice.
• Still wondering why open access makes a difference? Read ‘Why I don’t care about open access to research – and why you should’ by Michael White.

Open tools

Here are some open tools that you could use or incorporate appropriately into your teaching:

• ‘Open source software’ (Wikipedia definition)
• ‘101 open source tools for developers’
• ‘Examples of open source software’
• GitHub (for code)
Open data

• Want to find out more about open data? Read the Open Data Institute’s ‘What is “open data” and why should we care?’ or check out this Q&A with Marieke Guy (formerly of Open Knowledge Foundation).
• The Open Data Handbook sets out the case for using and releasing data in the open and provides useful information on what you need to consider.
• OpenDataScotland.org has made a range of open datasets available, whilst the Open Knowledge Foundation has listed organisations and public bodies in Scotland that release data openly in its Open Data Catalogues.
• The Open Data Research Network’s ‘Exploring the emerging impacts of open data in developing countries’ is mapping the different uses and impacts of open data around the world.
• Find out more about using Figshare to share your data and research.

Open accreditation and open badging

Find out more about different ways open badges are being utilised by these organisations and initiatives:

• University of British Columbia’s Open Badges UBC
• The Open University’s badged open courses
• Caring counts: a self-reflection and planning course for carers
• Social Partnerships Network courses
• Understanding Parkinson’s for health and social care by Parkinson’s UK and the OEPScotland project
• Development impact & you: learning modules – DIY Learn online learning program in innovation.
Acknowledgements

This chapter is a cloned version, with minor modifications, of a course that was developed as part of the Opening Educational Practices in Scotland (OEPS) project funded by the Scottish Funding Council, which supports and builds best practice in open education in the Scottish HE, colleges and third sectors.
This chapter includes guidelines, best practices, and materials for planning an OER project. Topics include Planning, Workflow & Development, Outlining, Compiling & Writing, a Quick Guide to Pressbooks, and Checklists.
6. Introduction: Planning an OER Project

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This chapter introduces strategies for planning an OER project.

The Planning, Workflow, & Development section offers guidelines on planning, workflow, and development of Open Educational Resource (OER) Textbooks. The first section, planning, offers selected guidelines from the BCcampus Self-Publishing Guide. These have been modified for American English spelling conventions. The second section, workflow and organization of labor, offers selected guidelines from the BCcampus Self-Publishing Guide on project outlines and timelines, and on technology accounts and training, as well as a sample development workflow used for a previous UH OER text.

The Outlining, Compiling & Writing section offers guidelines and suggestions on outlining, compiling, and writing your OER textbook and materials. The Outlining guide includes 5 rules of textbook development, structuring your open textbook, and a textbook outline. The Compiling guide includes suggestions on collecting, organizing, and naming files and resources, version control of files and resources, and making sure everyone who needs access is able to access the files and resources. The Writing guide includes suggestions on consistency in tone, audience, planning for multiple learning styles, and sample style sheets, as well as information on glossaries and indexing.

The Pressbooks Quick Guide offers a quick guide to Pressbooks, including a series of short video introductions to key topics, short powerpoint guides, Pressbooks webinar recordings from BCcampus, a list of post-secondary institutions in the U.S. and Canada with their own Pressbooks catalogs, and frequently asked questions about Pressbooks.
This chapter offers guidelines on planning, workflow, and development of Open Educational Resource (OER) Textbooks. The first section, **planning**, offers selected guidelines from the BCcampus Self-Publishing Guide. These have been modified for American English spelling conventions. The second section, **workflow and organization of labor**, offers selected guidelines from the BCcampus Self-Publishing Guide on project outlines and timelines, and on technology accounts and training, as well as a sample development workflow used for a previous UH OER text.

When building a team, it will be useful to plan out and write down who will take on which roles. You may have roles such as: contributing authors, leadership, management and administrative roles; and OER professionals to help you. It will also be useful to think about and write down a plan for any necessary training, such as technology accounts and technology training, Open Pedagogy, professional development, and best practices for Open Pedagogy, OER textbooks, lesson planning, and instructional materials.

The third section offers selections from the BCcampus Self-Publishing Guide related to **OER textbook development**.

Below is a linked table of contents for this chapter.
Planning

Table of Contents

- Experience
- Quality
- Who Owns Copyright
- Contributing Authors
- Identify Support

Workflow and Organization of Labor

- Project Charter and Timeline
- Technology: Accounts and Training
- Sample Development Workflow

Developing Open Textbooks

- Five Rules of Textbook Development
- Open Textbook Formats
- Quick Guide to Equity, Diversity, and Inclusion, and Indigenization
- Textbook Outline
- Create a Style Sheet
Experience

How does your experience match the requisites of open textbook writing and publishing?

For many, writing and self-publishing an open textbook is unfamiliar terrain. However, identifying pertinent skills from past and current professions will help you gauge how your expertise fits with this new endeavor and where you need to draw on the knowledge of others to fill in the gaps. Publishing an open textbook is not a one-person job, so use the information you generate from this chapter as the springboard from which to build your team.

Publishing experience

As you consider which of your talents might transfer to producing and publishing an open textbook, write down related positions you've held. These might include:

- Editor
- Graphic designer
- Instructional designer
- Librarian
- Marketer
- Project manager
- Publicist
- Researcher
- Writer

Next, by each role, describe the details of that job. Then fill out the below table by matching your skills with the knowledge needed to produce an open textbook. The skills gaps can be filled by others. (See Identify Support.)
### Identify the Gaps

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### Writing experience

Previous writing experience comes in handy for both you and your contributors. Seasoned textbook authors know that this kind of project can take one to three years to complete when all stages are factored in: consultation, planning, researching, writing, and publication. The writing portion alone can range from six to
eighteen months, depending on the length and complexity of the book. Knowing this upfront and understanding the determination and specific skills required to complete the task helps set the stage for successful authoring.

If you haven't authored a textbook before, create a list of other writing assignments you've completed or contributed to. These might be:

- Textbook(s) in your field or another
- Book(s), fiction or non-fiction, in an unrelated field or subject
- Chapter(s) for a textbook or other book
- Course content; course packets; supplementary material for a course
- Article(s) published in a professional journal
- Article(s) published in a magazine related to your discipline
- Reviews about books in your field
- Letters to the editor for a professional journal in your field
- Professional blog about subjects in your field

Qualifications as a writer — in any capacity — prepares you in other ways too. As a writer, you will know what to look for when selecting colleagues as contributing authors. (See Contributing Authors.) Although writing is not synonymous with book production, many authors are acquainted with at least some aspects of publishing. This know-how, however minor, can be very handy when planning an open textbook project. (See Textbook Outline.)

**Quality**

Questions about the quality of open educational resources has been cited as one of the top three concerns among faculty who are considering adopting OER, including open textbooks, to use in the
Therefore, as an author of a textbook, it is vital to factor in the quality of your work during the planning stages.

The quality of an open textbook is determined by many different things. When designing a textbook, an author should consider the quality of the following aspects:

1. **Information.** Is it current, complete, relevant, and well-cited?
2. **Design.** Is it well-structured and consistent? Does it include pertinent learning objects and align with learning objectives for the intended curriculum or curricula?
3. **Accessibility.** Is the content in the book accessible to the greatest number of students?
4. **Copy.** Is the writing clear and concise? Is the text grammatically correct with no spelling errors? Is the writing style, spellings, layout (use of headings, bold, italics, etc.) used in an appropriate and consistent manner? Are all figures, tables, graphs, and other learning objects clearly identified, numbered, and labelled for easy reference? Is a style guide being used? Has a style sheet been created for the book?

Open-copyright licenses allow people to share and build on knowledge, both of which are beneficial, and technology has made these tasks faster and easier. However, quick and simple sharing can also perpetuate an error made by the original author.

If you decide to include a portion of a colleague's openly licensed work in your textbook, review it carefully as you would any supporting academic source.

Who Owns Copyright

Who are the copyright owners for your open textbook?

Determining who will own copyright for the various components in an open textbook – before writing begins – is very important. This was one of the first items that BCcampus project managers discussed with authors, and the results were included in the contracts they signed. We learned early on that a faculty's contract with their employer might state that the institution owns copyright for all writings produced during employment. Therefore, we needed to be careful about copyright ownership: was it with the author or the author's employer? (See Copyright and Open Licenses.)

It's possible that, as the primary author and publisher, you will decide to pay contributors for their work and their copyright. If this is the case, outline this condition in those contracts. A writer who is paid this way is called a **write for hire**.

Here are potential copyright owners participating in the creation of an open textbook.

- Primary author
- Primary author's institution
- Contributing authors
- Photographers
- Illustrators
- Graphic designers or others who contribute tables, graphs, charts, etc.
• A contributor’s institution

It is not usual practice to include copy editors and proofreaders as copyright holders. Instructional designers, who assist with the layout of a textbook but do not contribute content, are also not included.

Once you’ve established who owns copyright to specific material in the textbook, decide how you will acknowledge each creator for their work. This information should be recorded in your project timeline. (See Project Charter and Timeline.)

Talk to the copyright librarian or other intellectual property (IP) expert at your institution for additional assistance or questions on this topic. (See Copyright and Open Licenses.)

Contributing Authors

None of us is as smart as all of us.

– a Japanese proverb

As you plan the content of your book, think about experts in your field who might write on a specific topic. To help make a decision about who to approach, ask yourself if contribution from an individual will add value to your textbook and whether or not they have the experience to author a chapter or section for a textbook. Familiarity with open education is a plus.

The BCcampus Open Education team oversaw the production of fifty-four new open textbooks and ten major adaptations during its initial phase. Inviting collaborators to participate was left to the lead author who had proposed the textbook idea to us. It was

felt that, as the subject-matter expert, this individual was most qualified to make these decisions. From the sidelines, our project managers watched the interplay between the primary author and their contributors. We learned what worked and what didn't, and how problems could be avoided in the future.

The biggest lesson learned was the importance of establishing expectations for your contributors before writing begins. If you decide to invite one or more colleagues to provide material to your textbook, determine the parameters of this business relationship and then clarify with each author the following points:

1. Who will own copyright
2. Disclose the type of open-copyright license that will be used to release the book. Be prepared to answer concerns and questions for colleagues not familiar with open textbooks.
3. Decide if contributing authors will be compensated for their efforts. Be clear about how much they will be compensated or paid.
4. Provide written details about their contribution, including:
   1. the topic – be specific
   2. length of their work by word count
   3. layout of the contributing piece including sections and subsections, number and type of images, tables, graphs, or other support resources
   4. the timeline and deadline for the first and subsequent drafts
   5. the timeline and deadline to review questions from the copy editor and make revisions

Use a contract or written agreement to clearly describe these expectations so there are no misunderstandings. (See Appendix 4: Contracts.) This will be a valuable document to reference if either party has questions during the writing process.
If you plan to include students as contributing authors, refer to A Guide to Making Open Textbooks with Students [New Tab].

Identify Support

Many hands make light work.

— English Proverb

Self-publishing a book is not new. With advances in technology and the advent of the Internet, this endeavor has been made that much easier. Still, producing your own book — especially a well-written, high-quality textbook — is a big undertaking, and for best results should include a team of individuals, each armed with skills that would otherwise be filled by employees at a publishing firm. Remember: When you self-publish, you become the publisher.

BCcampus published over fifty open textbooks. Each author was assigned a project manager — similar to a managing editor — who organized book layout, scheduled copy editing and proofreading, attended to editorial development, ordered the textbook cover, and saw that the book was promoted and posted in the B.C. Open Textbook Collection. When we moved to the next phase of our work and encouraged authors to look to their post-secondary institutions for support, it was recognized that many of the publishing tasks

– previously filled by BCcampus staff – fell to the author. This realization was one of the impetuses for writing this guide.

The Publisher’s Role

A publisher, particularly one that specializes in textbooks, is responsible for managing all aspects of the book’s production, save the writing; that’s the author’s job. Still, the publisher guides the development and refinement of the author’s ideas and words. Below are some of the roles typically filled by the publishing team.4

- Project management. The managing editor tracks assigned tasks for all staff, including the author.
- Book outline and layout. Publishers typically require a book outline from the author. However, a developmental editor will review it to ensure that all necessary elements are included and properly organized.
- Design (textbook cover, font, and layout) and art direction (illustrations, graphics, tables, and figures)
- Copy editing and proofreading
- Marketing, promotion, and distribution

Find help

As you list how and who will pay for your textbook (see Who Pays For This), include your support – or publishing – team. At your home institution, look for support from:

- Instructional designers (for design and layout)
- Graphic designers or illustrators (for images)
- Librarians (for copyright and license information, and help evaluating resources and repositories)
- Technical support (assistance with authoring platforms, videos, and audio files)
- Student assistants (for gathering external resources and working as fixers). (See Fix as You Go.)

Outside of your post-secondary institution, look to:

- Colleagues at other institutions
- Your professional organization
- Open-textbook and OER communities

As the OER movement advances, several groups have come forward to support the efforts of open textbook authors and self-publishers. Below are some to consider.

- **Rebus Community** [New Tab] is made up of faculty, staff, and students from post-secondary institutions and other organizations from around the globe who support the work of open textbook authors and projects. Talents include project management, copy editing, proofreading, writing,
and other skills.

- **GitHub** [New Tab] is a development platform that includes open-source projects such as open textbooks. For more information, see Appendix 2: Developers and Technicians [New Tab] in the BCcampus Open Education Pressbooks Guide [New Tab].

- **CCCOER** offers a Community of Practice for Open Education [New Tab]. Their community email [New Tab] provides an easy way to ask colleagues questions about open education, open practice, and where to find specific open textbooks and OER.

For more information, see the Authoring Open Textbooks chapters on Community Support [New Tab] and Institutional Considerations [New Tab].
Who Pays for This

In terms of money, open textbooks are free for students, faculty, and anyone else to use. But they're not free to produce. If you decide to write and publish an open textbook, you need to think about how you are going to compensate not only the people who help you, but yourself as well. The cost of producing an open textbook is often underestimated by authors.

Before you begin, make a list of the individuals you will need to support your project and resources.

Funding and compensation comes in different forms. Besides cash, in-kind contributions should be considered. For example, your institution may offer support by providing access to instructional designers, librarians, or in-house copy editors. The OER Grants offered by BCcampus Open Education to faculty and staff in this province stipulate that:

(s)uccessful applicants must secure matching funds by their institution (for the requested OER Grant amount) in advance of submitting a proposal.  

Typically, the creation of an open textbook is funded (often through grants) by:

- Open textbook projects

Government (provincial or state, federal)
• Philanthropic organizations (e.g., Hewlett Foundation, Bill & Melinda Gates Foundation)
• Professional societies (e.g., Association for Psychological Science)
• Consortia (e.g., Center for Computer-Assisted Legal Instruction)
• A faculty author’s post-secondary institution (grant, release time, in-kind contributions, other)

**How BCcampus Open Education Began**

On October 16, 2012, at the annual OpenEd conference in Vancouver, the then British Columbia Minister of Advanced Education, the Honourable John Yap, announced the creation of the B.C. Open Textbook Project. The goal of the project was to make higher education more accessible by reducing student cost through the use of openly licensed textbooks. BCcampus was tasked with coordinating the project because of its ten-year experience.

funding open educational resources (OER) through the Online Program Development Fund.\textsuperscript{7}

While open textbooks are still important, the B.C. Open Textbook Project is now known as BCcampus Open Education, a title that better describes its participation in open education initiatives.

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**Workflow and Organization of Labor**

Table of Contents

- Project Charter and Timeline
- Technology: Accounts and Training

Project Charter and Timeline

Writing and publishing an open textbook will take longer than you think. Plan for thinking time. Be prepared to incorporate new ideas as you conduct your research. Be ready to cut material that doesn’t work. Our team began each textbook project with a well-thought-out plan and timeline. Early meetings with the author included the communication plan, instructions on what each stage would entail, deadlines for each chapter, how and when the copy editors would contribute, and all phases that led to the release of the finished product.
We have created templates to help you plan the many details of producing a textbook:

- Project-Charter template [Word file]
- Project-Timeline template [Word file] (This template can be used to record and track specific tasks throughout the book’s creation process and the individuals who will be performing them.)

Timeline tasks

There are many steps to producing a textbook, and each of those steps involve multiple responsibilities. As you record these on your timeline, calculate how long each will take – and then add some additional time as a buffer. (See Appendix 5 for checklists that match the chapters and chapter sections in this guide.)

1. **Research.** Track all references carefully as would be done for any academic work. If you are using openly licensed text, images, or other resources, place close attention to the legal requirements for the license. (See Research.)

2. **Gather or create resources.** Resources may include photos, illustrations, graphs, tables, figures, videos, audio files, or spreadsheets. Remember, if you’re using someone else’s work, it must be openly licensed or in the public domain. If a resource is copyrighted and all rights are reserved, you may provide a link to it. However, linking should only be used as a last resort when an openly licensed resource cannot be located. (See Resources: Only the Open.)
3. **Write the book outline.** This includes chapters, chapter sections, front and back matter, learning objectives, exercises, key terms and takeaways, and the glossary. Outline how chapters and chapter sections will be laid out. (See [Textbook Outline](#).)

4. **Find supplemental resources.** Not all textbook authors or publishers create ancillary resources, such as test banks, for their books. However, many instructors and students find them helpful, and textbooks with ancillary resources are often highly adopted. Determine what your textbook will need in order to be most effective.

5. **Plan each chapter.** During the book-outline phase, determine the structure for each chapter in addition to the research and resources required to write it. Record these in your timeline beside the designated author. Use this information to calculate how long each chapter will take to complete. Remember to build in extra time for the beginning phase of the project, as this is when you and your team are learning to work together and with the textbook, and for any unanticipated delays. While working with many authors is a good way to incorporate expertise and multiple viewpoints, it will take extra time as you or your project manager communicate with the team and manage their work. (See [Textbook Outline](#), [Contributing Authors](#), and [Identify Support](#).)

6. **Peer review.** Schedule time for the peer review of your textbook by subject-matter experts. (See [Peer Review](#).)

7. **Fix as you go.** As you go, expect to be regularly reviewing the style and format as well as auditing external images and resources to ensure all are openly licensed or in the public domain. (See [Fix as You Go](#).)

8. **Copy edit.** Have the book copy edited. (See [How to Copy Edit](#).)

9. **Proofread.** Have the book proofread. (See [How to Proofread](#).)

10. **Prepare for publication.** Conduct a final check of your book and set up print-on-demand copies. (See [The Final Check](#) and [Print-on-Demand Copies](#).)
11. **Promote.** Launch and communicate about your new book. (See
Communications.)

And as you build in extra time to each phase of your
timeline, remember Hofstadter's Law...

> It always takes longer than you expect, even
when you take into account Hofstadter’s Law.

–Douglas Hofstadter in *Gödel, Escher, Bach: An
Eternal Golden Braid.*

wiki/Hofstadter%27s_law (accessed January 5, 2018).
For more information, see the Authoring Open Textbooks chapter on Developing a Timeline [New Tab].

Attributions

Project Management by TheDigitalArtist has been designated to the public domain (CC0).

Technology: Accounts and Training

If you decide to use an authoring platform, such as Pressbooks or Scalar [New Tab], to create your textbook, you must also ensure that all participants have accounts to access the platform and the training to use it. While this latter item will require additional effort,
it is worth the time in order to avoid confusion and mistakes during production.

This chapter uses Pressbooks as an example of an authoring platform.

![BCcampus Pressbooks home page](image)

**Determine access**

Begin by determining who should have access. If you have multiple authors, it's often best to restrict access to the book in Pressbooks to one or two “gatekeepers” to maintain the textbook’s formatting, style, and layout. One of the gatekeepers might be the individual responsible for reviewing and fixing the textbook as they will be very familiar with the book’s flow. Others who will need platform access are the copy editor and proofreader. (See Fix as You Go, How to Copy Edit, and How to Proofread.)

If you wish others to view the textbook, but do not want them to have editing or administrative privileges, “view only” rights can be granted or a generic account can be created for all who require in-progress viewing access.

The BCcampus Open Education [Pressbooks Guide](#)
contains information specific to Pressbooks. This guide will explain how to set up a Pressbooks account and how to add an author, editor, or other user to your textbook. (See Setting up an Account: Where to Begin [New Tab] and Adding an Author or Editor to a Book [New Tab].)

Platform set-up, training, support

Once you have established the required accounts for Pressbooks, or other authoring platform, then it’s time to create the book shell. Information on setting up a book, importing a Pressbooks or WordPress file, and importing a Word document are all covered in the BCcampus Open Education Pressbooks Guide [New Tab]. However, listening to a recorded session [New Tab] or viewing the PowerPoint slides [New Tab] from past Pressbooks Training webinars, or watching a Pressbooks Tutorial video [New Tab] can help. You may also consider hiring an expert to offer a training session to your support team.

Lastly, identify who will provide technical support. Many platforms and systems have very good support resources available; however, it’s always nice to have a friendly, knowledgeable individual to call on. The helpdesk or teaching-and-learning centre at your university or college is a good place to start.

Other technology

In addition to the system you’ll be using to house and create your textbook, consider all other technologies that will be needed. These might include:

- Video-creation software and hosting platforms, e.g., Audacity
• Audio-recording systems and hosting platforms
• Graphic-design software
• Repositories containing openly licensed media (See Resources: Search and Find.)

Attributions

BCcampus Pressbooks website (screenshot) is used under a CC BY 4.0 International License.

For more information, see the Authoring Open Textbooks chapters on Publishing Tools [New Tab] and Authoring Tools [New Tab].
Sample OER Development Workflow

Based on a textbook developed at UH Mānoa.

Pre Production

- Scope desired OER output (textbook, course, etc)
  - Create content outline of desired OER
  - Confirm learning objectives/outcomes
- Estimate/scope work needed
  - Create MOA/Letter of Agreement
- Develop timeline for completion
- Audit known OERs
  - Compile list of existing OERs
  - Complete review of OERs on list
    - Existing open textbooks
    - Existing interactive learning content
- Assess technical editability of selected OER

Design Phase

- Flesh out content outline
  - Include chapters and topics
  - Include learning outcomes
  - Include intro paragraph for chapters
- Task division
  - Chapter contributions
  - Images (sourcing, creation)
  - Copyediting
Chapter reviewing
Metadata management

Development Phase

- Chapter contributions
  - Write/revise chapters
  - Include images/media
- Review content
  - Copyediting
  - Chapter reviewing
- Quality assurance checks
  - Proofreading
  - Clear IP rights
  - Attributions
- Import to Pressbooks
  - Import Pressbooks XML file
  - Organization
    - Part and chapter order
    - Media import and display
    - Metadata placement
    - Front matter and back matter
- Final quality assurance check

Release

- Book made live
  - Move to production server
  - Export formats made available
Feedback and Monitoring

- Collect student feedback re: Textbook
- Faculty reviews and comments/suggestions
- Monitor success rates of courses using OER

Developing Open Textbooks

- Five Rules of Textbook Development
- Open Textbook Formats
- Quick Guide to Accessibility, Equity, Cultural Relevance & Usability
- Textbook Outline
- Create a Style Sheet

Five Rules of Textbook Development

The below list provides five rules that help guide the development of a good textbook.9

1. Rule of frameworks

Memory and understanding are promoted by the use of a structure that mimics the structures we all use within our minds to store information. Before we can use or master a subject, we have to have a mental road map that allows us to navigate within and through the subject domain. The text can best aid understanding by making this framework visible early on within each section or topic. The extent to which the student understands that they are using a framework, and knows what that framework is, is important as they internalize and make use of the material presented.

2. Rule of meaningful names

Everything we know is tagged with an index or a title. These indices are critical to the ability to recall or retrieve the things we know and remember. Each concept, process, technique or fact presented should aid the student to assign a meaningful name for it in their own mental organization of the material. To be most useful, these names shouldn't have to be relearned at higher levels of study. The names assigned by the text should be useful in that they support some future activities: communication with other practitioners, reference within the text to earlier mastered material, and conformity to the framework used for the subject. Each unique element of the subject domain should have a unique name, and each name should be used for only one element.
3. Rule of manageable numbers

When we learn from an outline, an illustration, or an example, most of us are limited in our ability to absorb new material. As we become familiar with part of a subject domain this number expands, but for new material four to six new elements is a reasonable limit. If a chapter outline contains twelve items, the student will have forgotten the outline before getting to the last item. When a text fails to support this rule, it requires even a diligent student to needlessly repeat material.

4. Rule of hierarchy

Our mental frameworks are hierarchical. Learning is aided by using the student’s ability to couple or link new material with that already mastered. When presenting new domains for hierarchical understanding, the rules for meaningful names and manageable numbers have increased importance and more limited application. A maximum of three levels of hierarchy should be presented at one time. The root should be already mastered, the current element under consideration clearly examined, and lower levels outlined only to the extent that they help the student understand the scope or importance of the current element. This area is supplemented by two more rules within this rule: those of Connectivity and Cohesion. Connectivity requires consideration of what the student likely knows at this point. The more already mastered elements that one can connect with a new element, the easier it is to retain. Cohesion requires that the characteristics of new elements as they are presented be tightly coupled.
5. Rule of repetition

Most people learn by repetition, and only a few with native genius can achieve mastery without it. There is a pattern of repetition that aids in promoting the elements of a subject from short-term to long-term memory. Implementations of this rule may mean that frameworks and important hierarchies are repeated as many as five or six times, while frequently used elements are repeated three or four times, and elements of lesser utility may not be repeated at all. The first repetition should normally occur within a day of first presentation, followed by a gradually decreasing frequency. Exercises and review sections are ideally contributing to a designed repetition pattern.

5 Rules of Textbook Development [Long Description]

Attributions

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Long Descriptions

5 Rules of Textbook Development long description:

1. The rule of frameworks means maintain a consistent structure. The text can best aid understanding by making this framework visible early on.
2. The rule of meaningful names means create and use consistent titles and terminologies. The names are critical to the ability to recall or retrieve the things we know and remember.
3. The rule of manageable numbers means limit the amount of new information introduced at one time.
4. Rule of hierarchy means new knowledge builds on learned knowledge. The student needs to understand the foundational knowledge before being introduced to a new concept. When new concepts are introduced the should be explicitly connected to the foundational material.
5. The rule of repetition means repeat important concepts. There is a pattern of repetition that aids in promoting the elements of a subject from short-term to long-term memory.

Open Textbook Formats

You will notice that open textbooks are available in a number of different technical formats, some of which may not be familiar to you. The reason for this is because research into student preferences around textbook formats shows that students want flexibility and options. Some students, prefer physical textbooks,
some want their textbook delivered to their favourite eReader device, and others prefer the familiarity of a PDF or a website.  

Here is a brief guide to the different types of document formats that open textbooks are most often available in.

**EPUB**

**EPUB** is a standard format for ebooks. Students will need an eReader to use EPUB files. eReaders are available as stand-alone devices (such as a Nook or Kobo reader) and as software packages that students can install on their PC, Mac, tablet, or mobile phone.

There are a number of eReaders available for free, and many have features such as cloud syncing, which allows users to read their book on their tablet, PC, and phone and keep the book in sync. Many also offer annotation and highlighting capabilities.

EPUB is superior to PDF in that the text in EPUB files can shift to fit the size of the device being used to read the book, giving the user a smooth side-to-side reading experience. eReaders also often provide options to resize the text, change the font, or change the colour of the text.

Those who have a Nook, Kobo, or other dedicated eReading device or have downloaded and installed eReader software on their tablet, PC, or mobile device will want to use an EPUB file. Note that Kindle does not support EPUB. Instead Kindle users will want to use the MOBI format (see below).

<table>
<thead>
<tr>
<th>Software</th>
<th>Supported Platforms</th>
<th>eReader Device Available</th>
<th>Registration</th>
<th>Open Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adobe Digital Editions [New Tab]</td>
<td>PC, Mac, Android, iOS</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Kobo [New Tab]</td>
<td>PC, Mac, Android, iOS</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Nook [New Tab]</td>
<td>PC, Mac, Android, iOS</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>iBooks [New Tab]</td>
<td>iOS</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Calibre [New Tab]</td>
<td>PC, Mac, Android, iOS</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

These are just a few of the many EPUB readers available. Wikipedia has an extensive comparison list of eReaders [New Tab].

MOBI

Students should choose the **MOBI** format if they have an Amazon Kindle or use the Amazon Kindle software, which anyone can download. Kindle apps and software [New Tab] are available for download on Mac, PC, Android, BlackBerry, Windows OS, and iOS.

Website/HTML

An HTML website is a good format to use to distribute your textbook to students as it is a universal format that does not require
any additional software beyond a web browser. HTML is also a good format to distribute your textbook in if you want others to be able to edit or customize your book. If possible, you can create a zip file of your HTML documents and make those available for other instructors to download, edit and host on their own websites.

PDF

PDF is a common file format that requires a PDF reader. Free PDF readers include Adobe Reader [New Tab], Foxit [New Tab], and Nitro [New Tab]. PDF is a good format to make available to students because it is common and most students will know how to work with a PDF document. However, PDFs are difficult to edit, so if you plan to openly license your textbook, you should also make your source files available so other instructors can edit the book.

Word/OpenOffice

Some open textbooks are available as Word/OpenOffice documents. These file formats will be have the .docx or .odt file extensions. You will need Microsoft Word [New Tab] or OpenOffice [New Tab] to view these files. Word/OpenOffice documents can be used to distribute a textbook to students as it is a common file format. However, it is more common that you would convert the Word/OpenOffice document to a PDF, EPUB or HTML file for distribution to students and provide Word/OpenOffice as a source file for others who may want to edit or adapt the textbook.
LaTeX

**LaTeX** is a document format often used when complex scientific or mathematical equations and notations are required. LaTeX [New Tab] requires special software [New Tab] to read and edit. These files are not recommended for students and are primarily provided as source files for instructors who wish to modify or customize a textbook.

Attributions

Information and much of the text used in this chapter are based on the blog “Open Textbook Formats Explained” by Clint Lalonde and is used under a CC BY 4.0 Licence.

Quick Guide to Equity, Diversity, and Inclusion, and Indigenization

This section provides a quick guide to Equity, Diversity, and Inclusion, as well as Indigenization. This section also concerns Accessibility, Equity, Cultural Relevance & Usability.

For a quick introduction to some of the stakes of this work, please see the CCCOER blog post “Equity & Openness : Perspectives from North American colleges and universities.”
Accessibility, Diversity, and Inclusion — BCcampus

One of the basic premises of open education is access. The United Nations Educational, Scientific and Cultural Organization (UNESCO) believes:

...that universal access to high quality education is key to the building of peace, sustainable social and economic development, and intercultural dialogue. Open Educational Resources (OER) provide a strategic opportunity to improve the quality of education as well as facilitate policy dialogue, knowledge sharing and capacity building.\textsuperscript{11}

Access in this context refers to the ability for students, instructors, and others to obtain access to education. Releasing textbooks and other educational resources with open-copyright licences is a big step toward removing barriers, as it makes these materials free of cost and free to use, distribute, and change. But there is more that goes into accessing a resource than it just being free and online.

For a textbook to be truly accessible, people of all abilities need to be able to access the content. This means designing a textbook that accommodates people with diverse learning styles and ensuring the content can be accessed by all, regardless of disability. It also means creating materials that include diverse viewpoints and voices. As you plan your textbook, contemplate how to design it so it is accessible, diverse, and inclusive.

Read what your colleagues are saying about Equity, Cultural Relevance, Usability & Open Education [New Tab].

Accessibility

As an open textbook author and publisher, it’s important to consider the social-justice side of open education. Listed below are some of the barriers students face during their education, as well as some solutions and examples.
## Reducing Barriers to Access

<table>
<thead>
<tr>
<th>Barrier Type</th>
<th>Challenge</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical Impairments</strong></td>
<td>Low vision or blindness</td>
<td>Use alternative text (alt-text) to describe an image's content or function that can be read by a screen reader.</td>
</tr>
<tr>
<td></td>
<td>Hearing impairment or deafness</td>
<td>Add transcripts and captions to all audio content.</td>
</tr>
<tr>
<td></td>
<td>Motor-skill impairment, immobility</td>
<td>Provide file formats that can be uploaded into a variety of mobile devices.</td>
</tr>
<tr>
<td><strong>Learning Disabilities</strong></td>
<td>Difficulty absorbing information via reading or difficulty concentrating (ADHD)</td>
<td>Add audio clips to printed text that student can listen to while reading along.</td>
</tr>
<tr>
<td><strong>Language Comprehension</strong></td>
<td>Low literacy: adult basic education (ABE) student or English language learners (ELL)</td>
<td>Provide a print copy with increased font size or provide formats that allow the font size to be adjusted.</td>
</tr>
<tr>
<td><strong>Limitations of Time and Place</strong></td>
<td>Working, parenting, or live far from a college or university</td>
<td>Provide a version of the textbook that can be accessed from anywhere online.</td>
</tr>
<tr>
<td></td>
<td>Unreliable or no access to the Internet</td>
<td>Set up a service that can supply a print-on-demand copy.</td>
</tr>
</tbody>
</table>

Refer to the BCcampus Open Education [Accessibility Toolkit](https://www.bccampus.ca/support/AccessibilityToolkit) for information on how to make sure you create an accessible textbook. (A [French version](https://www.bccampus.ca/support/AccessibilityToolkit-fr) is also available.) There are a number of [accessible textbooks in the B.C. Open Textbook Collection](https://www.bccampus.ca/textbooks). They are flagged as “Accessible” when they meet all requirements on the [Accessibility Checklist](https://www.bccampus.ca/support/AccessibilityChecklist).
The National Center on Universal Design for Learning [New Tab] also offers guidelines on how best to design educational resources so that students with a variety of learner styles benefit. You can also watch this video produced by the University of British Columbia: Open Dialogues: How to make open content accessible [YouTube – New Tab].

Equity and Cultural Relevance

In the context of writing an open textbook, equity and cultural relevance means centering a wide range of perspectives in your textbook. This can help ensure that more readers identify with and relate to the material. Some benefits are:

• Engaging more students because they recognize themselves or their life experiences in the material
• Appealing to instructors in a variety of educational settings
• Creating a more interesting reading and learning experience

Question 10 on the BCcampus Open Education Review Rubric [Word file] addresses the issue of diversity and

Ethnocentrism

Whether intentional or not, **ethnocentrism** – “a tendency to view alien groups or cultures from the perspective of one’s own”\(^{13}\) – can creep into the content and presentation of a textbook, and it is something all authors should be aware of. This doesn’t mean you must write a book that fits every culture and perspective, only that you are respectful.

Once your book is published, if instructors from another country and culture want to use your work, they may customize it for their classroom needs. The changes made might include:

- Translating the book into a different language
- Adjusting the content to meet the local cultural, regional, and geographical needs
- Revising the material for a different learning environment

For more information see [Reasons to Adapt an Open](http://www.dictionary.com/browse/ethnocentrism)

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Textbook Outline

Before you begin writing, create an outline that details the topics to be covered in your textbook and how they will be organized in a table of contents. Consider the type of students who will use your textbook and the course level and program for which the textbook is intended. Taking time to consider the audience and classroom will direct the tone and complexity of your writing. As such, it should be scheduled in your project timeline. This vital step will save time and money, reduce mistakes, and hopefully result in a more useful, engaging textbook. (See Project Timeline.)

Details and decisions

An outline is most useful when it includes all the details needed to build and arrange your book. Recruiting a copy editor at this early stage, someone who can ensure that all elements and layout are covered, will save time later in the project. The copy editor can also assist you with selecting a style guide and setting up a style sheet, which they will reference during the copy-editing and proofreading phases. (See How to Copy Edit and Create a Style Sheet.)
Front matter

The **front matter** is the introductory section of your textbook and the first thing readers see. If you're using an authoring platform such as Pressbooks, the system will set up some of these sections for you, including a copyright page and a table of contents. The following table lists the items typically included in the front matter and the order in which they appear. While most open textbooks will have many of these elements, very few will have all of them. Only include the sections relevant to your textbook.
<table>
<thead>
<tr>
<th><strong>Item</strong></th>
<th><strong>Responsibility</strong></th>
<th><strong>Purpose</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Half title</td>
<td>Publisher</td>
<td>Includes just the title of the book on the <strong>recto</strong> (front side of the page) with a blank <strong>verso</strong> (back side of the page).</td>
</tr>
<tr>
<td>Title page</td>
<td>Publisher</td>
<td>Book title is repeated along with subtitle (if any), author(s) and/or editor(s), and illustrator (if any).</td>
</tr>
<tr>
<td>Copyright page</td>
<td>Publisher</td>
<td>On the verso of title page, the following may be included:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• open-licence information (type, definition, where to obtain free copy of book)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• if an adaptation, the changes made</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• attribution for cover image</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• publisher's name and address</td>
</tr>
<tr>
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<td>Dedication</td>
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<td>The person or people for whom the author has written or dedicated the book.</td>
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<td>Publisher</td>
<td>A list of all parts and chapters (or chapters and chapter sections) together with their respective page numbers. Front-matter items that appear after the table of contents are also included.</td>
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<td>About this book</td>
<td>Publisher</td>
<td>This page is used to define open textbooks and other OER, and any other unique features for this type of book. Funding provided by the author's institution, a public body, or philanthropic organization can also be noted.</td>
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<td>The forward is typically written by an outside expert in the field at the request of the primary author. The foreword author's name, place, and date are included at the end of the statement.</td>
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<td>Preface</td>
<td>Author</td>
<td>The author uses the preface to explain why and how they came to write the book. They might also describe their expertise in the subject area.</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>Author</td>
<td>This is a list of individuals whom the author acknowledges for their contributions and assistance.</td>
</tr>
<tr>
<td>Introduction</td>
<td>Author</td>
<td>This introduction describes the book contents as a whole. The book's theme, layout, special features, and how instructors can make the best use of it, can also be included. The author may also create a “How to Use This Book” section if more fitting.</td>
</tr>
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</tr>
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<td>Accessibility statement</td>
<td>Publisher</td>
<td>If the book has been written and designed to be accessible, provide a description of how this was done and various options people have when accessing the book. Indicate the standards that have been followed, and provide contact information for where people can report any accessibility issues. (See BCcampus Accessibility and Inclusion.)</td>
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<tr>
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Body

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- Will numbering and/or titles be used to identify parts, units, chapters, and chapter sections? If possible, include these in the outline. (Titles and numbering can be changed in the final draft, but establishing working titles helps during the organizational phase.)
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Next, consider the layout, style, and length for each chapter and chapter section. Decide what elements to incorporate such as:

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<td>Appendix / appendices</td>
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</tr>
<tr>
<td>Glossary</td>
<td>Author</td>
<td>The glossary is a list of keywords or terms used within the book and their definitions. These terms are listed alphabetically. Many authors will highlight key terms when first defined in-text using bold or italics.</td>
</tr>
<tr>
<td>Reference list</td>
<td>Author</td>
<td>A <strong>reference list</strong> notes all resources cited within a textbook and lists them alphabetically by the author’s last name.</td>
</tr>
<tr>
<td>Bibliography</td>
<td>Author</td>
<td>Typically, a <strong>bibliography</strong> refers to all works used as references within a textbook, both cited and read as background in preparation for writing. Note: A bibliography is not used by all style guides.</td>
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<td>Suggested readings</td>
<td>Author</td>
<td>A list of additional books, articles, and other readings can be included here for students. Some authors choose to add suggested-reading lists, targeted at the subject covered in a chapter, at the end of each chapter.</td>
</tr>
<tr>
<td>Resources</td>
<td>Author</td>
<td>A list of helpful resources, such as videos and tools, can be added here.</td>
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<tr>
<td>About the author / Bio</td>
<td>Publisher</td>
<td>This page has author’s biography followed by the biographies of any contributing authors listed in alphabetical order. This description is professional in nature and describes the author's expertise, experience, and training in the textbook's subject matter. A photo can be included.</td>
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<tr>
<td>Call for reviews</td>
<td>Author</td>
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<td>This list of keywords and terms is laid out alphabetically and includes the page numbers of where they can be found. Indexes are often left out of open textbooks, especially those available online, because keywords and terms can be easily found using the search field. In addition, because open textbooks are often available in a number of formats, it's difficult to provide an index that will be useful in all formats.</td>
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<td>As open textbooks are often digital and available online, there is a certain expectation that minor corrections and updates be made as necessary, even after the book is live and completed. BCcampus has dedicated “Versioning History” pages to the back matter of its books for this purpose. This page provides information about how to report an error in the textbook, as well as a record of any updates and changes made in the textbook and the date of those changes.</td>
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**Attributions**

Front Matter and Back Matter tables: Some of this information was

Create a Style Sheet

A style guide should be used when writing an open textbook to ensure that style and formatting is consistent throughout the work. (See Appendix 2: Style Guide.) Style guides usually include citation style as well, i.e. how cited or referenced material should be treated both in the text (in-text) and within the reference list. Commonly used style guides include,

- **APA Style [New Tab]**. APA (American Psychological Association) style is typically used to cite and style works in the social sciences and education.
- **The Chicago Manual of Style Online [New Tab]**. Chicago style is most often used to cite and style works in the humanities. This style was developed by the Chicago University Press in 1906. 16
- **MLA Style Manual [New Tab]**. MLA (Modern Language Association of America) style is most frequently used to cite and style works in the literary and humanities fields.
- The **Associated Press Stylebook [New Tab]**. The Associated Press style is the standard for style guide for those working in the media and communications.

In addition to selecting a style guide, it is advised that a style sheet be created and updated throughout the writing process. A style

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**Sheet** is a record of the styling and formatting exceptions for your textbook, such as spelling choices, selection and placement of learning objects, and differences in punctuation, layout, and style from the style guide. Frequently used style elements can also be noted on the style sheet for easy reference, especially during the copy editing and proofreading stages.

**How to set up and use a style sheet**

Here is a template you can use to set up the style sheet for your open textbook:

- [Style-Sheet template](#)

1. Download the above style-sheet template and fill out as much information as possible, including book title, author, copy editor, and proofreader.
2. Add or remove items as they pertain to your book. These might include:
   1. exercises (and how to format them)
   2. back matter and/or appendix information and how to label each
   3. key terms: how and when to highlight them in the text body and if they should be summarized in an end-of-book glossary
3. In addition to different or additional styles and formatting, you can list:
   1. styling issues included in the style guide, but repeated in
the style sheet for easy reference

2. the correct usage of grammar and spellings that are often inaccurate

4. Change and update the style sheet throughout textbook production. Update the style sheet each time you make changes or add to it and share it with your team.

5. When the book is finished, date the style sheet and mark it as the “final copy.” This reference document can be shared as part of your textbook when it’s published.
This section offers guidelines and suggestions on outlining, compiling, and writing your OER textbook and materials. The Outlining guide includes 5 rules of textbook development, structuring your open textbook, and a textbook outline. The Compiling guide includes suggestions on collecting, organizing, and naming files and resources, version control of files and resources, and making sure everyone who needs access is able to access the files and resources. The Writing guide includes suggestions on consistency in tone, audience, planning for multiple learning styles, and sample style sheets, as well as information on glossaries and indexing.

- **Outlining**
  - Five Rules of Textbook Development
  - Defining Content Structure
  - Defining Element Structure
  - Textbook Outline
  - Best Practices

- **Compiling & Research**
  - Managing Assets – Open Textbook Network
  - Standardization & Access
  - Research
  - Citation vs. Attribution
  - Resources: Only the Open
  - Resources: Search and Find
  - Embedding and Linking
○ Using Screenshots of Software

• Writing
○ Ten Tips for Authoring Success
○ Writing Process
○ The Writing
○ Writing Recommendations
○ Consistency In Tone
○ Consistency In Captions
○ Chapter Prototype
○ Style Guides
○ Create a Style Sheet
  ■ Style Sheet Prototype
○ Accessibility, Audience, Learning Methods & Styles
  ■ Accessibility – Open Textbook Network
  ■ Lessons Learned in Accessibility Through the BC Open Textbook Project
○ Glossaries & Indexing

Outlining

○ Five Rules of Textbook Development
○ Defining Content Structure
○ Defining Element Structure
○ Textbook Outline
○ Best Practices
  ■ Lesson planning
  ■ Content planning
  ■ Assessment
  ■ Test Banks
The below list provides five rules that help guide the development of a good textbook.¹

1. Rule of frameworks

Memory and understanding are promoted by the use of a structure that mimics the structures we all use within our minds to store information. Before we can use or master a subject, we have to have a mental road map that allows us to navigate within and through the subject domain. The text can best aid understanding by making this framework visible early on within each section or topic. The extent to which the student understands that they are using a framework, and knows what that framework is, is important as they internalize and make use of the material presented.

2. Rule of meaningful names

Everything we know is tagged with an index or a title. These indices are critical to the ability to recall or retrieve the things we know and remember. Each concept, process, technique or fact presented

should aid the student to assign a meaningful name for it in their own mental organization of the material. To be most useful, these names shouldn’t have to be relearned at higher levels of study. The names assigned by the text should be useful in that they support some future activities: communication with other practitioners, reference within the text to earlier mastered material, and conformity to the framework used for the subject. Each unique element of the subject domain should have a unique name, and each name should be used for only one element.

3. Rule of manageable numbers

When we learn from an outline, an illustration, or an example, most of us are limited in our ability to absorb new material. As we become familiar with part of a subject domain this number expands, but for new material four to six new elements is a reasonable limit. If a chapter outline contains twelve items, the student will have forgotten the outline before getting to the last item. When a text fails to support this rule, it requires even a diligent student to needlessly repeat material.

4. Rule of hierarchy

Our mental frameworks are hierarchical. Learning is aided by using the student’s ability to couple or link new material with that already mastered. When presenting new domains for hierarchical understanding, the rules for meaningful names and manageable numbers have increased importance and more limited application. A maximum of three levels of hierarchy should be presented at one time. The root should be already mastered, the current element under consideration clearly examined, and lower levels outlined
only to the extent that they help the student understand the scope or importance of the current element. This area is supplemented by two more rules within this rule: those of Connectivity and Cohesion. Connectivity requires consideration of what the student likely knows at this point. The more already mastered elements that one can connect with a new element, the easier it is to retain. Cohesion requires that the characteristics of new elements as they are presented be tightly coupled.

5. Rule of repetition

Most people learn by repetition, and only a few with native genius can achieve mastery without it. There is a pattern of repetition that aids in promoting the elements of a subject from short-term to long-term memory. Implementations of this rule may mean that frameworks and important hierarchies are repeated as many as five or six times, while frequently used elements are repeated three or four times, and elements of lesser utility may not be repeated at all. The first repetition should normally occur within a day of first presentation, followed by a gradually decreasing frequency. Exercises and review sections are ideally contributing to a designed repetition pattern.
5 Rules of Textbook Development [Long Description]

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Long Descriptions

5 Rules of Textbook Development long description:

1. The rule of frameworks means maintain a consistent structure. The text can best aid understanding by making this framework visible early on.
2. The rule of meaningful names means create and use consistent titles and terminologies. The names are critical to the ability to recall or retrieve the things we know and remember.
3. The rule of manageable numbers means limit the amount of
new information introduced at one time.

4. Rule of hierarchy means new knowledge builds on learned knowledge. The student needs to understand the foundational knowledge before being introduced to a new concept. When new concepts are introduced they should be explicitly connected to the foundational material.

5. The rule of repetition means repeat important concepts. There is a pattern of repetition that aids in promoting the elements of a subject from short-term to long-term memory.

[Return to 5 rules of textbook development image]

Defining Content Structure — Open Textbook Network, Melissa Faldin & Karen Lauritsen

Now that I’ve completed the process of writing an open textbook, there are a few changes I would make if I were starting over. For one, I would take more time to make a detailed outline of the entire text. I was so overwhelmed by the process of writing that I just wanted to jump in before I got cold feet, but it made writing the first few chapters a bit challenging. As I went on, I got better about taking the time to map out the entire chapter thoroughly before writing and it actually made the writing easier. Thinking more broadly, I would just go into the project with more confidence, knowing that the time spent writing and editing the text was absolutely going to be worth it. — Caitie Finlayson, Assistant Professor, Department of Geography, University of Mary Washington. Author of World Regional Geography (CC BY NC SA).

What goes into a textbook? How is it structured?
We will use two categories of terms:
• Book Structure: How the book is organized on a high level.
• Book Elements: Internal components of a book that may be replicated within the overall structure. See the next chapter for more on elements.

Fleshing out the basic structure of your book allows you to address the matter of consistency. Creating consistent, repeatable, expected content for student readers provides a better learning experience. It also allows you to consistently frame how the materials will be taught.

While defining your content structure outline, it may be helpful to keep in mind what pre-requisite knowledge the students will have prior to using your book, what your anticipated time constraints are and where your students will go next. You may find that your structure is modified after you begin to include elements.

This list is meant to assist in the process of creating your structure. It is in no way exhaustive and many categories of content may be known by different terminology.

Structure

• Cover Page
• Legal Page
• Table of Contents
• Foreword
• Unit
• Chapter
• Section
• Sub Section
• Bibliography
• Resources
• Appendices
• Index
After you have created a general outline for your book structure (in the previous chapter), look to the common elements within that structure. Elements, just as structural components, should be fairly consistent throughout your book.

It is at this point when you might start to look for matches among existing content. For example, do you have a case study that can be used for each unit or chapter you are creating? If you only have one case study you intend to use, can it become a chapter in itself? Does it belong in the appendices? As you build your elements, you may find that your overarching structure is modified as well.

This list is meant to assist in the process of creating your elements. It is in no way exhaustive and many categories of content may be repeated with different terminology.

Elements

• Headings
• Titles
• Objectives
• Overview
• Introduction
• Body
• Graphs
• Images
• Tables
Tip! Use Post It notes or half sheets of paper to brainstorm structural components. It gives you the ability to shift the order of the components. When finished, an outline of the book is clearly visible. It may be helpful to keep structural components of the book on colored paper and elements on plain paper. Working at a distance? Think about using organization tools such as Trello or Libreboard. See the chapter on authoring tools for more examples.
Textbook Outline — BCcampus

Before you begin writing, create an outline that details the topics to be covered in your textbook and how they will be organized in a table of contents. Consider the type of students who will use your textbook and the course level and program for which the textbook is intended. Taking time to consider the audience and classroom will direct the tone and complexity of your writing. As such, it should be scheduled in your project timeline. This vital step will save time and money, reduce mistakes, and hopefully result in a more useful, engaging textbook. (See Project Timeline.)

Details and decisions

An outline is most useful when it includes all the details needed to build and arrange your book. Recruiting a copy editor at this early stage, someone who can ensure that all elements and layout are covered, will save time later in the project. The copy editor can also assist you with selecting a style guide and setting up a style sheet, which they will reference during the copy-editing and proofreading phases. (See How to Copy Edit and Create a Style Sheet.)

Front matter

The front matter is the introductory section of your textbook and the first thing readers see. If you're using an authoring platform such as Pressbooks, the system will set up some of these sections for you, including a copyright page and a table of contents. The following table lists the items typically included in the front matter and the order in which they appear. While most open textbooks will
have many of these elements, very few will have all of them. Only include the sections relevant to your textbook.
<table>
<thead>
<tr>
<th>Item</th>
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<th>Purpose</th>
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<td>Publisher</td>
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<td>Publisher</td>
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<tr>
<td>Dedication</td>
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<td>About this book</td>
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<td>This page is used to define open textbooks and other OER, and any other unique features for this type of book. Funding provided by the author's institution, a public body, or philanthropic organization can also be noted.</td>
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<td>Expert (not the author)</td>
<td>The <strong>forward</strong> is typically written by an outside expert in the field at the request of the primary author. The foreword author's name, place, and date are included at the end of the statement.</td>
</tr>
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<td>Preface</td>
<td>Author</td>
<td>The author uses the preface to explain why and how they came to write the book. They might also describe their expertise in the subject area.</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>Author</td>
<td>This is a list of individuals whom the author acknowledges for their contributions and assistance.</td>
</tr>
<tr>
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<td>Author</td>
<td>This introduction describes the book contents as a whole. The book's theme, layout, special features, and how instructors can make the best use of it, can also be included. The author may also create a “How to Use This Book” section if more fitting.</td>
</tr>
<tr>
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<td>Accessibility statement</td>
<td>Publisher</td>
<td>If the book has been written and designed to be accessible, provide a description of how this was done and various options people have when accessing the book. Indicate the standards that have been followed, and provide contact information for where people can report any accessibility issues. (See Accessibility and Inclusion.)</td>
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<td>Bibliography</td>
<td>Author</td>
<td>Typically, a bibliography refers to all works used as references within a textbook, both cited and read as background in preparation for writing. Note: A bibliography is not used by all style guides.</td>
</tr>
<tr>
<td>Suggested readings</td>
<td>Author</td>
<td>A list of additional books, articles, and other readings can be included here for students. Some authors choose to add suggested-reading lists, targeted at the subject covered in a chapter, at the end of each chapter.</td>
</tr>
<tr>
<td>Resources</td>
<td>Author</td>
<td>A list of helpful resources, such as videos and tools, can be added here.</td>
</tr>
<tr>
<td>About the author / Bio</td>
<td>Publisher</td>
<td>This page has author's biography followed by the biographies of any contributing authors listed in alphabetical order. This description is professional in nature and describes the author's expertise, experience, and training in the textbook's subject matter. A photo can be included.</td>
</tr>
<tr>
<td>Call for reviews</td>
<td>Author</td>
<td>This page can be included if the author is posting the textbook outside of a collection that provides for book reviews. (See Textbook Reviews.)</td>
</tr>
</tbody>
</table>
This list of keywords and terms is laid out alphabetically and includes the page numbers of where they can be found. Indexes are often left out of open textbooks, especially those available online, because keywords and terms can be easily found using the search field. In addition, because open textbooks are often available in a number of formats, it's difficult to provide an index that will be useful in all formats.

As open textbooks are often digital and available online, there is a certain expectation that minor corrections and updates be made as necessary, even after the book is live and completed. BCcampus has dedicated "Versioning History" pages to the back matter of its books for this purpose. This page provides information about how to report an error in the textbook, as well as a record of any updates and changes made in the textbook and the date of those changes.

Attributions

Front Matter and Back Matter tables: Some of this information was

Best Practices

Considerations for best practices and making the best use of OER textbooks and materials include the following topics:

- Lesson planning
- Content planning
- Assessment
- Test Banks

Compiling & Research

- Managing Assets – Open Textbook Network
- Standardization & Access
- Research
- Citation vs. Attribution
- Resources: Only the Open
- Resources: Search and Find
- Embedding and Linking
- Using Screenshots of Software

Managing Assets – Open Textbook Network

Faculty are used to borrowing liberally, especially from
something like Google Images, for their course content and slide decks. Getting them to understand that they should use openly licensed images, and that they should look for and reuse existing openly licensed content, is surprisingly challenging. Faculty seem to understand attribution and copyright when it comes to text, but images seem to be fair game for many of them! The nuances of all the content they usually bring together to produce their course content can present some interesting challenges, both in how to explain best practices about open publishing to faculty, and how to successfully find openly licensed replacements that help faculty reach their educational goals for their students.

– Shane Nackerud, Technology Lead, Library Initiatives, University of Minnesota Libraries

In most cases, asset management is a crucial component to not only the production of your book, but your legal compliance as well.

As you seek resources, be them text, images, graphs, maps or other materials, consistently document as much as possible about the resource. Not only will this assist in any future updates or modifications to your textbook, but the information will be vital as you provide proper attributions.

Building asset management into your writing process may also be beneficial. For example, if writing as a group, one individual may be tasked with seeking out a list of items to be included and obtaining all material information.

Information to document should include:

- Given resource name
- Type of material (ex. video, image, website)
- Link to resource
- Description of resource
- License type*
- Author/owner
- Title to be used in textbook
* Special attention should be paid to license type when dealing with asset management. Some Creative Commons license types do not allow for mixing with others and will effect what resources can ultimately be used. Using a spreadsheet to manage assets allows for quick and easy review of such issues. For more information see Understanding Open Licenses.

Standardization & Access

Other aspects of compiling to be aware of:

- Collecting Files & Resources
- Organizing Files & Resources
- File & Resource Naming conventions
- Version Control of Files & Resources
- Access to files & Resources
- Resource Curator Prototype

When you begin collecting files and resources for your OER textbook, make sure to organize materials you find in a way that you and your team will be able to easily find and use. Also make sure to establish a naming convention for files and resources, as well as a standardized listing of the sources, copyright data, and other metadata for the resources. A best practice would be to create a resource curator. One way to do this is to create a spreadsheet listing the key information, such as name of the resource, website or source where it can be found, copyright and reuse details, author details, and where and how you plan to use the resource in your OER textbook. Other useful information might include a description of the resource, author contact for the resource, notes, and a
column to indicate whether you ended up using the resource in your OER textbook.

A resource curator might look something like this:

- Research
- Citation vs. Attribution
- Resources: Only the Open
- Resources: Search and Find
- Embedding and Linking
- Using Screenshots of Software
Research — BCcampus

The writing portion of a textbook begins with research. In some cases, collecting and organizing the research can take longer than the actual writing. However, it's time well spent by both you and your contributing authors, especially if it's done well and thoroughly.

Like any scholarly work, it's important to choose appropriate sources when conducting research for a textbook and then cite or attribute them correctly (see Citation vs. Attribution). The UBC Library Research Help [New Tab] page offers valuable step-by-step advice. For example, in a section entitled “Evaluating Information Sources,” their response to the opening question of “Why Evaluate?” is:

You will need to evaluate each resource you use for research, whether it is an online or print journal article, a website, a book, a newspaper article, or other source that
you want to cite. Use the questions in this guide to analyze materials and to assess how appropriate they will be for your research. Keep in mind that many publications have a particular bias or agenda, which may not be obvious at first glance.⁴

To help organize collected items, consider using a source management tool like Zotero [New Tab] (free and open source) or Mendeley [New Tab] (free and run by publisher Elsevier).

In addition, the following steps may help as you gather research and resources.

1. Write down the knowledge you have accumulated on your textbook’s topic. If you’re an instructor, it’s likely this information is part of your course package or curriculum notes, or something you talk about in the classroom. However, unless this information is common knowledge or based on original research, you must cite it.⁵


2. Look at other open textbooks on the same or similar topics to see if they contain sections/chapters that can be adapted or used in your book. (See the Open Textbook/OER Directory [New Tab].)

3. Before you expand your search, read these three chapters: Resources: Only the Open, Resources: Search and Find, Resources: Captions and Attributions

4. If possible, follow resources – be they text or images – back to the original source so you’re confident that they are truly openly licensed.

5. Keep concise records of all sources you reference and cite in your textbook, including journal articles (online and off), newspapers, books, government documents, reports from a private organization, conference proceedings, dissertation, online lecture notes, email, blogs, wiki, websites, and video podcasts.

6. Note the date when accessing an online resource and its URL (Uniform Resource Locator) or web address.

7. Record all the information you will need to cite a resource properly. Purdue University’s Online Lab (OWL) [New Tab] provides very good research and citation resources for writers.

8. If your research requires conducting interviews, record them. Consider asking the subjects you interview to sign an interview consent and release form (see word file below). Taking these steps clarify for the interview subject the purpose of the interview and how and where their words will be used.

Here is a template of an interview consent and release form that you can use if you will be conducting interviews:
Attributions

Knowledge by Dariusz Sankowski has been designated to the public domain (CC0).

Citation vs. Attribution — BCcampus

Outside ideas and information provide evidence that build an argument or lay the foundation for a textbook's topic. A strong textbook will appropriately reference these sources, showing the student reader where information and ideas that do not originate with the open textbook author come from. This should be done for both restricted and open works through citations and attribution statements. Use this as an opportunity to show students by example how a scholar respects and shares information from other sources.

Even though they share characteristics, citations and attributions play different roles and appear in different places. This chapter defines citation and attribution, explains how and when they should be used in an open textbook, and discusses their purposes, similarities, and differences.
Citation

A citation allows authors to provide the source of any quotations, ideas, and information that they include in their own work based on the copyrighted works of other authors. The Oxford Living Dictionary defines it as a “…quotation from or reference to a book, paper, or author, especially in a scholarly work.”

Citation is a common and long-time practice among scholars used to indicate where a resource is from and who the author is. Unlike an attribution, citation is typically used for copyrighted works with restricted rights or “all rights reserved.” In other words, it is used in works for which broad permissions have not been granted.

As a scholar and potential author of an open textbook, we assume that you are familiar with the rules around citation. However, the article Warning: When You Must Cite [New Tab] from the Yale Center for Teaching and Learning provides some guidance about how, what, and the amount of a work that can be cited. (See Textbook Citation.)

Attribution

Attribution is the cornerstone condition when using a resource or text released with an open-copyright licence. This legal requirement states that users must attribute – give credit – to the creator of the work. (See Copyright and Open Licenses.)

In a CC BY licence, the “CC” stands for “Creative Commons” and the “BY” stands for “Attribution,” or who the work is “by.”

An attribution statement is used to provide credit to the original creator; its purpose is similar to a citation. Best practice says that the statement should include the title of the work, name of the creator, and licence type (with links to each). When using text from another open educational resource, be clear in your attribution statement what section of your textbook contains this information.

A useful tool to help create attribution statements is the OPEN Attribution Builder [New Tab] by Open Washington. (See also Resources: Captions and Attributions.)

Differences

Citation and attribution serve different purposes.

- Citation is used for academic reasons in order to give credit to
a colleague for their work as part of academic integrity. It’s also used for legal reasons. Attributing an open work fulfills the legal requirement of the open-copyright licence, which requires you to give credit to the creator of the work.

- Citation is used for restricted works where the copyright holder does not share the rights of the copy with the general public. The opposite is true for cases where attribution is used.
- Citation legally protects an author who wants to refer to someone else’s work and to avoid plagiarism and copyright infringement. The author of an open work has given advanced permission for others to use their work. (See Concerns About Plagiarism and Copyright and Open Licences.)

- When referencing a restricted work with a citation, one must be careful about the amount referenced. Both direct quotations and paraphrasing are permitted. All of an open work may be used with no limitations; attribution is used to give the author of this work credit.
- The closest one can come to altering a restricted work is to paraphrase the original author’s ideas and expression of these ideas. Whereas the author of an open work has provided advanced permission to use AND change their work (except in cases where ND – NoDerivatives – has been applied).
- Citation styles are varied and established. They dictate how to cite or reference a paraphrase or quotation within text (e.g., with an in-text citation or footnote) and how and where to provide the full reference, whether it be in a reference list, a works cited, or a bibliography and the end of a book.
- The styles for attribution statements are still emerging. Current best practice for an attribution statement states it should reside on the same page (digital or printed) as the resource it refers to. Statements can stand alone, e.g., within the caption of an image, or in a list at the bottom of the page.

The following table summarizes the differences between citations and attributions.
### Citation vs. Attribution

<table>
<thead>
<tr>
<th>Citation</th>
<th>Attribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic and legal purposes (plagiarism and copyright infringement).</td>
<td>Legal purposes (e.g., rules of Creative Commons licences).</td>
</tr>
<tr>
<td>The rights of the copy (meaning copyright) are <strong>NOT</strong> shared with the general public by the copyright holder.</td>
<td>Copyright <strong>IS</strong> shared with the general public by the copyright holder by marking the work with an open-copyright licence.</td>
</tr>
<tr>
<td>Protects an author who wants to refer to a restricted work by another author.</td>
<td>Author of an open work has given advanced permissions to use their work.</td>
</tr>
<tr>
<td>Used to quote or paraphrase a <strong>limited portion</strong> of a restricted work.</td>
<td>Used to quote (or paraphrase) <strong>all or a portion</strong> of an openly licensed work.</td>
</tr>
<tr>
<td>Can paraphrase, but cannot change work without permission.</td>
<td>Author has give advanced permission to change work.</td>
</tr>
<tr>
<td>Many citation styles are available: APA, Chicago, MLA.</td>
<td>Attribution statement styles are still emerging, but there are some defined best practices.</td>
</tr>
<tr>
<td>A reference list of cited resources are typically placed at the end of the book.</td>
<td>Attribution statements are found on the same page as the resource.</td>
</tr>
</tbody>
</table>

### Similarities

There are also similarities between a citation and attribution.

- Both can be – and often are – copyrighted. (See [Copyright and Open Licences](#).)
- Both give credit to the creator of the original work
- For both restricted and open works, the author or creator of a work might be different from the copyright holder. For example, if a faculty member writes an open textbook, their institution might hold copyright. However, it's standard practice to attribute the creator – not the copyright holder – in the attribution statement.
• Both can be used for either a newly created work or a revised work
• Both can be used when referring to a portion of another work, though the amount that can be cited from a fully copyrighted work is substantially less than what can be used from an open work
• Both can be used when building an argument or the foundation of a textbook

Tables: A special case

When BCcampus Open Education began publishing open textbooks, we discovered that there were few openly licenced tables that our authors could use. So, with the help of our copy editors, we developed a way to present information in a table format without violating copyright.

We learned during our research that a table is comprised of two parts:

1. The style or layout of the table, which displays the information. These elements can include the size, placement, and colour of the cells; the style of fonts; and the wording and placement of column and row headers.
2. The data or information contained within the table

<table>
<thead>
<tr>
<th>Style</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Label</strong></td>
</tr>
<tr>
<td>Row One</td>
</tr>
<tr>
<td>Row Two</td>
</tr>
<tr>
<td>Row Three</td>
</tr>
</tbody>
</table>
Our solution was to instruct authors to create an original table, and then cite the data added to that table. As you can see in the below example from *Introduction to Tourism and Hospitality in B.C.*, we provided the source for the data in the last row in the table. For clarity, we labelled this in-text citation as “Data source.” Alternatively, you could add the source information to a footnote.

<table>
<thead>
<tr>
<th>Main Label</th>
<th>Column One</th>
<th>Column Two</th>
<th>Column Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row One</td>
<td>Information 1</td>
<td>Information 2</td>
<td>Information 3</td>
</tr>
<tr>
<td>Row Two</td>
<td>Information 4</td>
<td>Information 5</td>
<td>Information 6</td>
</tr>
<tr>
<td>Row Three</td>
<td>Information 7</td>
<td>Information 8</td>
<td>Information 9</td>
</tr>
</tbody>
</table>

Table 2.1 from Introduction to Tourism and Hospitality in B.C.

The original table, created by the author or a designer working with the author, is an original creation. Because of this, no attribution statement is required. The table design is copyrighted by the author (or designer). However, as the data comes from an external source, it requires a citation. This same process can be applied to charts and graphs.

**Citation-Attribution Fusion**

The libraries at Thompson Rivers University in Kamloops have come up with a clever solution to the citation versus attribution dilemma. In the Crediting Images found Online section of their APA Citation Style web page, they suggest
modifying the APA citation style so it incorporates open license or public domain information for the image’s caption and reference. Here is an example.

The image and its caption would appear like this:

![Yellow-bellied Marmot Pups – Kamloops, BC, by A. Vern, 2007,](http://commons.wikimedia.org/wiki/File:Yellow-bellied_Marmot_pups_-_Kamloops,_BC..jpg) Used under Creative Commons Attribution 2.0 Generic License: [http://creativecommons.org/licenses/by/2.0/deed.en](http://creativecommons.org/licenses/by/2.0/deed.en)

The corresponding reference would be laid out like this:

Attributions

1. The concepts and portions of this text have been taken from Quill West’s presentation for Pierce College called Citations vs. Attributions, And how to deal with them in your work and is used under a CC BY 4.0 Licence.
2. Table 2.1 by Morgan Westcott is used under a CC BY 4.0 Licence.

Resources: Only the Open — BCcampus

If you are writing a new textbook (or other open educational resource) or adapting an existing one, it's important that all of the content meets open-copyright licence requirements or is in the public domain. (See Licenses and Tools and Copyright and Open Licenses.)

Is your material really open?

As the author and publisher of an open textbook, you have agreed to release your work with an open-copyright licence. However, open educational resources often include materials from external sources. (See Resources: Search and Find.) And it is the licensing conditions of these items that must be carefully examined before incorporating them in your open textbook. Follow the below steps to ensure that all material you find on for your book is open. Don't assume that any item posted on the internet is free or free to use.

1. Look for the copyright notice. This information lists the copyright symbol (the letter C inside a circle) or the word “copyright” followed by the year in which the work was
created, and therefore copyrighted, and the name of the copyright owner.

1. **NOTE:** A copyright notice does not automatically mean that a resource is not permitted in an open textbook. In fact, most open resources are copyrighted.

2. Here is an example: Copyright 2018 Lauri Aesoph.

2. Look for a **statement of rights.** This statement outlines the conditions of use or permissions granted by the copyright holder – for example using a Creative Commons licence – and is part of the “copyright notice”:

   1. If not included, it can be assumed that the copyright holder grants no permissions and that “all rights are reserved”.
   
   2. Here is an example of a copyright notice that includes a statement of rights for an openly licensed resource:

      *Copyright 2018 Lauri Aesoph. This guide is released under a Creative Commons Attribution 4.0 International Licence.*

3. If the copyright notice, and statement of rights aren’t immediately apparent on a website, look for this information on web pages marked as “Terms and Conditions”, “Permissions”, etc.

4. If you can’t find a copyright notice, statement of rights, or licensing information, don’t use the material.

5. Even if a website is labelled as open, unless the material is clearly marked with an open-copyright licence or uses a public-domain marking, don’t use it.

6. If a resource is in the public domain because its copyright has expired or a work has been designated to the public domain, look for language or a logo that makes this clear. (See Appendix 1: Licences and Tools.)

7. Don’t assume that an old image or text found online is in the public domain. It might be a secondary source or someone’s interpretation of the original item. For example, a photograph of a centuries-old painting may be copyrighted and have
restricted rights.

8. Don’t use a resource for which one-time permission has been granted by the creator. (Creative Commons licences permit unlimited usage). Instead, if you find material that you want to use but hasn’t been released with an open-copyright licence, contact the creator and ask if they will consider doing so.

9. Keep track of all external resources added to your open textbook including where and when they were found.

Resources: Search and Find — BCcampus

There are literally millions of educational resources – photos, illustrations, videos and film, audio clips, courses, articles, research – that have been released with an open-copyright licence or are in the public domain and available to open textbook authors and
publishers. Below are online libraries, projects, directories, repositories, and websites where you will find both individual objects and full resources. If you have difficulty finding what you need, be creative and look for the desired item – photo, graphic, video – in an article from one of the many open academic journals or an open textbook. Another trick is to use several synonyms when searching for a hard-to-find resource.

Many sources contain items that range in user permissions from no copyright (e.g., in the public domain) to CC licences to all rights reserved. Make it your practice to check every resource’s licence or permissions before adding it to your open textbook. User rights have been noted beside some of the below sources.

It is recommended avoiding CC licences that include the -ND (NoDerivatives) restriction as content under this licence cannot be changed. See [CC BY-ND 4.0](#) for more information.

Chapter table of contents

**Canadian collections**

**Mixed collections (open and restricted materials)**

- [Creative Commons (CC)](#)
- [Flickr](#)
- [Google](#)

**Government**

- [Canadian government websites](#)
- [U.S. government websites](#)
Libraries, museums, and book collections

Subject-specific collections

- Art, culture, and history
- Broadcasting
- Music and audio
- Science and health

Type of resource

- Audio
- Courses, lectures, and lessons
- Games and interactive simulations
- Images: charts, clip art, graphs, icons, photos, symbols, vectors
- Maps
- Open academic journals
- Videos and film

Repositories

Canadian collections

- Canadian Museum of Nature [New Tab]: Collection data are available under a CC BY licence. Images are available under a CC BY-NC licence.
- cIRcle [New Tab]: This OER repository is from the University of British Columbia. Each item is individually marked with copyright permissions.
- Images Canada [New Tab]: See Terms and Conditions [New Tab] for information about usage
- Library and Archives Canada [New Tab]: See Terms and Conditions [New Tab] for information about usage
- Open Collections [New Tab]: Check each item used in this collection, from the University of British Columbia, as
permissions vary

- **Project Gutenberg – Canada [New Tab]**: Books that are in the public domain in Canada
- **SOL*R (Shareable Online Learning Resources) [New Tab]**: Higher education and government material from British Columbia and released under CC licences

**Mixed collections (open and restricted materials)**

**Creative Commons (CC)**

- **Content Directories [New Tab]**: A list of organizations and projects released with CC licences
- **CC Search [New Tab]**: Images from multiple repositories

**Flickr**

- **Flickr – advanced search [New Tab]**: Limit search to CC licensed materials only
- **Flickr: Internet Archive Book Images [New Tab]**: Check each item for permissions
- **The Commons [New Tab]**: Found on Flickr in partnership with The Library of Congress [New Tab]. Participants are cultural heritage institutions who share publicly held photography collections. There are “no known copyright restrictions” on the photographs in this collection. See Rights Statement [New Tab] for more information.
Google

- [Google – advanced search](#)[New Tab]: Limit search to CC licensed materials only

Government

Canadian government websites

Most [government of Canada websites and publications](#)[New Tab] are covered by the open government licence. Here is an example of the Statistics Canada data licence

Source: Statistics Canada, name of product, reference date. Reproduced and distributed on an “as is” basis with the permission of Statistics Canada

However, when using a resource from a Canadian government website or publication, always check the Terms of Use, Copyright, or similar page for details. Often, images and other resources from a Canadian government website stipulates that the reused image or resource not be used for commercial purposes. If this is the case, then add this line to your attribution statement: “This image cannot be used for commercial purposes.”

U.S. government websites

Generally, the information and images found on [U.S. government websites](#)[New Tab] are in the public domain. However, when using
a resource from a U.S. government website, always check the Terms of Use, Copyright, or similar page for details.

Libraries, museums, and book collections

Also see open academic journals and repositories.

- **British Library [New Tab]**: Check each item for permissions
- **eBooks and Texts Archive [New Tab]**: This website lists dozens of collections that contain free academic books, fiction and popular books, children's books, and historical texts. Check each book for permissions before using.
- **Europeana Collections [New Tab]**: Digital resources of Europe’s museums, libraries, archives and audio-visual collections. Rights vary by item. For an overview of this collection, see Terms and Policies [New Tab].
- **Hathi Trust Digital Library [New Tab]**: Many items are in the public domain, but some copyrighted items have restricted rights. Check each item before using. The advanced full-text search [New Tab] allows searching by year of publication.
- **Library and Archives Canada [New Tab]**: See Terms and Conditions [New Tab] for information about usage
- **MusOpen [New Tab]**: Resources for teachers and students such as royalty free music and sheet music
- **National Science Digital Library [New Tab]**
- **Petrucci Music Library [New Tab]**: Public domain music recordings and scores
- **Project Gutenberg [New Tab]**: Books that are in the public domain in the U.S. or U.S. copyrighted titles, for which the copyright holder has given permission for unlimited non-commercial worldwide use
- **Project Gutenberg – Canada [New Tab]**: Books that are in the public domain in Canada
Subject-specific collections

Art, culture, and history

- British Library [New Tab]: Check each item for permissions
- Library and Archives Canada [New Tab]: See Terms and Conditions [New Tab] for information about usage
- Metropolitan Museum of Art [New Tab]: Read the Met’s Open Access Policy [New Tab].
- Museum of New Zealand [New Tab]: Images available for reuse under a CC BY-NC-ND Licence [New Tab].
- New Old Stock [New Tab]: Vintage images
- Old Book Illustrations [New Tab]
- Public Domain Review [New Tab]: An online journal of works from the history of art, literature, and ideas
- Smithsonian [New Tab]: Free Sackler Gallery (images)
- Viintage [New Tab]: Vintage graphics in the public domain
- Wellcome Images [New Tab]: Images of current and historic human culture

Broadcasting

- Al Jazeera English [New Tab]: Quality footage of comprehensive news reports and debate; openly licensed as stated under their Terms and Conditions [New Tab]

Music and audio

- Audio Archive [New Tab]
• ccMixter [New Tab]
• Creative Commons suggestions [New Tab]
• Free Music Archive [New Tab]
• Free Sound [New Tab]
• Jamendo [New Tab]
• Juke Deck [New Tab]
• MusOpen [New Tab]: Royalty free music including sheet music, and resources for teachers and students
• Open Music Library [New Tab]
• Opsound [New Tab]
• Petrucci Music Library [New Tab]: Public domain music recordings and scores
• SoundCloud [New Tab]

Science and health

• BioMed Central [New Tab]: Open access biology and medical journals. Figures and graphs in articles are CC licensed and available for reuse.
• Bioscience Image Library [New Tab]: From Berkshire Community College
• Canadian Museum of Nature [New Tab]: Collection data are available under a CC BY licence. Images are available under a CC BY-NC Licence.
• Encyclopedia of Life (EOL) [New Tab]
• Morphbank [New Tab]: Biology images
• NASA Images [New Tab]
• National Science Digital Library [New Tab]
• PhET interactive simulations [New Tab]: Math and science simulations from the University of Colorado
• PLOS [New Tab] (Public Library of Science)
• PubMed Central (PMC) Open-Access Subset [New Tab]: Search within journals marked with the OA symbol in the “Free
Access” column for freely available articles

- Science Image [New Tab]
- Wisc Online [New Tab]: Images from Wisconsin's Technical Colleges

Type of resource

Audio

See Music and Audio

Courses, lectures, and lessons

- Open Learning Initiative [New Tab]: From Carnegie Mellon University
- Khan Academy [New Tab]
- MIT YouTube channel [New Tab]
- MIT OpenCourseWare (OCW) [New Tab]
- Open Course Library [New Tab]
- Open Education Consortium – Courses [New Tab]
- Open Yale Courses [New Tab]
- Saylor Academy [New Tab]
- webcast.berkeley [New Tab]: From the University of California, Berkeley
- Wisc Online: Basic Computer Skills course [New Tab]: From Wisconsin's Technical Colleges
Games and interactive simulations

- **PhET interactive simulations [New Tab]**: Math and science simulations from the University of Colorado
- **Play games [New Tab] and build games [New Tab]**: Wisc Online from Wisconsin’s Technical Colleges

Images: charts, clip art, graphs, icons, photos, symbols, vector images

- **Bing [New Tab]**: Photos and videos
- **Foodies Feed [New Tab]**: Food photos in the public domain
- **Gratisography [New Tab]**: Photos in the public domain
- **IM Free [New Tab]**: Photos, vector images, and videos
- **Images Canada [New Tab]**: See copyright page [New Tab] for info about licences
- **Inkscape [New Tab]**: Professional vectors graphic editor, open source
- **ISO Republic [New Tab]**: Photos, vector images, and videos
- **New Old Stock [New Tab]**: Vintage images
- **Noun Project, The [New Tab]**: Icons and symbols
- **Old Book Illustrations [New Tab]**
- **Open Clip Art Library [New Tab]**
- **Picjumbo [New Tab]**: Photos
- **Picography [New Tab]**: Photos
- **Pixabay [New Tab]**: Photos and clip art
- **Public Domain Vectors [New Tab]**
- **Startup Stock Photos [New Tab]**
- **Stokpic [New Tab]**: Photos
- **Superfamous Studios [New Tab]**: Images
- **Travel Coffee Book [New Tab]**: Travel photos
- **Unsplash [New Tab]**: Photos
• **Viintage [New Tab]**: Vintage graphics in the public domain
• **Wellcome Images [New Tab]**: Images of current and historic human culture
• **Wikimedia Commons [New Tab]**: Photos, images, charts, and graphs
• **Wikipedia [New Tab]**: Look for photos within articles

Maps

• **Open Street Map [New Tab]**

Open academic journals

• **Bio Med Central (BMC) journals [New Tab]**: High quality peer-reviewed journals including broad interest titles such as BMC Biology and BMC Medicine, specialist journals such as Malaria Journal and Microbiome. Check each publication to ensure it’s open access.
• **DOAJ (Directory of Open Access Journals) [New Tab]**: Community-curated online directory that indexes and provides access to high quality, open access, peer-reviewed journals
• **IRRODL (The International Review of Research in Open and Distributed Learning) [New Tab]**: A refereed, open access e-journal that disseminates original research, theory, and best practice in open and distributed learning worldwide, and based at Athabasca University in Alberta
• **Open Praxis [New Tab]**: A peer-reviewed open access scholarly journal focusing on research and innovation in open, distance and flexible education. It is published by the International Council for Open and Distance Education – ICDE [New Tab].
• **PLOS (Public Library of Science) [New Tab]**: A nonprofit organization with the goal of accelerating progress in science and medicine

• **Public Domain Review [New Tab]**: An online journal of works from the history of art, literature, and ideas

**Videos and film**

• **Al Jazeera English [New Tab]**: Quality footage of comprehensive news reports and debate that are openly licensed as stated under their [Terms and Conditions [New Tab]]

• **Bing [New Tab]**: Photos and videos

• **IM Free [New Tab]**: Photos, vector images, and videos

• **ISO Republic [New Tab]**: Photos, vector images, and videos

• **Moving Image Archive [New Tab]**: Movies, films, and videos

• **TED talks (Technology, Entertainment, Design) [New Tab]**: These presentations are released with the CC BY-NC-ND Licence

• **Vimeo [New Tab]**

• **YouTube [New Tab]**: Include CC BY when searching for videos. Items with a”Standard YouTube Licence” (covered in their [Terms of Service [New Tab]] are not open. See [YouTube's article on how to add a CC licence to a video [New Tab]].

**Repositories**

• **Bielefeld Academic Search Engine (BASE) [New Tab]**: Thousands of academic OER in a variety of languages

• **cIRcle [New Tab]**: This OER repository is from the University of British Columbia. Each item is individually marked with copyright permissions.
• **Connexions [New Tab]**: A repository of open educational resources started by OpenStax where faculty, students, and others can view and share these items

• **Internet Archive [New Tab]**: Wayback Machine: A digital archive of the World Wide Web and other information on the Internet. Do not assume that items are in the public domain or openly licensed.

• **MERLOT (Multimedia Educational Resource for Learning and Online Teaching) [New Tab]**: A curated collection of free and open online teaching, learning, and faculty development services contributed and used by an international education community.

• **OAlster database [New Tab]**: Catalog of millions of OER

• **OER Commons [New Tab]**: A public digital library of open educational resources launched by ISKME – the Institute for the Study of Knowledge Management in Education – in 2007

• **Open DOAR (Directory of Open Access Repositories) [New Tab]**: Quality-controlled list of academic open access repositories

• **Open Education Europa [New Tab]**: OER offered in a variety of languages for the European teaching community

• **SOL*R (Shareable Online Learning Resources) [New Tab]**: Higher education and government material from British Columbia and released under CC licences

• **Wikiversity [New Tab]**: Learning resources, learning projects, and research

### Embedding and Linking

When an author is unable to find or create a needed video, image, or other item for their open textbook, they often ask if linking or embedding copyrighted material—for which all rights are reserved—is permitted. As a publisher of open textbooks, BCcampus...
Open Education has developed recommendations on this issue while taking into account the guiding principles and values behind open educational practices and resources.

### Linking text

Linking to a website or deep linking to a web page does not require permission from the copyright holder and is not considered copyright infringement. However, linking to a website that obviously violates copyright law, such as one that hosts pirated music or films, should be avoided.

If an author decides to link to restricted material within their open textbook, it is recommended that descriptive text be used for the link so, if taken out of context, the reader knows exactly to what resource they are being redirected. This method also addresses accessibility requirements for linking.

- **Example:** Information on BCcampus Open Education is available online.

  For more information, see [Links](#) in the Accessibility Toolkit – 2nd Edition.

### Embedding a video

Embedding—or inline linking—involves adding an embed code to a web source (such as an open textbook) that results in a visual
representation—or streaming—of digital content, such as a video, from another web source, such as YouTube or Vimeo. This is a very popular practice because: 1) viewers don’t need to access a second website to watch the video and 2) the embedder doesn’t sacrifice bandwidth because the video data is stored on the original site.

The question for open textbook authors, however, is: Does embedding violate copyright infringement for videos not released with a CC or open licence?

In his blog post, “Is it legal to embed YouTube videos in a blog post?” Kenny Novak answers this question with a summary of YouTube’s terms. He says: “…as long as YouTube's terms permit it, any YouTube user can embed your content without needing to ask your permission, because you already GAVE them permission simply by uploading your content to YouTube.”

All videos shared on YouTube are assigned to one of two licences.

- The Standard YouTube licence is added, by default, to all videos uploaded to YouTube and set the conditions described by Novak above.
- A Creative Commons Attribution (CC BY) licence is also available, but the user must manually make the change from a Standard YouTube licence to the CC BY licence by following these instructions. The CC BY licence lets the video’s copyright holder give users advanced permission to copy, change, redistribute, and retain copies of the video.

For more information, see “YouTube” in the Videos, Audio, and Interactive Media chapter of the Pressbooks Guide.
Recommendations

For authors who wish to embed videos by other creators in their open textbooks, it is recommended that they:

1. make a best effort to embed open-source or public domain videos
   - if it’s uncertain whether or not video is open, follow steps laid out in Resources: Only the Open

2. embed videos from video-sharing websites for which:
   - the Terms of Service clearly indicate this action is permitted
   - copyright holders can remove their videos in cases of copyright infringement

3. provide proper attribution

If an author or publisher decides to embed a restricted video in an open textbook, it is recommended that this information and a link to the original content are clearly indicated out in the attribution statement.

Using Screenshots of Software

If you want to use a screenshot of software for an openly licensed work, as a general rule check the terms of a website, as they may
spell out the rules of how to use screenshots of their products. Many companies are okay with using screenshots of their software or products for training. There are many “how to” websites that use screenshots, as there is a financial incentive for companies to have training material created for them by others. (The more people who learn to use their product, the better.)

Follow a company’s guidelines if you want to include screenshots of their software product

If the software is open source [New Tab] or released under a free software licence [New Tab], it is usually fine to use screenshots.

Microsoft spells out how you can use screenshots of their products as follows:

- You may not use screen shots of Microsoft product boot-up screens, opening screens, “splash screens,” or screens from beta release products or other products that have not been commercially released.
• You may use other screenshots in advertising, in documentation (including educational brochures), in tutorial books, in videos, or on websites, provided that, in addition to the requirements above, you:
  ◦ Do not alter the screen shot except to resize it.
  ◦ Do not use portions of screen shots.
  ◦ Do not include screen shots in your product user interface.
  ◦ Do not use screen shots that contain third-party content.
  ◦ Do not use screen shots that contain an image of an identifiable individual.  

Google allows the use of screenshots of their products. For more information, see Google’s Using Product Graphics page [New Tab]. Others, require that you ask permission. For example, see Yahoo’s Permissions page [New Tab].

**Bottom line:** Check a software’s website for terms of use before using screenshots of its products.

Ten Tips for Authoring Success — Open Textbook Network, Linda Frederiksen

This chapter was written by Linda Frederiksen, Head of Access Services, Washington State University Vancouver.

From generating awareness and finding partners, to developing and completing projects on time, to assessing and sustaining resources and funding, writing open textbooks can be both a highly rewarding and challenging enterprise. Based on conversations with authors and project managers who have successfully developed and produced open textbooks, this is a list of authoring tips for success. It describes practical and philosophical strategies for authoring, particularly in a higher education environment, and provides support for those considering this worthwhile and exciting prospect.

In early 2017, I contacted OER authors and project managers and asked:

“If you could tell a new open textbook author one thing, what would it be?”

Here I share the thoughtful comments and helpful tips each
provided. Some of the suggestions may already be familiar to you, or are included in Chapter 4’s Checklist. Other recommendations may be surprising or unexpected, and more than a few may inspire you to think more about your own authoring process. It is my hope that all of them will be helpful as you move from aspiring to successful open textbook author.

10. Good authoring begins with planning

Writing well takes time, patience, practice, and planning. David Lippmann is the author of Math in Society and co-author of Precalculus: An Investigation of Functions. He believes having a good plan in place before sitting down to write is critical to success. With a clearly thought out structure, including a fairly detailed table of contents, mapped out in advance, writing becomes much easier. He recommends spending 2-3 weeks planning the book structure, during which time authors can also think about purpose, audience, voice, technology, accessibility, distribution, and more.

Along these lines, Julie Lang the OER Coordinator at Pennsylvania State University, suggests asking yourself a very specific question: where are you going with the resource you’re writing? If your intent is to replace a commercial textbook, what are the learning goals and objectives for the course and what content will be needed for students to meet those objectives? Get those materials in place before you begin writing. In other words “think about the end as you begin.”

Both Lippmann and Amanda Coolidge, BCcampus Open Education Senior Manager and co-author of the BC Open Textbook Accessibility Toolkit, urge new authors to think broadly about who will read, adopt, or adapt your work. As Coolidge says, “Are you standing on the other side of the world from the reader?” And, if so, how should you plan for that? For example, in an online, blended, hybrid, open learning, or MOOC environment, will students in South
Africa or Singapore relate to very specific or localized examples and scenarios or will these become barriers to learning?

9. It’s going to take longer than you think

Even with the best preparation, authoring an open textbook is not a fast or easy process. While all those I interviewed mentioned this tip in one way or another, a couple of comments stand out. **Chapter author** and Director of Open Oregon State Dianna Fisher has managed numerous open textbook projects, including bringing a popular geoscience text *Living with Earthquakes in the Pacific Northwest* by Robert S. Yeats into a digital format. She says: “Even if you are taking content such as your class lecture notes – content that you think is fairly substantial, when you sit down to reformat those to read like a book, it still takes more time than you think it will.”

And, according to Lauri Aesoph, BCCampus Open Education Manager:

> In my previous career I was a writer specializing in integrative medicine. For 15 years, I published hundreds of articles and wrote two books. When I work with new or even experienced faculty authors of open textbooks I tell them of my experience and then say: “Writing a book – any book – will take much longer than you expect. It will require more of your energy that you anticipate, and you will run into problems that you need to plan for.”

8. Share the load

Because of the time commitment involved in authoring an open textbook, several interviewees mentioned the benefits of working
with others. Authoring is hard, often stressful, work, especially if you are trying to balance it with other equally important responsibilities. It may be that you can share the load by working with a librarian to identify what’s already available or asking a colleague to proofread and edit your work. Perhaps you can find a student or entire class to provide feedback on content or test ancillary resources. Whether it’s collaborating with a project manager who will keep you on track, an instructional designer to do the heavy technical lifting, or a contributor to write additional content, or all of the above, distributing the myriad tasks involved in open textbook publishing is better than trying to do everything yourself.

Quill West, an open education project manager in Washington State, and frequent OER presenter, believes strongly in the team approach to open textbook authoring. She says those who go it alone have a more difficult time getting the work done. Multiple authors make the work not only go faster but can provide important peer review along the way. West knows additional support also makes the content stronger. For any authoring project, it’s important to have a reviewer, project manager, or student reader who may be unfamiliar with a topic who can say, “I don't understand that part, explain it to me.”

7. Do the prep work

When writing any learning resource: have a style guide (see one option in this guide). Create one of your own or find one elsewhere, but use one. Keep the same font, citation style, and – perhaps most importantly – voice throughout the resource. A good style guide makes the end product look better, read better, and be more credible. A style guide is particularly important if working with co-authors or contributors.

You should also know what Creative Commons (CC) is and how
you are going to license your work. Nick Johns, an Enterprise Analyst with Lumen Learning, says new authors should have a working knowledge of Creative Commons and other open licensing models, a thought echoed by West when she notes the value of the CC BY license to the larger open community. If your intention is to share your work openly, then others have to be able to edit, revise, and adapt it. As she says “If you can’t edit it, you aren’t sharing it.”

For more info: https://press.rebus.community/authoropen/chapter/creative-commons/

6. Learn the ropes

This tip is about the publishing aspect of authorship. What kind of technology will you be using for authoring – Word? Google Docs? Pressbooks? If you are authoring something in the STEM field, how comfortable are you working with software that generates diagrams, formulas, charts, and complex tables? Lippmann suggests selecting the technology you will use before, not in the middle of, the authoring process. Work in a format that you’re comfortable with and make sure the software and license allow for editing.

If you’re using Pressbooks either as an authoring tool or as the publishing platform for your open textbook, you should have some idea of how the software works or how content created elsewhere integrates with Pressbooks, and what to do when it doesn’t. BCcampus and other open textbook programs often provide the instruction needed. Aesoph says adequate training is necessary before starting, along with preparation for technical issues that may occur during the writing process. If your institution provides this type of training, take it.

Amy Hofer, the Statewide Open Education Library Services Coordinator for Oregon State and co-author of the forthcoming Transforming Information Literacy Instruction: Threshold Concepts in Theory and Practice, thinks composing in Word or Google Docs
is fine, but at some point authors should set up the structure and formatting in the publishing platform. She suggests creating the first 10% of content in Word, then testing it in Pressbooks.

Hofer is also a strong proponent of setting up mechanisms or forms to keep track of sources (see Managing Assets in this guide). Too often, she says, new authors don’t plan for how they’re going to incorporate images, copyright-protected, or public domain works into content, making attribution at the end of the project more cumbersome.

Finally, don’t forget about accessibility. Mark-up language and alt tags are easy to incorporate as you go along, less so if you have to go back and add them later. For more information see the accessibility chapter in this guide.

5. Beware of scope creep

If the scope of your open textbook is the amount of authoring required to successfully complete the project, then scope creep is the addition of content or features that were not in the original plan. Without a clear target or scope, projects can quickly become hard to manage. Both Lippmann and Mike Caulfield, the Director of Blended and Network Learning at Washington State University Vancouver and author of Web Literacy for Student Fact Checkers recommend authors avoid aiming for encyclopedic comprehensiveness.

It can require concentrated effort to stay focused. What will you include and what will you exclude? This is a significant and sometimes philosophical or political question. The need for clarity is especially important if working with co-authors and collaborators. BCcampus’ Aesoph and Coolidge recommend authors think about where to draw and hold the line on scope. They also say revisit the scope throughout the process, so that the project stays on track.
4. Don’t reinvent the wheel

As an open textbook author, you may have many goals. You may want to make college more affordable for students by replacing a commercial textbook; you may want a resource that more closely resembles how you teach; your department, university, student organization or state legislature may be strongly encouraging OER adoption or setting OER benchmarks. Whatever the motivation, spend some time looking to see what is already available. You may want to adopt or adapt an already existing resource. The beauty of OER is that it provides teachers, learners, and open textbook authors with the legal permissions to Retain, Reuse, Revise, Remix, and Redistribute a work (David Wiley).

Ashley Miller is the Affordability and Access Program Manager at the Ohio State Universities. In her experience, the best projects have been with faculty who “grasped the remix” by finding content and revising it. She says, “For faculty, the textbook publication lifecycle starts with a landscape evaluation in your discipline – what can you remix?” Or, as West says, “Look at what’s already out there. Make sure you're not recreating the wheel for no reason. There is plenty of good stuff to start with.”

3. It doesn’t have to be perfect

In the same way that scope creep can stall a project, perfectionism can as well. Accept that there will be edits and revisions, and that one of the strengths of publishing in an open environment is the ability to gather feedback and make changes more quickly than in a traditional environment. Fisher says new authors should be ready for feedback, especially from students using the work, and that their comments and suggestions will make the work stronger. As Caulfield says, this is an opportunity to think about your book and
your teaching in a different way than a textbook; it's more modular than a traditional textbook and far more open to revision.

According to Miller, “it’s not really a textbook, it’s a growing, living document.” Lippmann recommends adapting the open software model of ‘release early, release often’ to ‘publish early, revise often.’

2. Think about ancillary resources

One of the early (and continuing) criticisms of OER has been the lack of ancillary resources. Question and test banks, solution manuals, slide decks, and multimedia tutorials are examples. According to Caulfield, these additional activities, exercises, and multimedia features are the ‘secret sauce’ of a successful project. If CC BY licensed, ancillary resources can be adapted by others who can then add local examples.

There are existing ancillary resources that you may want to add to your work. Lippmann’s MyOpenMath and iMathAS along with James Sousa’s Mathispower4u offer ancillary resources for mathematics instructors who want to adopt, adapt, or develop their own open textbook.

1. Embrace open

Creating an open textbook is an opportunity to embrace a new way to think about the teaching and learning experience. As Miller summarizes, the value of authoring an open textbook goes beyond student savings and becomes “just another way to support the teacher/student relationship and learning experience. So in that way, the deliverable is not an artifact like a textbook, it’s the (new and improved, and less expensive) teaching and learning experience.”
Rajiv Jhangiani is a University Teaching Fellow in Open Studies and Psychology Instructor at Kwantlen Polytechnic University, a Senior Open Education Research and Advocacy Fellow at BCCampus, and the co-author of *Research Methods in Psychology-2nd Canadian Edition* and co-editor of *Open: The Philosophy and Practices That Are Revolutionizing Education and Science.*

To your question, “What Is The One Thing Every New Open Textbook Author Should Know?”, I would say that although constructing an open textbook is easier when you think about it in terms of a conventional textbook structure (e.g., sub sections within chapters that may also be grouped into sections), know that the most exciting elements of OER have to do with the greatest weaknesses of conventional textbooks. With an open textbook you have the ability to update content frequently, so write with this in mind (e.g., do not keep referring to one particular study as this may be replaced over time). Think about how you might take advantage of the digital platform by embedding interactive simulations, videos, and online activities. Consider how you can invite students into the process of OER creation, even if through personal application questions or small exercises. And finally, do not wait for your open textbook to be in some mythical “perfect” state before releasing it to the community. Pilot it, collect student feedback, and revise. Consider this an iterative process that you own. And if you are feeling a bit bolder, develop the textbook itself in the open, permitting and even inviting feedback from colleagues as you develop each sub-section. It may seem daunting to open yourself up to that level of scrutiny, but the resource will be far stronger for it. If you think about it, this is what the process of opening education is all about.
Writing Process — Open Textbook Network, Melissa Faldin & Karen Lauritsen

Writing a Draft

The first draft is probably the hardest part of making an open textbook. A few hints to get you writing faster:

1. **Begin with defining learning objectives and key terms.** This assures you or your group are writing, very specifically, to set goals and objectives. Decide on key terms and vocabulary early in the drafting process to help with consistency throughout the textbook.

2. **Draft in a flash.** Get your ideas drafted quickly, without formatting. Don't worry about headings, graphics, or other issues. It may help prevent writer's block. There will be time to proofread, copyedit and format the book later.

3. **Create a resource wish list.** Keep a list of materials you'd like to include in the book, but haven't found yet. If you need a break from writing, work on the list.

Group Process

Commonly, open textbooks are authored by a group. This is either by design, as with a curriculum committee, or because of shared interest among colleagues. In either situation, when more than one person is writing, it helps to have clearly defined roles to expedite the process.

- If possible, bring everyone together to launch the project. Brainstorm topics and concepts to define scope and give
everyone a voice in the overall product. Having everyone on board early will prevent rework and confusion as the project progresses.

- During the drafting process, work together to identify learning objectives, key terms and potential resources. Doing so assures that everyone is working to the same end.
- Divide the work by defining roles.

Common Group Roles

- **Writer**: Writes draft with consist voice and tone. Since writing is especially time-consuming, it helps to have a few writers, especially if a group has more than three people.
- **Curator**: Finds or makes supplemental resources. The writer may request materials from the curator, using the resource wish list.
- **Archivist**: Documents resources used throughout the book. Works with the writer and curator to manage assets. This person may also check attribution in a final draft, and provide appropriate captions and other related help.

For additional roles in making open textbooks, see the chapter [Defining Your Role](#).

The Writing

Writing a textbook that is coherent takes discipline, endurance, and determination. Depending on the length and subject matter of your book, you will need to carve out an extended schedule to think and write. The detailed outline and project timeline created at the beginning of a self-publishing endeavor will help guide your writing efforts. (See [Textbook Outline](#) and [Project Charter and Timeline](#)).
We have worked with many faculty authors and watched as they attempted to write an open textbook off the side of their desks (and in the evenings and on the weekends). While possible, this approach is not ideal and certainly not fun. We tell authors-to-be that writing a book will be more time consuming and challenging than they can image. To help them prepare, we suggest they:

- Clear their personal and professional schedule as much as possible.
- Obtain release time, apply for a sabbatical, use vacation time, or take paid (or unpaid) leave that can be devoted to writing their textbook.
- Ask for help.

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**Secrets of a Writer**

I was a published author for fifteen years and practised my craft in a home office surrounded by two young children and household chores begging to be done. To survive and succeed as a writer, I developed the following routine.

- Get enough sleep, eat a balanced diet, exercise, and take breaks throughout the working day. Writing is tiring and it's difficult to write when you're not feeling well.
- Figure out the times of day when you write efficiently and do your best work. Take advantage of these times to get writing done.
- Restrict writing time to a specific time of the day. This will force efficiency and prevent endless writing.
on and off throughout the day, which can be exhausting.

- Find a quiet place to work.
- When you write, just write. Don’t give into distractions such as answering the phone, texting, emailing, or doing laundry.
- Don’t worry about perfecting or revising your work, particularly during the first draft. Allow the words to flow. Editing will come later.
- Allow a realistic amount of time to write the book, a chapter, or a section assigned that day, week, or month. Don’t underestimate how long it takes to write a textbook.
- Don’t give into writer’s block. When creativity is evasive, work on something mechanical such as:
  - pasting blocks of research into the book (with citations and attributions)
  - writing image captions
  - adding resources such as suggested reading lists, exercises, and key takeaways

Writing a book will never feel finished. There is always something that can be changed, improved, or added. At some point you will need to stop and tell yourself, “good enough.”

Mind control

Because writing is a creative process, it can feel incessant,
occupying your thoughts night and day. Calm your frenzied mind by enlisting these practices.

1. Record stray ideas that come to mind when not writing to come back to later.
2. Keep a notebook by your bedside for middle-of-the-night thoughts that wake you up.
3. Brainstorm by recording as many ideas as possible on a specific topic or problem.
4. Begin each writing session with ten minutes of unedited scribbling to clear your mind and jump-start creativity.
5. Experiment with paper and pen. Some find this method assists with processing ideas.
6. Allow ideas to sit for a day before reviewing them for value.

Writing Recommendations — Open Textbook Network, Melissa Faldin & Karen Lauritsen

As an educator you write often, but writing a book can still be intimidating. As you start to write it is important to remember the famous line by William Zinsser, “writing is thinking on paper.” Or in this case, writing is teaching on paper. You may not be an author, but you are a teacher, and that gives you an expert advantage when it comes to the textbook authoring process.

When writing a textbook, it is important to consider the following elements:

- **Tone**: In what tone do you want to present your materials? How do you want the learner to react?
- **Tense**: Past or present? In most cases, non-fiction and news
materials are written in past tense, and readers expect it.

- **Consistency**: Tone and tense should be used consistently throughout your writing. If using existing materials, adapt the materials to match tone and style, so that the work is cohesive.
- **Quality**: A work, no matter the strength of its ideas, will be judged on the quality of its execution. This means you'll want to use proper spelling and grammar. There are many grammar guides and apps online to help with proofreading and review.

Read more about style and consistency in the [Style Guides](#) chapter.

### Consistency in Tone — BCcampus

One of the challenges of adapting an open textbook is to create a final product that is consistent throughout. It is highly recommended that you assess the original textbook before you begin. Once this has been done, attempt to match all revised and new text, resources, layout and citation styles to that of the original work.

### Assessing Language and Tone

Begin by assessing the style and tone of the original text. Here are some elements to be aware of:

- Is the tone of the language formal, or friendly and conversational?
- How does the author address the reader? From a distance? Or does the author include the reader with phrases such as “we learn” and “you will see”?
- How is punctuation used? For example, are serial commas
used, i.e. a comma before “and” when listing three or more things: “the cat, the dog, and the horse” OR “the cat, the dog and the horse”.

• How long is the typical sentence? Paragraph?
• Pay attention to the word count for existing chapters (average and range). Try to maintain this count for both new and revised chapters. Ask your project manager for assistance, if required.

Consistency in Layout

As you review the textbook, take note of the following:

• Does each chapter contain specific pedagogical features such as Learning Objectives, Exercises, Summary, Suggested Readings, highlighted points of interest?
• Does the author use lists? If so, are bullets or numbers used or something else?
• How are headings used? Are sub-headings used? What is the highest heading level used?
• How long are sections under a heading or sub-heading?

Consistency in Use of Resources

Resources refer to all items other than text, such as photos, graphs, diagrams and multimedia content (video or audio links). Pay attention to what types of resources the original author used, how often they are inserted and how they are labeled.

• Resources should have a caption (e.g. Figure 1 + description). See the Captions section for guidelines on how this are added and laid out.
Differentiation between figures and tables. For example: Figure 1.2 or Table 1.2

For adaptations, use the numbering system employed by the original author.

For new creations, use a numbering system that incorporates the chapter number and image sequence. For example, for the first figure in Chapter 1 caption the figure, Figure 1.1.

New types of resources can be added to the adapted version; however, keep the overall textbook in mind. When adding a new type of resource ensure that it enhances the flow of the book.

In addition to the above, we will suggest the attribution be based on the layout recommended by Creative Commons (http://wiki.creativecommons.org/Best_practices_for_attribution)

References and Citation Style

When you assess the textbook, identify both the citation style, and how and where references are listed in the book (e.g., at the end of each chapter or at the end of the book), or as footnotes. Be sure to follow the same style. Note how in-text citations are used including the punctuation used.

Consistency in Captions — BCcampus

When BCcampus Open Education began working with open textbook authors, we soon recognized that devising a standard method of captioning each non-text item in a book was critical. At the same, we were teaching authors the importance of recording the information needed to create a well-structured attribution
statement for each open resource they borrowed. It didn’t take long to realize that we could use – and shape – a caption’s layout to help identify its resource in an attribution statement. In other words, the caption’s label could be part of the attribution statement. This chapter describes suggested formats for captions and attribution statements, and how the two can be used together so that the resources in a textbook are clearly marked and legally attributed.

Captions Table of Contents

Captions

- Figure captions
- Table captions
- Graph and chart captions

Attributions

- Who gets attribution for an image?
- Should items in the public domain be attributed?
- Attribution statements
  - Open-copyright licence, no changes
  - Open-copyright licence, changes made
  - Public domain: designated, no changes
  - Public domain: designated, changes made
  - Public domain: expired copyright, no changes
  - Public domain: expired copyright, changes made
  - No known copyright restrictions
  - Government websites and publications
  - Source statement
- Attribution-statement tools
  - Open Attribute
  - OPEN Attribution Builder
Captions

A **caption** is text that accompanies a figure, table, or other non-text resource within a work such as an open textbook. At BCcampus, we decided that the caption for each item should only contain the resource type label and number, and a description of the resource. If an item requires an attribution statement, it is placed elsewhere – typically in an “Attributions” list at the end of the chapter.

Separating the attribution statement and caption kept the caption clear and uncluttered. However, it also introduced a problem: how do we connect an item to its attribution statement? First, we determined that each resource type needed to be identified with a label. We selected “Table” for tables, and “Figure” for all images and pictures. That label is combined with a numbering system that incorporates the chapter number the item is found in and the item’s places in that chapter in relation to other items with the same label. For example, if a photograph is the third of four figures in Chapter 5, it would be labelled as “Figure 5.3.” This resource type and number appears in the caption, and it is used to identify the attribution statement.

Note that the sequence number of a resource label is resource specific. For example, if an item is marked as “Table 6.2,” this means it’s the second table in Chapter 6, not the second non-text resource. As such, you can have a Table 6.2 and a Figure 6.2 in the same chapter.

The content of a caption is written by the author to convey the significance of the resource and its relationship to text. Referencing the resource in the text body contributes to this connection. Authors are discouraged from using the resource title (assigned to the item by its creator) as a caption because this label is a key
component of the item’s attribution statement. Using the same phrase as both resource title and caption can cause confusion.

See below for caption examples for the most commonly used resources in an open textbook. Refer to your style guide or make a decision about how you want to style the captions in your textbook and include these details on your book's style sheet. (See Create a Style Sheet.)

Figure captions

Figure 4.3 The green discus fish shown in its natural environment.

Format items to note in this example:

- The resource label (Figure 4.3) indicates that this is the third image in Chapter 4.
- No punctuation (period, comma, or colon) is inserted between the resource label (Figure 4.3) and description (The green
discus fish shown in its natural environment).

- A period is placed at the end of the description even though it is an incomplete sentence.

Table captions

Table 2.3: Hotel revenue in British Columbia

<table>
<thead>
<tr>
<th>Hotel</th>
<th>Annual Revenue ($ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motel ABC</td>
<td>23.4</td>
</tr>
<tr>
<td>Hotel DEF</td>
<td>54.2</td>
</tr>
</tbody>
</table>

Data source: Johnson, 2013

Format items to note in this example:

- The resource label (Table 2.3) indicates that this is the third table in Chapter 2.
- A colon and one space is used to separate the resource label (Table 2.3) from the description (Hotel revenue in British Columbia).
- No period is placed at the end of the description
- The caption uses sentence case to determine capitalization
- The data used in this table is cited using the label “Data source:” followed by an in-text citation (Johnson, 2013). (See Citation vs. Attribution – Tables: A special case.)

Graph and chart captions

Because graphs, charts, and other data-rich resources where the data is cited are often added images, you can choose to label them as “Figures” or as “Charts” or “Graphs.” For example, in the below
For information on designing images, charts, graphs, and tables for accessibility, see [Images](#), [Tables](#), and [Colour Contrast](#) in the BCcampus Open Education Accessibility Toolkit.

**Attributions**

Before looking at the details of how and where to place attributions.

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or attribution statements, let’s answer a couple of questions that might influence how you proceed.

**Who gets attribution for an image?**

It is important to understand who to give credit to for an image. Frequently, especially for a work in the public domain, it is not the artist or photographer who created the original work. Instead, you must attribute the individual who created the version of the work that you are using in your book or educational resource. For example, a photograph of a painting is considered a secondary source, or interpretation of the original painting, and you will need to credit the photographer in the attribution statement, not the painter.

Below is a photograph of the famous painting *Mona Lisa*, by Leonardo da Vinci. In the attribution statement, credit is given to the photographer, not da Vinci. As such, the attribution statement should read: *Mona Lisa* by Dcoetzee is in the public domain. This also means that just because a work of art may be in the public domain, it does not mean that the reproduction of that work is in the public domain.
The Mona Lisa is a painting by Leonardo da Vinci. The photograph of this painting was taken by Dcoetzee.
Should items in the public domain be attributed?

Resources for which copyright has been designated to the public domain by the creator do not require that attribution be given to the creator. However, as a best practice, we encourage still crediting the author or artist for the resources they created. Taking this extra step does many things:

1. It shows respect provides recognition for the individual who created and freely shared their creation.
2. It upholds academic integrity.
3. It ensures consistency in how a textbook is styled.
4. It leaves no doubt that the resource is open for use and provides future users with links and other information about the resource’s origins.

Attribution statements

This section provides sample attribution statements based on the most common rights and conditions under which open educational resources are released and used. Note that for resources in the public domain, the attribution statement changes depending on how the work ended up in the public domain. Attribution statements for resources that have been designated to the public domain by their creators are labelled as “Public domain: designated.” Items in the public domain because their copyright expired are labeled as “Public domain: expired copyright.”

Most of these attribution statement layouts are based on recommendations posted by Creative Commons [New Tab]. Here are the commonly used elements and information to be aware of.

- **Resource type + number.** This is the label that you assign to a resource based on its place in your open textbook or OER. It is
generally placed in a resource's caption, and it is an effective way connecting a resource to its attribution statement.

- **Resource title.** This is the title assigned to the resource by its creator. An attribution statement should contain the title of the resource with a link to the web page where the resource was found.

- **Creator.** This is the name of the individual who created the resource. An attribution statement should contain the creator’s name and (if available) a link to their profile page within the website or repository where the resource was found.

- **Resource change.** If you change a resource, including cropping a photo, this must be indicated in the attribution statement. NOTE: If the CC licence covering a resource includes “ND” (NoDerivatives) as a condition, the item cannot be changed. This includes cropping.

- **Copyright information.** A link to a description of the type of licence or other conditions that permit you to use this resource, should be provided as follows:
  - If the open-copyright licence used is a CC licence, link the licence description to the ones provided on the Creative Commons website [New Tab].
  - If the creator has designated their work to the public domain and marked this work with a Creative Commons zero (CC0) logo or icon, link to the CC 0 page [New Tab] on the CC website.
  - If an item has been identified as having “no known copyright” with the Creative Commons public domain mark, link to the Public Domain Mark page [New Tab] on the CC website.
  - If an item is in the public domain and is not marked with a Creative Commons public domain logo or icon, we recommend linking to the public domain description from Wikipedia [New Tab] instead.

- **Accessibility.** Web accessibility guidelines state that if a link opens in a new tab or window, this should be marked
However, because each attribution statement contains up to three links – and readers are less likely to open these links – it is not necessary or even advised to provide externally opening links for attribution statements. (See [Links](#) in the BCcampus Open Education Accessibility Toolkit.)

Open-copyright licence, no changes

- FORMAT: Resource type/number + resource title “by” creator “is used under a“ licence type.
- EXAMPLE: Figure 4.3 Dallas – Green Discus Fish by Drriss & Marrionn is used under a [CC BY-NC-SA 2.0 Licence](#).

Open-copyright licence, changes made

- FORMAT: Resource type/number + resource title “by” creator “has been modified (resource change) and is used under a” licence type.
- EXAMPLE: Figure 4.3 Dallas – Green Discus Fish by Drriss & Marrionn has been modified (cropped) and is used under a [CC BY-NC-SA 2.0 Licence](#).

Public domain: designated, no changes

- FORMAT: Resource type/number + resource title “by” creator “has been designated to the public domain (CC0).”
- EXAMPLE: Figure 5.5 Meadow by geralt has been designated to the [public domain (CC0)](#).
Public domain: designated, changes made

It is not required to include a description of a change when using a resource from the public domain. However, you can choose to include this information in your attribution statement.

- FORMAT: Resource type/number + resource title “by” creator “has been designated to the public domain (CC0). This item has been modified (resource change).”
- EXAMPLE: Figure 5.5 Meadow by gerald has been designated to the public domain (CC0). This item has been modified (cropped).

Public domain: expired copyright, no changes

- FORMAT: Resource type/number + resource title “by” creator “is in the public domain.”
- EXAMPLE: Figure 13.1 Walter Cronkite by NASA/Bill Ingalls is in the public domain.

Public domain: expired copyright, changes made

It is not required to include a description of a change when using a resource from the public domain. However, you can choose to include this information in your attribution statement.

- FORMAT: Resource type/number + resource title “by” creator “has been modified (resource change) and is in the public domain.”
- EXAMPLE: Figure 13.1 Walter Cronkite by NASA/Bill Ingalls has been modified (cropped) and is in the public domain.
No known copyright restrictions

- FORMAT: Resource type/number + resource title “by” creator “has no known copyright restrictions” (link to web page describing this condition).
- EXAMPLE: Figure 13.1 C.P.R. Mount Stephen House, Field, BC, 1909 by Musée McCord Museum has no known copyright restrictions.

Government websites and publications

If using images from a government publication or website, see content under the Government heading in the Resources: Search and Find chapter for details about attribution and licences.

Source statement

If available, an optional source statement can be appended to the end of an attribution statement. It notes the type of source from which an open educational resource is curated, such as a museum collection, and is used when this information provides legitimacy to the textbook subject matter.

Source statement example: This image is available from the Toronto Public Library under the reference number JRR 1059.

Full attribution statement with source statement: Toronto Rolling Mills is in the public domain. This image is available from the Toronto Public Library under the reference number JRR 1059.

Attribution-statement tools

Attribution statements for resources can be added manually, as described above. However, there are a couple of browser add-ons
that can help you capture the correct information for web-based Creative Commons licensed material. If you work with CC material often, take a look at these tools to make attributing content easier.

Open Attribute

Open Attribute [New Tab] is a browser add-on/plugin for Firefox and Chrome that gathers the CC licence metadata on a web page and creates an attribution statement. This is how it works.

1. After installing this add-on, a small logo will appear in your address bar (see red arrow) when you go to a website that has CC licensed content on it (and importantly, the correct metadata).

2. Click on the logo to reveal a textbox with the title, source, and licence of the selected website. When the “More Information” button (by the red arrow) is chosen, both basic (in plain text) and RDFa attribution statements (as HTML) are shown to select and use. The “All Data” button displays all attribution information for the chosen website.
The Open Attribute ad-on can provide both basic and RDFa attributions.

The advantages of this tool are:

- There is no need to go to another web page and manually enter data into text fields.
- It is quick.
- It tracks all of the elements required for a complete attribution.
- It responds to the correct metadata connected with CC licensed content.
- It offers a **Resource Description Framework in Attributes (RDFa)** option, which is a W3C recommendation that adds a set of attribute-level extensions to HTML, XHTML, and other XML

The disadvantages are:

- You must install the add-on
- If a website does not use CC metadata, this add-on will not work.

OPEN Attribution Builder

This tool was built by the Washington State Board for Community and Technical Colleges and can be found at OPEN Attribution Builder [New Tab]. It is simple to use and provides descriptions of each field through the “?” icon.

OPEN Attribution Builder

9. "RDFa," Wikipedia,
The advantages of this tool are:

- It requires no installation
- Licenses and versions can be chosen with drop-down menus
- It provides the option to attribute a work that has been changed (adapted)
- Attribution statements available in plain text or HTML
- It creates a well-structured HTML attributions for resources without the correct metadata

The disadvantages are:

- It is located on a separate website.
- It doesn’t include CC metadata.

Commons Machinery

For a suite of plugins for Firefox and OpenOffice tools – many in beta – visit the Swedish-based website, Commons Machinery [New Tab]. Their attribution-statement tools enable the copying and pasting of images that already have the attribution information attached.

**Chapter Prototype – From Ryerson University Open Textbook Authoring Guide**

**Style Guides — Open Textbook Network**

This chapter is an adaptation of the Style Guide chapter in the B.C. Open Textbook Authoring Guide, created by BCcampus and licensed with a CC BY 4.0 license.
A style guide helps an author or group of authors be consistent when presenting content to readers. It also saves a lot of work down the line during copyediting.

This chapter focuses primarily on copy. For style considerations that focus on textbook elements, formatting, and layout, please see the chapters in Textbook Organization.

Existing Style Guides

You may want to select the style manual particular to your discipline (e.g., MLA Handbook, APA, Chicago Manual of Style). However, if you are adapting an existing book, you may want to use the citation style chosen by the original author. As you’re writing, try to adhere to the punctuation rules for the citation style you’ve chosen.

Punctuation

The following are a selection of standard punctuation rules:

- Use one space between sentences (not two) and after a colon.
- Do not capitalize the first letter of the first word after a colon unless the colon introduces two or more sentences.
- In displayed lists, always start items with a capital letter. Use end punctuation, such as a period, with full sentences only.
- Use North American system for quotation marks: periods and commas always go inside quotation marks; semi colons and colons go outside.
- Use double quotes for all quoted matters. Single quotation marks should be reserved to enclose quotes within quotes (e.g., Mark exclaimed, “You have driven a stake into my heart! Now I truly understand Caesar’s words, ‘Et tu Brute?’ How could you
treat me so?”). Some exceptions to this system may be appropriate in specific disciplines.

- Place footnote numbers outside punctuation (usually a comma or period).
- Do not use periods in abbreviations, acronyms, and initialisms, (common exceptions are e.g., et al., etc., i.e.).
- Do not hyphenate Latin phrases used adjectivally: ad hoc proposal, post hoc analysis.
- For hanging hyphen constructions (15- to 19-year-olds), do not hyphenate after “to.”
- Don’t use a period after URLs when they end a reference list entry.

Commases, Commases, Commases

Most style guides use the serial comma. That means a comma placed immediately before the coordinating conjunctive (and, or, nor). Examples:

  Serial comma: There were cows, horses, and pigs in the barn.
  No serial comma: There were cows, horses and pigs in the barn.
  Use commas in numerals over 999 (e.g., 1,000; 45,000).

Being Bold

Bold is reserved for key terms within the text body. It should not be used for emphasis.
**Italics**

- Use italics for words used as words (e.g., The term *vocal cords* is often misspelled. What do you mean by *nexus*?).
- Use italics for titles of movies, TV shows, and radio programs.
- Don't use italics for bands and music channels.

Often words in other languages are italicized in a textbook. However, commonly used words or expressions do not require italics (e.g. ad hoc, vis-a-vis).

**Dashes**

**Em dashes (– )**

- The em dash is the standard for breaking a sentence or setting off parenthetical statements.
- With em dashes, insert a space on either side.
- In Pressbooks, the em dash is created by using two hyphens. In the book view, two hyphens will look like one long (em) dash.

**En dashes (– )**

- There should be no space on either side of the en dash.
- Use an en dash when expressing a range of years such as birth to death, e.g., 1955–2001.
- Use between pages (213–223).
- Use an en-dash (50–100 mg) for number ranges in tables and parentheses.
- In Pressbooks, use one hyphen to indicate an one short (en) dash.
Measurements and Numbers

Your subject standards and primary audience will determine whether you use the metric (most of the world) or imperial (U.S.) system. For number ranges in text, use the word “to” (50 to 100 mg).

Use numerals:

- For 10 and greater.
- In addresses (Suite 2, 400 West Hastings).
- For dates (May 17, 1948 or 17 May 1948).
- As designators (day 8, chapter 10, page 9, protocol 5).
- In figure and table designations (Figure 3, Table 6).
- For money ($14, $9.97, 6 cents, US$200).
- For temperatures (20°C).
- For time of day (11 p.m., 2:45 a.m., 07:30–13:00).
- With units of measure (2 m, 7 in).
- With percent symbols (0.02%, 99%).
- With “million” and “billion” ($1 million, 9.4 billion units).
- For percentages, unless at the beginning of a sentence. Repeat the percentage symbol in a range or series (the incidence varied from 1% to 4%; 6% to 7% of cases).
- School grades (e.g., Grade 6).
- Use digits and abbreviations in measurements (e.g., puzzle boxes were 50 cm long, 38 cm wide, and 30 cm tall).

Spell out:

- Numbers one to nine.
- First through ninth ordinals unless they include a higher ordinal. Ordinals greater than ninth are expressed as numerals unless they occur at the beginning of a sentence (...in the 12th century, but Twelfth-century monks...). Acceptable suffixes are 21st, 32nd, 43rd, 54th.
- Fractions, in running text with a hyphen (e.g., two-thirds).
- Number and percent if at the beginning of a sentence (three
percent).

- For temperatures, use arabic numerals and the degree symbol (37.8°C).

Create a Style Sheet — BCcampus

A style guide should be used when writing an open textbook to ensure that style and formatting is consistent throughout the work. (See Appendix 2: Style Guide.) Style guides usually include citation style as well, i.e. how cited or referenced material should be treated both in the text (in-text) and within the reference list. Commonly used style guides include,

- **APA Style [New Tab].** APA (American Psychological Association) style is typically used to cite and style works in the social sciences and education.
- **The Chicago Manual of Style Online [New Tab].** Chicago style is most often used to cite and style works in the humanities. This style was developed by the Chicago University Press in 1906.
- **MLA Style Manual [New Tab].** MLA (Modern Language Association of America) style is most frequently used to cite and style works in the literary and humanities fields.
- The **Associated Press Stylebook [New Tab].** The Associated Press style is the standard for style guide for those working in the media and communications.

In addition to selecting a style guide, it is advised that a style sheet be created and updated throughout the writing process. A style


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Sheet is a record of the styling and formatting exceptions for your textbook, such as spelling choices, selection and placement of learning objects, and differences in punctuation, layout, and style from the style guide. Frequently used style elements can also be noted on the style sheet for easy reference, especially during the copy editing and proofreading stages.

How to set up and use a style sheet

Here is a template you can use to set up the style sheet for your open textbook:

- Style-Sheet Prototype [Word file]

1. Download the above style-sheet template and fill out as much information as possible, including book title, author, copy editor, and proofreader.
2. Add or remove items as they pertain to your book. These might include:
   1. exercises (and how to format them)
   2. back matter and/or appendix information and how to label each
   3. key terms: how and when to highlight them in the text body and if they should be summarized in an end-of-book glossary
3. In addition to different or additional styles and formatting, you can list:
   1. styling issues included in the style guide, but repeated in
the style sheet for easy reference
2. the correct usage of grammar and spellings that are often inaccurate
4. Change and update the style sheet throughout textbook production. Update the style sheet each time you make changes or add to it and share it with your team.
5. When the book is finished, date the style sheet and mark it as the “final copy.” This reference document can be shared as part of your textbook when it’s published.

Accessibility, Audience, Learning Methods & Learning Styles

Accessibility — Open Textbook Network

This section is adapted from Modifying an Open Textbook: What You Need To Know (November, 2016) by the Open Textbook Network (CC BY). Special thanks to Krista Geear at the University of Washington for her contributions.

Making something accessible means making it available for a wide variety of people to access, including people with disabilities. Offering multiple formats of your open textbook is one key way to ensure greater access to it. Campus communities can also consult with their disability resource centers for guidance and assistance. Disability resource centers commonly facilitate student accommodations by ensuring access to:

• Portable electronic and large-type textbooks for people with mobility limitations or low vision.
• Read-aloud files for text-to-speech software for people with learning disabilities, traumatic brain injuries, or others who may benefit from listening to an audio text.
• Tagged texts, images, and tables to enable screen-reader navigation for people who are blind or low-vision. Tactile graphics and braille are also useful.

The EPUB format is often considered the most accessible for screen-reading software.

Here are three ways to improve accessibility of your open textbook:

• Ensure that digital text is machine-readable.
• Tag navigation elements, including headings and subheadings.
• Tag and describe images and tables.

If you have questions about open textbook accessibility, contact your disability resource center. You can also consult the DAISY Consortium's guide to Making Publications Accessible for All and the International Digital Publishing Forum's EPUB 3 Accessibility Guidelines.

Testing and Generating Accessible Formats

If you want to test the accessibility of your open textbook, or convert your textbook into different formats, there are online tools you can use.

NonVisual Desktop Access: Free screen reader that enables user testing. It’s an open source, Windows-based software available in more than 40 languages.

PDF Accessibility Checker (PAC 2): Free program displays a PDF preview in a web browser. The PAC preview shows PDF tags and presents the accessible elements as they’d be interpreted by assistive technologies. PAC also provides an accessibility report, which lists the detected accessibility errors.

DAISY Consortium’s Pipeline Download: Cross-platform, open
source framework for converting text documents into accessible formats for people with print disabilities.

Additional Resources

Many of the following resources on making your open textbook accessible include step-by-step instructions. Further information on accessibility can be found at the following Open Textbook Network partner institutions:

- University of Washington
- University of Montana
- Pennsylvania State University

In addition, you can consult the BC Open Textbook Accessibility Toolkit. The Texas Governor’s Committee on People with Disabilities also provides a number of videos on making accessible documents.

Accessibility Checklist

The Rebus Community is developing an accessibility checklist for open textbook creation. Follow its development at The Rebus Approach to Accessibility and Inclusivity.

Further Reading

Lessons learned in accessibility through the BC Open Textbook Project: Includes five key takeaways.

National Instructional Materials Accessibility Standard (NIMAS): Standard developed in the United States to assist with the
production of accessible content in higher education. The NIMAS standard is based on the DAISY standard.

**Section 508 of the Workforce Rehabilitation Act**: Requires federal agencies to make their electronic and information technology (EIT) accessible to people with disabilities.

**Web Content Accessibility Guidelines (WCAG) Overview from W3C**: Aims to provide a single shared standard for web content accessibility that meets the needs of individuals, organizations, and governments internationally.

**International Digital Publishing Forum (IDPF)**: Maintenance agency for EPUB.

Lessons Learned in Accessibility Through the BC Open Textbook Project — BCcampus, Erin Beattie

BCcampus is excited to share with you the amazing work that has been happening in the area of accessibility and open textbooks. Back in 2014, Amanda Coolidge, Senior Manager, Open Education, BCcampus, Sue Doner, Faculty, Instructional Designer, eLearning, Centre for Excellence in Teaching and Learning, Camosun College and Tara Robertson, Accessibility Librarian and Coordinator, Centre for Accessible Post-secondary Education Resources BC (CAPER_BC), created the BC Open Textbook Accessibility Toolkit. The purpose of the toolkit is to help instructional designers and faculty have a better understanding of how to make educational materials accessible.

Early in 2015, we conducted user testing with students who have a range of visual disabilities, from that testing we identified how to make changes to ensure all of our open textbooks are accessible. We were able to work on a few of the books, but because of our small
team, we had to put that project on hold until this fall when we hired Josie Gray, a History Major from the University of Victoria. Josie has been instrumental in researching best practices in accessibility and in implementing many changes throughout the open textbooks to comply with accessibility standards. In this post, we will outline the lessons learned with regards to accessibility and guide you through changes you can make to your own educational materials. The practices described will help improve accessibility for people who access BCcampus’ textbooks in all types of formats, including on the web, PDF, Mobi, epub, and word files. The gold standard for accessibility are the Web Content Accessibility Guidelines (WCAG), a set of guidelines which describe the minimum standards a web page must adhere to for it to be considered accessible. The WCAG site is a useful starting point for anyone who wants to start learning how to make their digital content more accessible. There are three levels, which range from “A” as the lowest standard to “AAA” being the highest. For BCcampus’ textbooks, we decided that the Web Content Accessibility Guidelines level “AA” would be the standard we would conform to.

The four principles of web accessibility:

1. Content must be **Perceivable** – That is, information and user interface components must be presented to users in ways they can perceive. This involves things like text size, colour contrast, and text alternatives for images.
2. User interface components and navigation must be **Operable**. Users must be able to navigate around the page and access all information.
3. Content must be **Understandable** – This principle expands on Principle 1 and 2. Just because a user can perceive and use the content on a webpage, does not guarantee they can understand it.
4. **Robust** – Content can be interpreted reliably by a wide variety
of user agents, including assistive technologies. Content is displayed and functions as it supposed to and the markup has little to no errors

5 key takeaways:

• Becoming familiar with how a screen reader works and ensuring that all of the important information can be accessed when using a screen reader proved to be absolutely vital to the accessibility editing process. The way screen readers present information can be quite different from how visual users are used to accessing information.

• While bold and enlarged text conveys the purpose of text to a visual user, a screen reader will treat it as regular text. For this reason, aspects of the document should be identified through markup so a screen reader can process them. This applies to things like table captions and column headers, headings, and subheadings. This can be done by changing the HTML markup or by selecting options in whatever word processing tool you use.

• Links are fairly straightforward. The two main requirements are that they are descriptive and that they don’t open any new windows or tabs. If they must open in a new window or if link opens a different document type, that should be clear: Google [New Window] or Course Outline [PDF]

• Providing an alternate text description (alt tag) for images will ensure screen reader users, or those whose computers will not load the images can still access all of the important information in an image.

• Textbooks in our collection that meet the accessibility criteria are marked with an “Accessible” flag. There are currently 39 accessible textbooks in the collection; a list of these books is available by clicking on any “Accessible” flag in the collection or by going here: https://open.bccampus.ca/find-open-
Notable quote:

“Open education is about making resources available to everyone, including students with visual and other disabilities. Ensuring that our textbooks are accessible and encouraging faculty who write open textbooks to do the same is our goal.” – Lauri Aesoph, Manager, Open Education

Learn more:

- BC Open Textbook Accessibility Toolkit
- The French translation of the Accessibility Toolkit
- The Accessibility Checklist used to determine whether or not a textbook in our collection is accessible
- Can everyone actually use it? Testing open textbooks for accessibility
- Accessibility
- Accessibility Prototype
- Audience (See also Localization & Representation)
- Variety of Learning Methods & Styles

Glossaries & Indexing
Chapter Prototype — Ryerson

Chapter Title (Heading 1)

Chapter Overview (Heading 2)

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Chapter Topics (Heading 3)

1. Lorem ipsum dolor sit amet
2. Lorem ipsum dolor sit amet
3. Lorem ipsum dolor sit amet
4. Lorem ipsum dolor sit amet
[Please include at least four learning objectives for your chapter. Learning objectives should be specific and measurable]. After completing this chapter, you should be able to:

- Learning objective 1
- Learning objective 2
- Learning objective 3
- Learning objective 4

Chapter Introduction (Heading 2)

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim [bolded text indicates a key term that can be found in the glossary], quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum

[bolded text indicates a key term that can be found in the glossary] dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla
pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum

1. Insert citation
Section (Heading 2)

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Did you know?

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Self Test (Heading 2)

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Glossary (Heading 2)

[All glossary terms should appear in the text as bolded words]

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References (Heading 2)

[Citations should follow the APA style.]
PART III

PRE-PUBLICATION

This chapter discusses important considerations to be addressed before publishing your textbook.
10. Introduction: Pre-Publication

LYNLEY SHIMAT RENÉE LYS, APURVA ASHOK, AND ZOE WAKE HYDE

This chapter offers guidelines on the pre-publication stage of creating and developing an open educational resource textbook.

Below you will find a video playlist from the Rebus Guide. In this playlist, open educator and textbook developer Zoe Wake Hyde offers a quick overview of OER creation.


If you're looking for a light overview of OER creation, check out the video series version of this guide. Making Open Textbooks: A Video Guide provides a brief summary of each of the major phases of creation. The short videos present the roles, models, and guidelines that make up the process of creating and publishing open textbooks. From project conception and rounding up a team of collaborators, to creating, editing, and reviewing your content, all the way through to release, marketing, adoptions, and revisions, these videos summarize the many steps along the way.
Making Open Textbooks: A Video Guide features Zoe Wake Hyde. It is edited and directed by David Szanto. Transcript and captions provided by Mei Lin.
Introduction: Editing & Formatting

This chapter offers guidelines for editing and formatting your textbook. The section *Textbook Design, Structure, and Organization* goes over some considerations for designing, adapting, and authoring OER textbooks, and presents a case study of a partnership which produced three open educational social studies textbooks. The section *Editing* presents guidelines and best practices for peer review, proofreading, and copy editing, and provides a case study where an educator used peer review in developing open educational materials. The section *Layout & Design* goes into details and offers samples of cover layout, chapter layout, and page layout for book design.

Table of Contents: Editing & Formatting

*Textbook Design, Structure & Organization*

- [Designing a Textbook](#)
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- [Case Study: University of Minnesota and Anoka Hennepin School District](#)

*Editing*
• Peer Review — Open Textbook Network, Melissa Faldin & Karen Lauritsen
• Peer Review — BCcampus
• Case Study: CALI’s eLangdell® Press — Open Textbook Network, Deb Quentel
• How to Copy Edit
• How to Proofread
• Guideline for Copy Editors

Layout & Design

• Open Textbook Cover Toolkit – BCcampus, Lauri M. Aesoph
• Chapter and Page Layout & Design
• Open Source Design & Statistical Tools

Textbook Design, Structure & Organization

Table of Contents: Textbook Design, Structure & Organization

• Designing a Textbook – Open Textbook Network, Melissa Faldin & Karen Lauritsen
• Adapting or Authoring – Open Textbook Network, Melissa Faldin & Karen Lauritsen
• Case Study: University of Minnesota and Anoka Hennepin School District
Designing a Textbook — Open Textbook Network, Melissa Faldin & Karen Lauritsen

When we think of a textbook we often think one of two things: the books we used during our own education, and the books we use for teaching our courses.

With an open textbook, we have the ability to create our ideal textbook, to look beyond the tradition of what a textbook has meant to us, and instead imagine what we wish it would be. An open textbook allows for a highly customized body of content and for a student centered delivery.

That said, a textbook is a familiar learning device. Students have a strong expectation of what a textbook should be. Just like with other instructional materials, the student experience should be carefully considered.

When looking to write a textbook, some general rules of design will be helpful.

• Begin with the end in mind. What is it that you are trying to achieve? What is the scope of the book? What knowledge should a student have before and after they have used the book? What are the learning objectives?
• Sketch out the general parameters of your book. What types of media do you want to incorporate to your book?
• Make a plan for the future. Who will review your book? How often do you anticipate the content will need to be updated?

Adapting or Authoring — Open Textbook Network, Melissa Faldin & Karen Lauritsen

In creating Fundamentals of Business (CC BY NC SA) the faculty author choose to start with an existing openly
licensed textbook instead of starting from scratch. From start to finish the process took about 14 months of part time work by various team members. While we had a team, plan, roles, and workflows in place, the process was a bit like remodeling a house — many tasks were more complex and required more time and effort than we had anticipated.

— Anita R. Walz, Open Education, Copyright & Scholarly Communications Librarian, Virginia Tech Libraries

In choosing to write a book you have a blank slate of opportunity, but sometimes opportunity means not re-inventing the wheel. There may be resources or books that exist that will suit your needs entirely, or will be close to what you need. After having discussed what the ideal structure of your book looks like, and what elements you would like to see within it, the next step is to evaluate the books and resources that have already been created. Can you use all or some of these materials? How much modification will be necessary to suit the goals of your project?

Common elements to evaluate when considering instructional resources include:

- Organizational features: Is the book structured in a useful manner? Are materials consistent and well organized? Is the information current?
- Student Engagement: Do the materials encourage students to think critically of the materials? Do the materials clearly present content?
- Content Balance: Is text interspersed with maps, graphs and images? Does content provide tangible real-life applications or case studies?
- Inclusion Elements: Do the materials reflect equity and diversity in their examples and other content?
- Alignment: Does the content align well or at all with district curriculum and standards?
- Legal: Is the material openly licensed? Can it be modified or
simply cited?

Remember, this evaluation process isn’t quite the same as choosing to adopt a textbook. Most standard textbooks are not open and full use would require payment. You are looking for books or content that are already open and will allow you to modify.

For each resource, book or otherwise, evaluate it for instructional effectiveness. A good idea is to imagine how you might use the resource in the classroom and ask a very simple question – “How would I teach using this?”

Case Study: University of Minnesota and Anoka Hennepin School District

This writing process case study outlines the process used in a partnership between the College of Education and Human Development (CEHD) at the University of Minnesota and the Anoka Hennepin School District. In 2016 they worked together to produce three open textbooks for the social studies department. The project included foundational training in understanding open, as well as hands-on textbook development.

Brainstorm

Three five-person groups wrote three books. To begin, the group brainstormed what topics to address in the textbooks. This involved considering the students who would ultimately use the books, and how the books fit into the overarching curriculum.
Content Framework

Next, as this guide recommends, the groups worked together to address what their textbook would look like by defining content structure. With the structure established, the group looked to what each of those larger segments might contain by defining book elements. The resulting outline allowed instructors to effectively align their content and structure.

Evaluation

Next, the groups spent time, as individuals, seeking existing openly licensed material that might suit the topic. Groups were given nearly a month to find content and evaluate licenses to determine what could be remixed or reused to meet their goals. In order to assure materials were evaluated with consistency, a basic rubric was provided (see the chapter on open licenses).

Collaborative Authoring

Group members were divided into writer, curator and archivist roles (as described in the previous chapter). Since the groups had more than three people, there were several writers.

As writers were evaluating existing resources, the CEHD project manager created a collection of Google Drive folders for each book. Each chapter or unit had a folder, and each page within those folders coincided with the elements of the book (for example, the learning objectives, key terms, and body).
Writing

Writers reconvened to discuss the materials they collected during the Evaluation process, and, using their Content Framework, began writing their books. This step was slightly different for each book based on the objectives — in some cases, authors were creating a book that was a supplement to a trimester-long activity. In other cases, authors were writing a traditional textbook or making a supplement to a course that reflected current events.

During the production period, groups of authors worked together and separately. This was largely determined by the district's time frame, which required a highly condensed book production period, limiting authors to only four days of work together on-site.
Review

After completing a chapter, the group reviewed the content for gaps and edits. Ideally, authors swapped content for review, lending a fresh set of eyes to the chapter.

Once the book was completed, it was again reviewed by the group as well as a copyeditor. The books were then imported to Pressbooks, for final formatting, proofreading, and attributions.

Editing

- Peer Review — Open Textbook Network, Melissa Faldin & Karen Lauritsen
- Peer Review — BCcampus
- Case Study: CALI’s eLangdell® Press — Open Textbook Network, Deb Quentel
- How to Copy Edit
- How to Proofread
- Guideline for Copy Editors

Peer Review — Open Textbook Network, Melissa Faldin & Karen Lauritsen

Peer reviewers strengthen the validity, effectiveness, and appropriateness of the text. — Karen Bjork, Head of Digital Initiatives, Portland State University

The quality and accuracy of an open textbook can be addressed in a variety of ways. Here are some models that are currently used:

By Author Invitation: Authors invite and coordinate peers to
review their work before publication. This review can be private or public, for example in the form of letters that are published with the text. There may be modest funding to pay reviewers for their time.

**Via Publisher:** Project managers send the textbook, or portions of the textbook, to reviewers. There may be modest funding to pay reviewers for their time. Common turn-around times range from 2 weeks to one month. The process may be blind or open.

**Student Tested:** Some faculty test their textbook in the classroom and incorporate student feedback. This method means that authors can hear directly from their key audience about what’s working and what isn’t.

**Open Textbook Library:** Faculty who teach at Open Textbook Network member institutions are invited to review published textbooks using a rubric. The reviews are public and unedited.

**Peer Review — BCcampus**

Look to your peers for feedback as you write
Inviting a colleague to contribute by writing a section or chapter to your textbook on a subject for which they are the expert is one way to ensure quality information in your open textbook. Another is to ask colleagues to serve as **subject-matter experts (SME)** and conduct a **peer review** — literally a review by a peer — of your work before it goes to copy editing. (Consider using one of your **Contributing Authors**.)

Like other textbook tasks, providing your SME with clear expectations will make this phase of the writing project smoother. It will also save your SME time and you frustration. Here are some suggestions.

- Only give the SME text that needs their input, not the whole textbook (unless it helps with the assessment).
- Identify the course level and subject matter for which the textbook is intended.
- Use a rubric that informs the SME about required feedback. (See the BCcampus Open Education Review Rubric posted below for ideas.)
- Clarify that you are seeking the SME's expertise on the content, but do not need help with grammar, spelling, layout, or other aspects of the textbook.
- Give the SME adequate time to conduct the review and set a deadline.

**SME Rubric**

Use the following questions to help steer feedback and make sure all areas are covered.

1. What information is inaccurate? Please offer
corrections.
2. Is there any information missing? Please provide a list.
3. Are there learning objects that could be used to enhance the information, such as case studies, historical examples, graphs, tables, and images?
4. Do you have a list of suggested readings for students?
5. Can you suggest study questions or exercises that will help the student learn this information?

Here is the BCcampus Open Education Review Rubric:

- Review Rubric [Word file]

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Attributions

Faces by geralt has been designated to the public domain (CC0).
Case Study: CALI’s eLangdell® Press — Open Textbook Network, Deb Quentel

This peer review case study was provided by Deb Quentel, the Director of Curriculum Development and Associate Counsel at the Center for Computer-Assisted Legal Instruction (CALI). As part of producing the open textbooks published by CALI's eLangdell® Press, she manages the peer review process through her established network and author suggestions. The system she uses is outlined below in the invitation she sends to potential reviewers.

Invitation to Peer Review

Dear [professor]:

Professor [author name here] has suggested that I contact you. [author] has recently completed a casebook entitled [snappy book title here], for CALI's free eLangdell® Press casebook series. The book will be released at no cost to students or faculty and with a Creative Commons license when it is completed. You can see CALI's other books here: https://www.cali.org/the-elangdell-bookstore

CALI is providing its authors with reviews of casebook chapters. And, CALI compensates reviewers $[??] for each reviewed chapter. We ask that reviewers write at least one page summarizing their thoughts about the chapter. Things CALI and the author are interested in include:

– did you see the cases you expected to see for this topic’s coverage (were any you expected to see missing),
– were the cases appropriately edited,
– any thoughts on the chapters questions (there will also be a teacher's manual released to faculty only), and
– any thoughts on the chapter in general, including its organization

Today, I am writing to ask whether you would be able to review a
chapter from the book. Rather than me “assigning” you a chapter let me list all 10 and perhaps one will be of particular interest to you. A few chapters are already assigned. I would ask that you select an unassigned chapter if possible. Thank you.

Chapters are as follows:
[list of chapter numbers and titles – sometimes I send a more detailed TOC, it depends what “condition” the book is in. Not all authors make the TOC.]

To the extent possible – considering that [author] has suggested several people as reviewers for some of the chapters – the peer review process is anonymous. Thus, I’d prefer that you come to me with questions and send your comments directly to me. Thank you.

To avoid crowding your email inbox, I will be sharing a Dropbox folder with you later today. It contains the book. If you’d like to look at it, please join the Dropbox and copy the file to your hard drive. And, if you’d prefer to receive a copy of the book by email, please let me know. I am working with [author] to have the peer review process completed in the next few weeks. He is working to complete the book in time for fall 2017 adoption.

Thus, I am asking everyone to complete the review of their chapter by 9 a.m. Monday, [date about 2-3 weeks from date of email].

I would really appreciate it if you would let me know whether you are interested in reviewing a chapter.

Thank you for your consideration of my request.

Best regards,

Deb

How to Copy Edit

Copy editors add an important element to the creation or revision of a textbook. When they copy edit, these individuals provide an objective set of eyes that ensures grammar and spelling are correct,
the established style for a textbook is followed (see Appendix 2: Style Guide), and the book’s language is suitable and understandable to the readers. Skipping this stage lowers the quality of the textbook.

It is recommended that trained copy editors be used for this phase. An author should never copy edit their own work. BCcampus Open Education used both independent copy editors and editors from an author’s university or college. It was interesting to observe how the copy editors’ work influenced textbook writing and production. For example, because a copy editor is not the subject-matter expert, they read a textbook like a student might, and quickly notice when information is missing or concepts are unclear. However, unlike a student, a copy editor has the skill to help an author rewrite a passage. Authors were happy to receive this feedback because they learned to present their material more effectively.

Make a plan

Like is done for other parts of your textbook’s timeline, it is important to clearly spell out the expectations for and schedule of the copy editor before this work begins. While the copy editor brings essential expertise to the writing process, it is the author-publisher’s or project coordinator’s responsibility to guide that expertise. (See Project Timeline.)
Here are some items that should be addressed.

1. Determine who will be the copy editor's key contact. If someone other than the author-publisher is coordinating the project, then allow the copy editor to communicate with this individual.

2. Clarify which style guide and other editing/styling references will be used by the copy editor. Instruct that a style sheet should be created and maintained; review the details of this document with the copy editor. (See Create a Style Sheet and Appendix 2: Style Guide.)

3. If an authoring platform or software is being used, allow the copy editor to make grammatical, spelling, and styling changes directly in the system to save time. Trust the copy editor's authority in this area. If the copy editor notices problems with
styling that are difficult to fix, or repeat throughout the book, assign the correction to someone other than the author, such as the fixer. (See Fix as You Go.)

4. If the copy editor is new to the technology being used, provide training. (See Technology: Accounts and Training.)

5. Develop a copy-editing schedule. At BCcampus, we learned that copy editing chapters as they are completed is most effective. This tactic saves time for both the author and production team because problems are identified and corrected early.

6. Define the copy editor’s role. For example, you might require that the copy editor check all grammar and spelling, in addition to scanning text for overall consistency, clarity, and style. If assessing content for accuracy and integrity will be the responsibility of the subject-matter expert, inform the copy editor. Include these points in the copy editor’s contract. (See Peer Review and Appendix 4: Contracts.)

7. Determine which sections and elements of the textbook should be copy edited. Careful copy editing is time consuming (and potentially expensive) so if there are items that will be reviewed by other parties, tell your copy editor. Consider assigning the following to one of your support team members:

1. in-text citations and the accompanying reference list
2. figure and table captions
   1. non-Canadian spellings often cannot be corrected in text that is part of an image, graph, chart, or other figure taken from an external resource. Therefore, if spelling is important, use Canadian repositories when possible.
   3. figure and table numbering (are they in sequential order, consistent, and complete?)
4. attribution statements (are they present for all resources? Is the format correct?)
5. check links and fix those that are dead or open on the
wrong web page

1. archived web pages found in the Internet Archive: Wayback Machine [New Tab] can be used for dead links

8. If the textbook is an adaptation of an existing book, decide if the unchanged original text and other elements of the book should be copy edited in addition to the new/changed text by the adapting author. This might be done:

   1. even if the original text has been copy edited to ensure that the new/changed text is consistent with the adapted work
   2. if the original text was not copy edited or poorly copy edited

9. Ask the copy editor to keep a list of items that should be reviewed by the author such as:

   1. text that requires a significant rewrite
   2. subject-related questions

Authors should not make changes to textbook chapters once they have been copy edited as this can undo the copy editor's work.

Attractions

Checklist has been designated to the public domain (CC0).
How to Proofread

Proofreading is worth the extra time

As tempting as it might be, the proofreading phase should not be skipped as it’s the last opportunity to mold your textbook into a work that contains coherent writing, consistent styling and layout, and correct grammar and spelling. Perfection is the unattainable goal.

(It’s been said there’s less pressure to create a “perfect” product when creating an open textbook because it can easily be corrected later. However, relaxing standards can give potential adopters a bad impression of your book and even lead to poor-quality book.)

A trained copy editor typically acts as the proofreader, but the proofreader ideally should not be the same individual who copy edited the textbook. In addition, as was stated in the previous chapter, the proofer should not be the author.)
Make a plan

Well in advance of this latter stage, think about and discuss with the proofreader what the requirements will be, and provide them with a clear plan. Many of the same items noted in the How to Copy Edit chapter can be referenced in addition to the items listed below.

1. How many times should the textbook be proofread?
   Proofreading is typically an iterative process whereby a manuscript is scanned one or more times until it is error free — or as close to error free as is humanly possible. However, if time and budget are a concern, it might be decided to enlist only one or two rounds of proofreading.

2. Provide the proofreader with the most recent version of the style sheet and style guides as references. (See Create a Style Sheet and Appendix 2: Style Guide.)

3. Some proofreaders report that it’s easier to identify errors on the printed page. If the textbook has been written in an online system, clarify if this is the proofreader’s preferred manner of working, and whether there is time and money to accommodate this extra step. ( Corrections made on the printed page must be entered into the digital version of the book by either the proofreader or someone else. If not the proofreader, make sure the chosen individual is highly skilled in detail work.)

Authors should not make changes to textbook chapters once they have been proofread as this can undo the proofreader’s work.
Attributions

Correcting has been designated to the public domain (CC0).

Guideline for Copy Editors

Advice for and from copy editors

While the basic rules of copy editing apply whether working on a traditional or open textbook, there are some differences. The below guidelines are for (and reviewed by) professional copy editors.

1. Writing and editing a web-based textbook will likely occur in an online platform such as Pressbooks. Therefore, it’s important that editors, authors, and other participating parties
agree to and understand how changes in the textbook and platform will be made.

1. Using an annotation tool such as hypothes.is can be helpful when the copy editor wants to highlight and comment on problems that should not or cannot be changed without instruction.

2. Like print books, starting with a standard style guide is important. As the project progresses, be sure to record styling exceptions for the textbook on a style sheet. You might find that an openly licensed textbook has special requirements such as ensuring that all images are properly licensed and correctly attributed. (See Appendix 2: Style Guide.)

3. Be sure that the copy editor is familiar with or receives training for editing web-based textbooks in the online platform.

4. A web-based textbook will likely include live links (in the body and possibly in the reference list), and multimedia. Decide at the outset of your textbook project what the copy editor is responsible for checking.

5. A web-based textbook, online platform, and other technical elements introduce additional challenges. Clarify at the beginning of an editing project:
   1. if the copy editor should report technical problems in the textbook
   2. to whom the copy editor should report technical problems relating to accessing or using the online platform or textbook
   3. who is responsible for fixing technical problems (the author, the project manager, or the managing editor)

6. Clarify, at the beginning of an editing project, who will receive the copy editor's editing notes and how issues will be addressed. Determine if the copy editor will contact the author directly or through an intermediary, such as a project manager.
Attributions

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Layout & Design

Open Textbook Cover Toolkit — BCcampus & Lauri M. Aesoph

This toolkit can be used by authors publishing their own open textbooks to create a book cover for their open textbook. Bookstores providing print-on-demand services for open textbooks can also use the toolkit to create book covers for open textbooks which do not have one.

The open textbook cover template in this toolkit are different than typical textbook cover instructions and templates because the templates and all images used to create them are either released with an open-copyright license (CC BY) or are in the public domain.

Toolkit Explained

What is the toolkit?

The Open Textbook Cover Toolkit has been created to give authors options to create book covers for the open textbooks they are writing and/or publishing. This toolkit has been created by BCcampus and released with a CC BY license.
Book cover elements

Essential items for your book cover are:

- Title
- Author(s)

Additional elements:

- Photo
- Graphic

Other items that could be include:

- Tag line
- Logo

Contents of the toolkit

The toolkit contains three book cover styles to choose from:

- Simple
- Graphic
- Photo

A template file for each of these styles has been provided for you to copy or modify.

Template attribution statement

The textbook cover templates have been designed by Robyn Humphreys, Digital Designer for BCcampus, and are covered by the
CC BY license under which this guide is released. It is recommended that the attribution statement for the template is placed on the textbook’s copyright page as follows:

The template used to create this textbook’s cover is by BCcampus and used under a CC BY 4.0 International Licence.

How to Use the Templates

Template Files

There are two types of files:

- Visual Guide (PDF)
- InDesign Template

Visual Guide

The Visual Guide will help you see the elements of the book cover so you can copy their styles, size and placement. If you do not own or have access to Adobe InDesign, then you may use another program that you are comfortable with.

Please note: Whichever program you use, you will need to export your cover to a JPEG image file to upload into Pressbooks to make the
cover. Microsoft Word does not export to a high enough resolution to be usable.

InDesign Template

InDesign is a layout program created by Adobe. If you own the program or have access to it, you can download the template and edit it with your book’s information. You can also modify the template to personalize your book by changing the fonts and colors used. If you have selected the photo or graphic template then you can modify those elements as well to suit your book. If you are not an InDesign user, but have hired a designer to create your book cover, you may pass the template onto them to modify.

Book cover styles

There are three book cover styles to choose from:

1. Simple: color cover and text
2. Graphic: pattern background and text
3. Photo: image and/or pattern background and text

Each book cover template has a screen or print version. The print version includes a spine and back cover. This is not required for screen viewing.

Book cover final files

When exporting your finished cover choose:

- PDF for print files
• JPEG for screen files

Resources

If you decide to use the Graphic or Photo cover template, you can find a list of openly-licensed and public domain graphics (vectors) and image [New Tab] in the BCcampus Open Education Self-Publishing Guide.

Images

When choosing an image for your work, you need to decide if you will be using it for print or for screen. Images for print require a larger resolution than images for screen.

See the Textbook Cover chapter [New Tab] in the Self-Publishing Guide for detailed information on choosing an image.

Attribution statement

Attribution may be required if you are:

• Adapting an open textbook
• Required to give credit for the graphic or image you are using
• Include the CC BY license in your attribution statement

For more information on best practices for composing an attribution statements, see Attributions [New Tab] in the Self-Publishing Guide.
**Licensing**

Visit [Creative Commons](https://creativecommons.org) to learn about the various licensing types. Creative Commons licenses may be attached to content you wish to use or you may want to choose a license for your own work.

**Textbook Cover Templates**

Find the files for download below.

The Visual Guide is a pdf file that gives you an example of how you can design your book cover if you are using a different program than InDesign. There are notes – accessed by hovering over the dialogue icons – in the file that show size and placement of the book cover’s elements. The below example uses red arrows to identify the location dialogue icons for one of the textbook cover templates.
Look for the dialogue icons for notes about how to use this template

The InDesign Template is an InDesign file that you can use and/or modify to your liking.

There are three options for both the Visual Guide and InDesign file, depending on your needs.
Consistency is a key element of textbook design. Having a template for chapter and page layout and design can help with standardizing...
content across your textbook. For an example of a standardized
chapter layout, see the chapter prototype designed by Ryerson
University, included in this book.

Open Source Design & Statistical Tools

Open source design tools and open source statistical tools can be a
great help in designing your open textbook. These tools are created
using open source software and allow you to share the images and
statistics you create with the open license of your choice, without
having to deal with proprietary software restrictions.
12. 2.2 Assessment, Evaluation & Rubrics

2.2.1 Quality

2.2.2 Assessment of OER Textbooks & Materials

- Evaluation

- Rubrics

- Peer Review
2.3.2 Accessibility Assessments, Rubrics, and Checklists

- Web version

- PDF

- Other formats (MOBI, ebook, etc)

- UH
2.3.3 Localization & Representation

- Native Hawaiian & Indigenous Place of Learning
- Language(s)

- **Representation**

  - Major student populations

  - See also teaching for populations and contexts

- People with disabilities

- Resources for teaching in Hawai‘i

- Resources for anti-racist pedagogy

- Resources for LGBTQ Inclusivity
Nonbinary Gender Inclusivity & Other Resources

- Resources for Navigating Difficult Dialogue

- Resources for Reducing Student Stress

- Geographic localization

- Major student populations

- Vanderbilt Pedagogies & Strategies Guide
14. 2.4 Platform Decisions

2.4.1 Compare features, ease of use, drawbacks
15. Pressbooks Quick Guide

LYNLEY SHIMAT RENÉE LYS AND BCCAMPUS OPEN EDUCATION

Introduction: Pressbooks Quick Guide

This section offers a quick guide to Pressbooks, including a series of short video introductions to key topics, short powerpoint guides, Pressbooks webinar recordings from BCcampus, a list of post-secondary institutions in the U.S. and Canada with their own Pressbooks catalogs, and frequently asked questions about Pressbooks.

Table of Contents: Pressbooks Quick Guide

- Pressbooks Quick Guide
  - How to Get Your Book into Pressbooks
  - Pressbooks Video Tutorial Series
  - Pressbooks Training Webinar PowerPoint Slides
  - Pressbooks Webinar Recordings – BCcampus
  - Administrators, Developers, Technical Support
  - Pressbooks Catalogs
  - OpenStax Textbooks in Pressbooks
  - Pressbooks FAQs – BCcampus Open Education Answer Guide
How to Get Your Book Into Pressbooks

Even if you've already started writing your book, it's easy to import into Pressbooks.

This chapter will:

• Provide an overview of the many options for getting your book into the Pressbooks platform and why you would use each;
• Link to subsequent guide chapters with more detail; and
• List next steps after importing your existing text.

1. Ways to Get Your Book Into Pressbooks

No matter where your manuscript is now—in your head, in another software or even fully produced as an ebook—there's a way to get it into Pressbooks so you can revise, write or complete it. Here are the basics:

• No matter what stage your book is in, you can copy and paste the text manually into the Pressbooks interface. This may be the best method. While it takes a little more effort up front, it will preserve the formatting that will translate into an ebook (line breaks, bulleted lists, bold, italics, headings and subheads), while stripping out formatting that won't.
• You can also write and format your book directly in
Pressbooks, which is arguably simplest.

- Pressbooks will also import text from Word documents (though some reformatting and cleanup may be needed with this method). We recommend using this for books with many chapters.
- Want to go blog to book? Import your blog files from WordPress.
- If your book is already in EPUB form, you can still get it into the platform—Pressbooks will convert it back to editable form.

2. What to Do Next

Once you've imported your book, whether manually by cutting and pasting or instantly through one of the other import methods, make sure all the elements have transmitted correctly.

To do so:

- Go into your Dashboard and click on Organize Text. Check that every chapter and section imported in their original hierarchy and that none are missing.
- Next, go into each chapter. Highlight each type of text—headings, paragraphs and subheadings, and apply a style in the Visual Text Editor's formatting menu.
- Finally, export a copy and review the output on your ereader or a simulator such as Kindle Previewer. If you see any funky formatting, go back into the chapters using the Text Editor and delete anything causing bad markup. (Learn more about markup here and here.)

These two steps will ensure that your book outputs elegantly and that there are no formatting inconsistencies.
Pressbooks Video Tutorial Series

The below list of videos are from the BCcampus OpenEd Pressbooks Video Tutorial Series. These videos are also embedded throughout this guide.

The first two videos are for information purposes. UH OER will provide you with a book in our Pressbooks repository.

**Outline of videos:**
### Getting Started with Pressbooks

- **Create a Pressbooks Account**
- **Create a Book in Pressbooks**
- **The Pressbooks Dashboard**

### Accounts and Users

- Reset Your Password
- Change Your Password
- Add and Manage Users

### The Pressbooks Editor

- Insert an External Link
- Insert an Internal Link
- Insert Internal Links with Anchor Tags
- Create a Table
- Create a Glossary

### Images

- Add and Format Images
- Accessible Images
- Media Attributions

### Files, Multimedia, and Plugins

- Make Files Available for Download
- Embed Media Plugins

### Import Pressbooks Content

- Clone a Book
- Search and Import
- Import a Pressbooks XML File

### Import Non-Pressbooks Content

- Import a Word Document
- Import a Web Page
- Copy and Paste

### Metadata, Licenses, and Attribution

- Automatic Pages and Content
- Book Info
- Add and Manage Contributors
- Provide Attribution

### Manage Your Book’s Appearance

- Themes
- Theme Options
- Custom Styles

---

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### Publish Your Book
- Hide Chapters in Webbook and/or Export Files
- Export Files
- Make the Webbook Public/Private

[http://pressbooks-dev.oer.hawaii.edu/uhoerpubguide/?p=643](http://pressbooks-dev.oer.hawaii.edu/uhoerpubguide/?p=643)

- **Add, Organize, and Delete Parts and Chapters**

### Accounts and Users
- [Reset Your Password](http://pressbooks-dev.oer.hawaii.edu/uhoerpubguide/?p=643)
- [Change Your Password](http://pressbooks-dev.oer.hawaii.edu/uhoerpubguide/?p=643)
- [Add and Manage Users](http://pressbooks-dev.oer.hawaii.edu/uhoerpubguide/?p=643)
The Pressbooks Editor

- **Insert an External Link**

```markdown
An interactive or media element has been excluded from this version of the text. You can view it online here: [http://pressbooks-dev.oer.hawaii.edu/uhoerpubguide/?p=643](http://pressbooks-dev.oer.hawaii.edu/uhoerpubguide/?p=643)
```

- **Insert an Internal Link**

```markdown
An interactive or media element has been excluded from this version of the text. You can view it online here: [http://pressbooks-dev.oer.hawaii.edu/uhoerpubguide/?p=643](http://pressbooks-dev.oer.hawaii.edu/uhoerpubguide/?p=643)
```

- **Insert Internal Links with Anchor Tags**
• **Create a Table**

• **Create a Glossary**

Images

• **Add and Format Images**
Files, Multimedia, and Plugins

• Make Files Available for Download
• Embed Media

• Plugins

Import Pressbooks Content

• Clone a Book
Import Non-Pressbooks Content

• Import a Word Document
• **Import a Web Page**

• **Copy and Paste**

---

**Metadata, Licenses, and Attribution**

• **Automatic Pages and Content**
• **Book Info**

• **Add and Manage Contributors**

• **Provide Attribution**
Manage Your Book’s Appearance

- **Themes**
- **Theme Options**
- **Custom Styles**

Publish Your Book

- **Hide Chapters in Webbook and/or Export Files**

- **Export Files**
Pressbooks Training Webinar PowerPoint Slides

BCcampus encourages all post-secondary institutions to train their faculty and staff on how to use Pressbooks. To assist with this effort, BCcampus has made the PowerPoint slides used during past webinar sessions available for all to use.

- Pressbooks Training webinar – Introduction
Pressbooks Webinar Recordings

Below are recordings from past BCcampus Pressbooks Training webinars. (These webinars were discontinued on October 10, 2018.)

Introduction

View recording for the October 9, 2018, session of the Pressbooks Introduction webinar.
Intermediate 1: How to import/export files

View recording for the April 16, 2018, session of the Pressbooks Intermediate 1 webinar.
Intermediate 2: Layout and styling tips

View recording for the June 12, 2018, session of the Pressbooks Intermediate 2 webinar.

An interactive or media element has been excluded from this version of the text. You can view it online here: http://pressbooks-dev.oer.hawaii.edu/uhoerpubguide/?p=643

Intermediate 3: Finding, citing, attributing OER

View recording for the October 9, 2018, session of the Pressbooks Intermediate 3 webinar.

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Intermediate 4: Embedding and adding multimedia: beyond the basics

View recording for the January 23, 2018, session of the Pressbooks Intermediate 4 webinar.

An interactive or media element has been excluded from this version of the text.
You can view it online here: http://pressbooks-dev.oer.hawaii.edu/uhoerpuguide/?p=643
Administrators, Developers, Technical Support

For administrators managing their organization’s Pressbooks instance, individuals who provide technical support, and developers who build and fix Pressbooks features, see below for support communities and resources:

- **The Pressbooks Network Manager’s Guide**: This guide details how to use the many Pressbooks features that are specific to and controlled by site administrators.
- **GitHub for Pressbooks**: GitHub is an online development community where individuals work together to build software. GitHub for Pressbooks is a branch dedicated to improving the Pressbooks platform.
- **Pressbooks Discourse**: This forum is a place for developers and administrators of Pressbooks Open Source software to discuss questions and issues related to the configuration and maintenance of Pressbooks networks, as well as to propose and refine feature ideas for Pressbooks core and plugin development.

Pressbooks Catalogs

Several post-secondary institutions in Canada and the U.S. have established their own instances of Pressbooks and, many, host a catalogue of open textbooks and other OER within that instance. Several of these are listed below alphabetically by province or state.
CANADA

Alberta

• Athabasca University: Faculty of Health Disciplines
• University of Alberta: Open Publishing at UAL

British Columbia

• BCcampus: BC Open Textbooks and BC Faculty Pressbooks
• Kwantlen Polytechnic University: Open Education
• Thompson Rivers University Pressbooks
• Trinity Western University

Nova Scotia

• Dalhousie University Libraries Digital Editions

Ontario

• Carleton University Pressbooks publishing system
• eCampusOntario: Open Library Publishing Platform
• Ryerson University Pressbooks
• University of Toronto Open E-Text
• York University Pressbooks
Prince Edward Island

- University of PEI: Pressbooks at the Robertson Library

Quebec

- Rebus Press

Saskatchewan

- University of Saskatchewan: OpenPress.USask.ca

UNITED STATES

California

- UC Berkeley Open Book Publishing

Hawai‘i

- University of Hawai‘i Pressbooks

Indiana

- Indiana University Pressbooks
Iowa

- University of Iowa Pressbooks

Massachusetts

- University of Massachusetts Amherst Libraries

Minnesota

- Minnesota Libraries Publishing Project

New Hampshire

- Pressbooks @ Granite State College

New York

- Open SUNY Milne Publishing

Ohio

- Cleveland State University: Pressbooks @MSL (Michael Schwartz Library)
- The Ohio State University Pressbooks
Oregon

- [Open Oregon Educational Resources](#)
- [Oregon State University Open Textbooks](#)

Texas

- [University of Houston Open Educational Resources](#)
- University of Texas at Arlington: [Mavs Open Press](#)

Washington

- University of Washington Libraries: [Pressbooks Publishing Platform](#)
- Whatcom Community College: [Open Textbook Collection](#)

Wisconsin

- [University of Wisconsin Pressbooks](#)

OpenStax Textbooks in Pressbooks

Each of the 33 OpenStax textbooks in the [B.C. Open Textbook Collection](#) has a Pressbooks copy.

The OpenStax collection contains a total of 59 books. Missing from the BCcampus Pressbooks collection are AP (Advanced Placement) books, translations, and first editions for which second editions have been released.

Links to Pressbooks copies can be found in the [B.C. Open Pressbooks Quick Guide](#)
Textbook Collection by locating the record page for a specific OpenStax textbook and clicking on the “Editable” label under Get This Book on the right-hand side of the textbook’s web page. A second click to “Editable: Pressbooks copy” completes the task. Use the keyword “OpenStax” to reveal all OpenStax textbooks posted in the B.C. Open Textbook Collection.

Custom copies

B.C. and Yukon instructors and staff who have created accounts on the free BCcampus self-serve instance of Pressbooks (and anyone with a Pressbooks account) can create personal copies of these OpenStax books by following instructions found in Add Content.

Because the OpenStax importing process wasn’t perfect and resulted in formatting errors, directions by each copy recommend that the online Pressbooks version of these books not be used in the classroom. Instead, students and instructors are encouraged to link to the original OpenStax online version provided on the record page.

Restrictions

Copyright, licensing, ISBNs, citing information, and redistribution instructions are listed at the bottom of the home page for each OpenStax Pressbooks copy. While textbook content is openly licensed, the OpenStax and OpenStax CNX names, logos, and book covers are not and may not be reproduced without the prior and express written consent of Rice University. For this reason, textbook covers are not posted in the Pressbooks copies.
Pressbooks FAQs — BCcampus Open Education
Answer Guide

- What is Pressbooks?
- Does it cost money to use Pressbooks?
- How do I set up an account in Pressbooks?
- How do I add other users to a book in Pressbooks?
- How do I gain access to an unpublished book in Pressbooks?
- How do I import an open textbook in Pressbooks?
- Can a Google Doc file be imported into Pressbooks?
- Will Pressbooks support books written in a variety of languages?
- How do I link or hyperlink material in a book created in Pressbooks?
- How do I add equations and formulas to a book created in Pressbooks?
- Where is the word count for a book in Pressbooks?
- What are the differences between digital and print PDF files?
- How do I delete a book from my Pressbooks account?
- Where can I find more help with Pressbooks?
16. Checklists

LYNLEYSHIMAT RENÉE LYS, OPEN TEXTBOOK NETWORK, MELISSA FALDIN, KAREN LAURITSEN, BCCAMPUS OPEN EDUCATION, AMANDA COOLIDGE, SUE DONER, TARA ROBERTSON, JOSIE GRAY, AND LAURI AESOPH

Introduction: Checklists

This section offers checklists to help you check your progress as you work towards developing your open educational resource textbook.

Table of Contents

- Checklist — Open Textbook Network
- Checklist for Accessibility — BC Campus
- BC Campus Checklists

Checklist — Open Textbook Network, Melissa Falldin & Karen Lauritsen

Defining and Understanding Open Textbooks

1. Familiarize yourself with open licenses, if you haven't already. Select which license you'd like to use, as it may impact what openly licensed material you can include in your work.
2. Learn where to find openly licensed material you can use. Librarians can help! You can also search Google by license. If you will be creating material (photos, for example) consider how to openly share those assets with others (like Flickr).

Institutional Considerations

3. Decide where you plan to share your completed open textbook and what those repositories, libraries and distributors may require.
4. Consider who may be able to offer help at your institution. Reach out to librarians and instructional designers, for example.
5. If working with others, take the time to meet and clarify expectations and roles. Draft and sign a contract or MOU.
6. Develop a timeline for textbook production. Include writing time as well as editing, proofreading and peer review time.

Textbook Organization

7. Develop a plan for your textbook’s design, including how you want to define the content and element structure. Each chapter needs to be consistent with the next so that students know what to expect.

Authoring Framework

8. Decide which style guide you’d like to use for your textbook and use it as a reference.
9. Commit to making your textbook accessible for a range of students.
10. Make a plan for how you're going to handle updates and revisions so that your textbook stays up-to-date.

11. Create a list of peers who are willing to review your textbook and offer constructive feedback.

Community & Tools

12. Find a community who can support your work. Decide which tool or tools may be helpful for writing your textbook. This may differ depending on whether you're writing solo or with others.

13. Survey which publishing tools look like a good fit for your textbook. Consider their capabilities related to your planned textbook content and elements.

14. Jump in!

Long Term

15. Share lessons from your experience with your colleagues in updates of this guide. (Thank you!)
Organizing content

- Content is organized under headings and subheadings.
- Headings and subheadings are used sequentially (e.g., Heading 1, Heading 2).

Images

- Images that convey information include alternative text (alt text) descriptions of the image's content or function.
- Graphs, charts, and maps also include contextual or supporting details in the text surrounding the image.
- Images do not rely on color to convey information.
- Images that are purely decorative do not have alt-tag descriptions. (Descriptive text is unnecessary if the image doesn't convey contextual content information).

Links

- The link is meaningful in context and does not use generic text such as “click here” or “read more.”
- Links do not open in new windows or tabs.
- If a link must open in a new window or tab, a textual
reference is included in the link information (e.g., [NewTab]).

Tables

? Tables include row and column headers.
? Row and column headers have the correct scope assigned.
? Tables include a caption.
? Tables do not have merged or split cells.
? Tables have adequate cell padding.

Multimedia

? A transcript is available for each multimedia resource including relevant non-speech content.

  • Transcript includes:
    • speaker’s name
    • all speech content
    • relevant descriptions of speech
    • descriptions of relevant non-speech audio
    • headings and subheadings

? Captions of all speech content and relevant non-speech content are included in the multimedia resource; this includes the audio synchronized with a video presentation.
? Audio descriptions of contextual visuals (e.g., graphs, charts) are included in the multimedia resource.

Formulas

? Formulas have been created using MathML.
Formulas are images with alternative text descriptions if MathML is not an option.

Font size

- Font size is 12 point or higher for body text.
- Font size is 9 point for footnotes or endnotes.
- Font size can be zoomed to 200%.

All open textbooks from the OpenStax collection are accessible according to this accessibility statement.

BC Campus Checklists — Lauri M. Aesoph

Here are checklists for each phase of a textbook-creation project. These can be used to conduct a gap analysis and to manage the project.

1. Look Before You Write [Word file]
2. Prepare to Write [Word file]
3. Plan the Book [Word file]
4. Write and More [Word file]
5. Edit and Review [Word file]
6. Pre-publication [Word file]
7. Post-publication [Word file]
17. Print-on-Demand Copies

Make arrangements for print-on-demand copies of your textbook to be available either through your college or university bookstore, student services, Amazon or other print-on-demand or self-publishing service. Print-on-demand services are helpful for students or instructors who prefer to work with a physical, bound version of your textbook.

BCcampus Open Education provides this service – in conjunction with Simon Fraser University’s Document Solutions department – for all open textbooks in our collection, indicated with a “Buy a print copy” button on the book’s record page.

You can buy a black-and-white print copy of British Columbia in a Global Context for $7.20.

It is expected that printed copies of an open textbook will cost money. However, prices are typically set for cost recovery only.

The price for an open textbook varies depends on:
- Number of pages
- Black and white vs. color
- Softcover or hardcover
- Shipping and handling costs

If you set up a print-on-demand option for your textbook, it is best for readers to use a service in your country. If you elect to provide a service outside your country, make this clear to your readers as they will have to contend with a different currency, and duties and fees related to customs and processing. BCcampus learned this lesson when its open-textbook readers complained about American-only options to purchase textbooks. Our solution was to provide a Canadian-based supplier for all our books and, when a U.S. print-on-demand option is also available, to clearly label it.

For more information, see the BCcampus Open Education Print-on-Demand Guide [New Tab].
PART IV
POST-PUBLICATION
This chapter provides guidelines and best practices for the post-production phase of creating an open educational resource textbook.
19. Post-Release Marketing & Communication

LYNLEY SHIMAT RENÉE LYS, OPEN TEXTBOOK NETWORK, MELISSA FALDIN, KAREN LAURITSEN, BCCAMPUS OPEN EDUCATION, LAURI AESOPH, APURVA ASHOK, AND ZOE WAKE HYDE

Introduction: Post-Release Marketing & Communication

This section offers guidelines and best practices for sharing, marketing, and communicating with educators, students, and institutions about your open textbook. Selected materials are provided from the Open Textbook Network, BCCampus Self-Publishing Guide, and the Rebus Guide to Publishing Open Textbooks.

Table of Contents: Post-Release Marketing & Communication

- Where to Share
- Communications
- Marketing and Communications Summary
- Marketing & Communications Overview
- Release Summary
- Release Overview
Where to Share — Open Textbook Network, Melissa Falldin & Karen Lauritsen

I recommend that authors check with their campus bookstore to see if it’s possible to create a printed copy for students. Our campus bookstore is able to print out course packs for students, which are often lab manuals or supplemental readings, and so for my class, I had them create printed copies of my textbook. It cost students around $15 and almost everyone bought a hard copy even though the book is also free online. — Caitie Finlayson, Assistant Professor, Department of Geography, University of Mary Washington. Author of World Regional Geography (CC BY NC SA).

Where will students be able to get the textbook you’re writing? Consider where you want to distribute your completed open textbook before you start. That way you can familiarize yourself with your preferred distribution channel's requirements, including file types.

In addition, sharing certain file types allow for easier editing down the line. For more information, see Modifying an Open Textbook: What You Need to Know.

In addition, depending on your subject and students, your main audience may prefer a print copy, online option or both. Their preferences can impact how your book is ultimately designed. In the K-12 context especially, there may be a one-to-one initiative or a classroom set of devices to consider, too.

Here are some places you can distribute your textbook:

- Open Textbook Library
- Institutional repository
- Learning Registry
- Learning management system (LMS)
One thing to keep in mind as you decide where to share your textbook: Whenever you make updates, you'll want to update all distribution channels.

Open Textbook Library

The Open Textbook Library is a growing resource for higher education open textbooks. Many textbooks are reviewed by faculty to assess their quality. All textbooks in the Open Textbook Library are either used at multiple higher education institutions or affiliated with an institution, scholarly society or professional organization. By including a textbook in the library, authors make it easier for other faculty to discover, use and review the textbook.

Open Textbook Library up-to-date guidelines and criteria: open.umn.edu/opentextbooks/ourbooks.aspx

Communications — BCcampus, Lauri M. Aesoph

Once you've completed your textbook, it's time to let everyone know. Here are some ideas about how and where to spread the word. As you do this, remember to keep track of where your textbook is posted as you'll want to keep all contacts and collections informed when changes or corrections are made to the book.
Home institution and colleagues

Authors who are faculty members or instructors at a college, institute, or university have a ready-made community that can help promote a new textbook. Here are someways you can make use of your institutional networks:

- Use email and mailing lists to inform colleagues, as well as the dean and/or department chair of your faculty
- Contact the communications and marketing department of your home institution and ask if they will write an article about your book in their next newsletter
- Ask librarians at your institution if your book can be added to the library catalogue. These steps might help:
  - provide a link to the web version of your book
  - point out all available file formats such as PDF, EPUB, and MOBI
  - donate one or more print copies to the library's collection for faculty and students who prefer a hard copy
  - show librarians where editable files can be downloaded for faculty who want to revise your book for their course
- Inform your institution's bookstore manager. Many bookstores appreciate knowing about newly available open textbooks, particularly those that will be used in the classroom, so they can inform students.
- Notify your professional association and related organizations.

Projects and organizations

Ask open textbook projects and OER organizations to spread the word about your book. It is common practice for these groups to monitor communication channels for new open textbooks so
they can let their networks know. Below are a number of OER organizations in Canada in the United States. In addition, you can reach out to open-education organizations in English-speaking countries outside of North America, such as the United Kingdom, Australia, New Zealand, and South Africa.

Canada

- BCcampus Open Education [New Tab]
- Campus Manitoba [New Tab] (OpenEd Manitoba)
- ecampus Ontario [New Tab]
- Canadian Open Education Initiatives [New Table]

United States

- Open Washington [New Tab]
- Open Oregon Educational Resources [New Tab]
- Open SUNY OER Services [New Tab]
- CCCOER [New Tab]
- Affordable Learning Georgia [New Tab]
- Open Textbook Library [New Tab] (part of the Open Textbook Network)

Repository applications

Many open textbook collections allow authors to submit requests for their book to be included. Some repositories require that a new textbook meet certain criteria, such as an evaluation by a subject-matter expert. Here are a few examples of where you can apply:

- BCcampus Open Education: Suggestion for the Collection
Marketing and Communications Summary — Rebus Guide 2.0, Apurva Ashok & Zoe Wake Hyde

When the “product” is an open textbook, “marketing” takes on new meaning. The promotion and communications tools you use may parallel those in conventional marketing, but the underlying principles of openness, collaboration, and inclusion give it them a less sales-driven flavor. In what follows, we share some of the whys of ‘open marketing’, as well as the hows of getting it done.

Underlying principles

**Marketing starts at day one, or better yet, day zero.** Well before content is written, even before a project officially ‘starts’, the story of the textbook has begun, including the reasons for creating it, the subject it covers, your team approach, and people who make up that team. Get in the mindset of telling that story early and often.

**Every open textbook project is different: so is the marketing.** Our suggestions are a guideline, not a standard.
Formulate your own suggestions, based on what happens in your project, and share them with the larger community in the forum!

**Collaboration in marketing is as important as it is in content creation.** The more voices and perspectives that are brought in, the greater the diversity, which also leads to greater potential for adoption, use, and re-use.

**Connection-making is at the heart of communications.** Create and tell a story about your project, connect with those who listen, and respond to their feedback.

### Who’s Involved?

Marketing and communications can be done by anyone on the team, but not everyone thinks of themselves as a “marketing person.” That is why it’s best to provide a clear outline of the promotional plan, along with the resources your team members will need to communicate with a consistent message. Some of the roles are:

- **Project leaders:** who create the plan and decide on the strategies to deploy
- **Communications lead:** who assembles the promotional material, writes a project summary, composes tweets and other blurbs
- **Contributors:** who can provide (or solicit) reviewer blurbs, endorsements, and recommendations for communications channels
Key Tactics

Word of mouth and grassroots efforts are easily the most effective tactics for marketing your open textbook. The team working on your textbook is one community, but you and everyone else in it has ties to many other communities and can help the word get out! To that end:

- Share content updates, success stories, and key milestones.
- Use every step as a communications opportunity and keep content flowing outward.
- Showcase the team members behind the work –make it personal!
- Share aspects of inclusivity, accessibility, and diversity in your concept, content, and design.
- Engage with new ideas and opinions to connect with relevant, current discourse.
- Tell your stories honestly and transparently.
- Provide accessible feedback tools, so that communication can be two-way.
- Repetition is good: get the word out early and often, using different channels:
  - blog posts
  - social media (with links to useful content)
  - listservs (in your discipline and across communities)
  - email signatures
  - conferences
  - webinars
Like all the processes in publishing openly, marketing and communications may happen in non-chronological order, and/or in unexpected ways. Make everyone on the team a part of it, and nurture their involvement as ambassadors for the book. If you all think about marketing as **producing value in the world by sharing your resource’s content**, this will allow it to find its market – those readers, adopters, and adapters who need it.

Read on to explore the whens and hows of marketing and communicating your open textbook project.

**Marketing & Communications Overview — Rebus Guide 2.0, Apurva Ashok & Zoe Wake Hyde**

This part of *The Rebus Guide to Publishing Open Textbooks (So Far)* is designed to help you think through the process of getting your textbook in front of the people who want it, whether for adoption or adaptation, reading or research. It is about using the tools and strategies of marketing and communications to reach those users, but also about the ways in which publicity, promotion, messaging, and outreach tend to differ when the “product” is an open textbook. Like everything related to publishing open textbooks, these processes often happen on variable schedules, and collaboration is always key to make them successful. In many ways, the marketing and communications of Rebus-supported projects start right at the conception of the work, running through to release as well as far beyond!

In what follows, we take you through what you need to know when telling your project’s story and helping it find its audiences. Read through the sections below, and consider our perspectives as suggestions that you can adapt to suit your own unique needs. As you start [scoping out your project](#), and at every other phase along the way, keep marketing and communications in mind. If they run
in parallel to the writing, editing, and production phases of creating your resource, everything should go more smoothly when it comes to the big release.

Remember that this part of the Guide, like the others, is a summary of what we have learned in working with you. What makes your open textbook project unique, however, also makes it distinctive when it comes to marketing. That means that queries will arise and clarifications will be needed, and we eagerly welcome them! Post your responses to this material in the Rebus Community project home, including questions and concerns that have come up for you. This document will continue to evolve, based on our experience managing open textbook projects and your feedback.

Special thanks to Elizabeth Mays, (former) marketing manager for Rebus; current director of sales and marketing for Pressbooks and adjunct faculty at Arizona State University; and author and editor of two open textbooks (Media Innovation and Entrepreneurship and A Guide to Making Open Textbooks With Students) for contributing to this overview!

The Rebus marketing philosophy

Before diving into tips and suggestions for handling marketing and communications on your open textbook project, we want to explain our philosophy and approach. Rebus’ version of marketing differs from the structured, sales-oriented processes that most people might think of. It’s not about driving consumer behavior, leveraging certain needs, notifying prospective customers about product rebates, or increasing purchase rates. Our approach is to start certain processes right at the beginning of the work, always with the goal of reaching potential adopters. Starting this early means you have a head start once your book is released, so marketing should be as much a part of the creation process as project scoping and building your team. If you limit your marketing and
communications efforts to the time immediately surrounding the release and launch, you may not be as successful in gathering the widest group of readers and adopters around your textbook.

We subscribe to the idea that marketing is a series of connections. In most cases, these connections are between people and projects, where Rebus’ target audiences are collaborators and communities. We see marketing as a way of creating and telling a story about your project and the resource you (and others) are working to build. Then, by forming connections with those who listen and respond to this story, you can help people find the textbook and help the textbook find its people.

The principles underlying our approach

Our goal with open textbook projects has always been to create a valuable resource for others to use, and to build a vibrant community around it. Over time, we have landed on a set of principles that are at the core of our overall approach, shared below.

For us, marketing starts at day one, or better yet, day zero. Even before the content is scoped out and written, the story of that textbook has begun. The story includes not only the reasons for creating the resource, but also the people who you hope will read, adopt, and adapt it. That means thinking about how your team is formed, who those people are, and what they bring to the project. Simultaneously, as you scope out the chapters and sections and subsections, bring in the story of what the book will include – and what it won’t (and why). Keep the communications flowing. Document your decisions and share them with the team, so that they become not just part of the story, but the storytellers themselves. Get the word out early and often, about what you’re doing and why, as well as who is helping you do it. It can be through word of mouth, social media, association listservs, a blog site, or other channels (we’ll dive in to this in more detail later).
Every stage of the open textbook publishing process can be leveraged to help the book reach its potential adopters, and there are ways to ensure that marketing is smoothly built in to what you do. For instance, collaborative authorship creates opportunities for buy-in and allows for a native network of ambassadors for the book to form. Project updates (through the channels noted above) keep the creation process on the radar of your colleagues and community, including those who aren’t directly involved or interested (yet!) The beta-testing and peer-review phases not only provide invaluable feedback on the book’s content, they also help establish groups of future users and readers around the book. Think of these people as a community of interest and practice, that naturally forms (and belongs) around the book. In fact, an underlying goal for every stage of open textbook development should be community building and engagement. As long as you are open about your processes and communicate them directly, you can always consider marketing as part of any phase of publishing.

In our experience so far, providing “value” to a community of potential users or collaborators is one way to help make a book meaningful and visible to them. For instance, one easy way to create value is to turn parts of the textbook’s story into useable, engaging, and even teachable chunks. You could do this by providing content updates as your team members write and edit their chapters. You can also share success stories of things that go well in the process, which not only communicates how open publishing works, but also gives others the incentive to try it out themselves.

When sharing your stories, try to showcase the team members behind the work. People like to hear about the personal aspects of publishing, not just the facts and figures. Putting a human face or voice to the project helps make it more compelling, and more relatable for those who aren’t involved. Besides, the people who are mentioned will naturally help promote those stories themselves! One way to showcase individual voices is by soliciting and sharing quotes from the team. Ask people both from within and outside the project leadership to talk about their experiences. Beyond the
insights you gather on what works (or doesn’t) about a given chapter or section, it keeps the process open and adds energy to the community around the book. At the end of the day, the project is made up of you and the team involved, so don’t hide behind the scenes!

Another approach to telling the story of your project is to share how your handling or presentation of a particular subject or topic makes your book unique. This might be in the tone of the text, the pedagogical approach, what areas you choose to cover (or not cover!), etc. Another great way in which your text might be unique is that it demonstrates greater inclusivity and a wider variety of perspectives and participation, both in the content itself and the teams creating the content. One of the most important principles of publishing openly is that it creates opportunities for more inclusive approaches to content creation, so if you commit to and enact these principles in your project, be clear about the choices you’re making and why you’re making them. Keep up the messaging about your work as related to accessibility, diversity, and equity, from the project scoping phase through content creation, peer review, and release.

As your project rolls along and you reach different milestones, keep asking yourself whether you’ve remembered to spread the word lately. With marketing and communications, it’s important to maintain momentum as you are building interest. While your major goal is to complete your book, resource, or ancillary material, the people around you might be focused on other things. So even as you work to build up community around the project, they need to keep being engaged with new ideas, updates, and stories. Be honest and visible, upfront about your decisions, and attentive to the comments and suggestions you receive in response.

Finally, marketing and communications are just as much about listening as they are about broadcasting. Make sure to give your community accessible pathways to get back to you and stay on top of those communications channels. Respond quickly and enthusiastically, and it will reinforce that you are listening and care
about what they have to say. If you note any eagerness that seems to go beyond standard interest, you might have a potential team member on your hands! Give them individualized attention and the chance to learn more about your project or participate in it. Especially once there is more than the initial team talking about the project, make sure that there are places to engage people in conversation and then give them opportunities to do more than just talk (see our engagement guide for more ideas). Provide avenues to participate and, as always, be inviting and welcoming!

What types of TACTICS can you employ?

When you begin thinking about marketing and communications within this framework, there's no limit to the types of tactics you can employ. Below is a short list of ways to promote your project, all along the road to release. Some of these are likely familiar, and some might be new, but either way, think about how they can be undertaken within a philosophy of openness and collaboration. Remember to keep providing value, so that these processes always offer a way for someone to get involved and do more. If people have something they can use (e.g.: investigate further, teach about, tweet), it will resonate with them more deeply, and inspire them to become part of the process.

- blog posts (with clear links to more content that is useful to your audience)
- milestone announcements (providing information on what someone can do next, like contribute, review, or adopt)
- social media (either from your accounts or a dedicated project account, sharing updates and other relevant content)
- discoverability (so readers, adopters, and adapters can get their hands on the textbook when they want it), meaning:
  - maintaining a public listing for project
submitting completed content to repositories
ensuring metadata is comprehensive and accurate

- listserv discussions (so you can become an engaged participant in a community, naturally directing people to your resource)
- email signatures (which can keep the project front of mind as you interact with people)
- community calls (to share updates, gather feedback, and reinforce community building)
- conferences (as opportunities to present, be challenged, make connections, and reconsider what you think you “know” about your project and how to make it better in a future release)
- promotional materials (that not only reinforce the value that your resource brings, but do so in quick and friendly formats), including:
  - slide decks
  - blurbs or review quotes
  - pamphlets
- print copies of the book, for potential adopters (to put a physical presence on their desk – front of view, front of mind!)
- project mailing list (for more frequent and detailed updates, and from which you also allow people to opt-out!)

As we've indicated above, each of the tactics might help to serve a specific goal on your project, such as helping give your book a physical presence, or providing more information on how contributors can get involved in the project. Later in this section, we'll go into more detail about these strategies, including how you can leverage them, what content to send out, which channels to use, and more. Stay tuned!

Ultimately, it’s all about the people

As we've said earlier, for us, marketing and communication are
mainly ways to connect communities and collaborators with your book. At Rebus, what drives our work is the idea that we’re building books to build communities, and building communities to build books. We strongly believe in the power of groups of people to come together around a particular project, and doing so in ways that help everybody benefit.

It’s with this goal in mind that we’ve outlined the principles and strategies above, and we want to remind you to keep tapping into your biggest resource as you go about marketing your book – you and your team’s network of contacts! Reach out to these people, whether they are in your professional or personal circles, and remember to listen to their insights about your book.

Positive recommendations about the book from people in the community around it are the most valuable pieces of communications you can ‘create.’ Word of mouth is immensely powerful in the OER space, so be sure to leverage any endorsements about your book – even traditional publishers will tell you that there’s no paid tactic that has the same impact as someone vouching for the quality of your resource. This type of handselling can only happen if you engage with the community right from the very beginning of your project, so that they are as invested in the resource as you are, even if they were not directly involved in the production. Collaborate and create, and you’ll see the community grow along the way. For us, that’s what open textbook publishing is all about!

Need further assistance?

We hope these suggestions will help you market and communicate your project, all throughout its various phases and incarnations. We’ll continue to add to this section of the Guide as we work with more projects. So whether or not we ask you directly, we always welcome your ideas on what else we could added, based on your
first-hand experiences and the stories you've heard in passing. We're also very interested to know your feedback about how these approaches have worked (or not!) for you.

Keep coming back to the Rebus Community project home and help the community learn and grow!

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Release Summary — Rebus Guide 2.0, Apurva Ashok & Zoe Wake Hyde

The “Big Release” is one of the most gratifying phases of the OER creation process. To make the most of it, a coordinated effort allows the word to get out and the resource to get into people's hands. However large your audience, it's important to take your time with these final steps, to make sure the book is in the best possible shape for release.

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**Estimate targets, but stay flexible.** Plan to have your book released one to three months before the academic term in which you'd like to use it. Set a date during the scoping or content creation phase, but remember to revisit and adjust your timeline if and when things change.

**Revisit your initial goals and measures of success.** Make sure that the resource meets the objectives you set out early on, in terms of both content and formats.
Preparation and planning makes everything easier. Working to build a community of potential adopters and meet accessibility standards at every stage of the process means you will not be rushing to do so during the final weeks before release.

Have fun along the way. Release isn’t all checklists and spreadsheets—it also includes elements like designing an attractive cover, writing stories about your experience making the book, and highlighting the impact the book can have, all with a great group of collaborators!

Savor the moment. Build in time for you and your team to celebrate the moment, and pat yourselves on the back for this incredible achievement. Creating an open textbook is no easy feat, but you’ve done it!

Who’s Involved?

Almost everyone on the team will have a part to play leading up to the book’s release:

- Project manager: keeps everything on schedule, coordinates with the team, conducts final checks on the book, creates adoption forms and tracking sheets, notifies the community about the release
- Formatter: converts content into accessible formats for readers (minimum: web, editable, and offline formats), does content layout and styling, adds front and back matter
• Designer: creates an engaging ebook and print cover (which may also be openly licensed), makes other marketing collateral as needed (e.g., pamphlets, slide decks, videos)
• Accessibility reviewer: reviews the formatted book to ensure that formats meet accessibility standards, meets with instructional designers to make sure the book meets all learners’ needs (including those with recognized disabilities)
• Proofreader: final check after formatting, to catch any small errors
• Marketing team: updates the book description, prepares a release announcement, collects blurbs about the book to feature on the cover or in communications, creates promotion plan
• Others: help with final checks, submit the book to repositories, set up print on demand, and spread the word

Key Tactics

Once content is finalized, you can start working on some of these processes:

• Work backwards from your target release date to distribute workload and allocate time for tasks.
• Remember technical openness—make your book available in web, editable, and offline formats.
• Also make a print-on-demand format available for those students and teachers who need or prefer a physical format.
• Create a cover that attracts potential adopters, distinguishes your book from others, and shows its personality upfront.
• Include front and back matter that complements the main content, rounds out the appearance of the book, and lends some professionally created appeal.
• Create an adoption form and encourage users to self-report adoptions, and use this information to prove the book’s impact.
• Follow accessibility checklists provided by your university or regional boards and prepare an accessibility assessment that shows your book meets these standards.
• Update the book’s metadata, check the license, and verify the information on the book’s homepage (including links to the Adoption Form).
• Submit the book to institutional and OER repositories or referitories.
• Send copies to the team if possible, or at a minimum, include them in the book’s acknowledgements.
• Execute your promotional plan and shout it from the rooftops, and ask the team to do the same!

Release is just one of the many débuts that your book will have. After you send it into the world, it will be used, expanded, and adapted in many other ways. So this phase of the process is about having confidence that the resource is ready to be shared, while also being ready for it to be taken on (and maybe released anew) by the
communities of practice that form around it. Then, as it becomes part of the disciplinary landscape, start thinking about a long-term vision, including ancillaries, new versions, and/or remixes.

Keep reading to find out more about planning and implementing the Big Release.

Release Overview — Rebus Guide 2.0, Apurva Ashok & Zoe Wake Hyde

After the work of scoping, creating, editing, and review is done, it is finally time to share your textbook with the world! This section of The Rebus Guide to Publishing Open Textbooks (So Far) takes a deep dive into one of the most gratifying phases of the publishing process: The Big Release (as well as the many small steps that lead up to it). Making your open textbook (or other resources) public requires a coordinated effort, much like the rest of the publishing process. In what follows, we summarize the final tasks that link the creation phases of publishing with those in which you get the word out and the resource into people's hands. We cover formatting and layout, cover design, final proofs, print-on-demand, and more.

As in the other sections of this Guide, these suggestions are based on our experience with open textbook projects. If you have questions about this overview, or suggestions for what else we could include, please share them in the Rebus Community project home. This document is an evolving draft, based on what we have learned so far in managing open textbook projects and gathering community feedback. We welcome your thoughts and contributions, including ways to improve the Guide overall.
It starts with a little math

Timing is important when it comes to release. If you want your textbook to be adopted for a course in a given academic year, for example, then it may need to be released as much as three months in advance of that course start date. (Check with your local institution on their policies regarding textbook adoption deadlines, and assume that anyone wanting to adopt your book will need at least a month to review it and make a decision.)

Alternatively, you might work to the deadline for a course you teach yourself, and be prepared for wider adoptions to happen in the following semester. Instead of thinking in terms of the school calendar, you might want to time the release with another big event, such as a major conference in your field. Or, depending on the type of resource you are creating, you might not need to work towards having it ready for a particular course or time of year at all, and can see how things develop as you go.

In any case, there are two ways to approach working out your release date. One is to figure out an approximate release date right at the very start of your project (e.g., a June release for September adoptions), and the other is to work it out once you’re getting close to having all your content written, edited, and reviewed. In fact, don’t be surprised if you end up doing both of these! Having a target release date from the outset can be very useful for keeping things on track and focused, but realistically, things can change over time.

In the first scenario, during the project scoping phase, you can get out your calendar and calculator, and start adding up the number of weeks you estimate the entire process will take. Then, count backwards from your desired release date and see if it’s looking realistic. In the second, you can plot out how much work is left to do, and see what release date that gives you, and whether you want to adjust at all to bring it closer, or push it out.

Even if you aren’t constrained by a specific target, we still recommend working backwards from a projected release date. In
that way, you can see when the preceding phases need to take place, and allow time for processes that are less under your time-management control, like peer review and review by potential adopters.

Regardless of the approach, however, it’s important to keep revisiting and re-confirming whether your timelines are on track for release. If you do need to do some schedule rejigging as you go, don’t worry—that’s normal. There will always be some adjusting on every project. Just remember to chat with your team about where to reduce time spent (and where not to), so the book still comes out when you want. And if it comes down to it, and you need to delay publication, that’s okay! What’s important is that you and your team are happy with the final resource, and proud of what you decide to share with the world. Besides, as an open resource, either you or your readers and adopters may choose to keep revising it, so “release” is just one of many possible débuts that the book will have.

Prepping for release

Once your content has been finalized, and closer to your release date, you can start working on some of the processes outlined below. (Some of them, like cover design and front/back matter, can be initiated sooner, but others like formatting and arranging for print-on-demand obviously require the content to be finalized.) We’ve included a variety of steps that most Rebus-supported open textbooks have gone through prior to release, but you might have ideas for additional steps or, alternately, discover that your project requires fewer.

Formatting

Formatting is the process of converting your content from a word
processing file into the format that will be consumed by readers. In the case of OER, content should be made available in a wide variety of formats, including web, offline, and editable formats. While Creative Commons licenses permit a range of uses, actual technical openness is vital to ensure that those uses are in fact possible (e.g., consider the difference between an openly licensed text available solely as a PDF versus one available in PDF, on the web, and in a downloadable, editable format).

Regardless of the book formatting software that you are using, it’s important that you create, at a minimum, one web-based format, one offline, and one editable format of your open textbook. There are many ways in which you can meet this standard, but one of the easiest and most popular in the OER world is to use Pressbooks, an open-source book production software. (In the interest of transparency: We love Pressbooks for how functional and useful it is, and we are a paying client of the software. Moreover, we also share an office with them, as well as a co-founder!) With Pressbooks, you are able to produce professional, platform-agnostic outputs of books in multiple formats. These include: web, PDF (print and digital), EPUB, MOBI, ODT, XML, WXR, and XHTML. You may have access to Pressbooks through your institution, or you can create a one-off book at Pressbooks.com. Rebus also offers access to the Rebus Press for many of our projects that do not have access elsewhere. Let us know if you’re in that group.

Formatting also includes styling your text, images, tables, and any other parts of your content. Overall it is about structuring and presenting your content so that it can be used and understood by readers in the best possible way. To ensure consistency throughout the book, we recommend making an inventory of the different types of content you want to have (i.e., learning objectives, case studies, summaries, key takeaways, or other recurring sections in each unit). With that in hand, you can create a “style guide” for each of these categories or elements in the inventory. Then create a template for each, which you can easily apply to every instance of them throughout your book. Not only will this help you create an overall
look and feel that is coherent throughout the book, you will also be able to ensure that all types of content are styled and structured the same way. That is, your tables, charts, bullet lists, subtitles, end-of-section questions, etc. will look the same from chapter to chapter, making it easier for your readers to recognize what type of content you are presenting.

During this stage, it is a good idea to talk with the instructional designers and accessibility practitioners on your campus, or in your network, and ensure that the resource meets its learning objectives and is formatted with all readers in mind. Formatting for accessibility is critical. This means, among other things, ensuring that headings are styled for contrast, size, hierarchy, etc., so as to make them both legible and comprehensible for all readers. Similarly, images need to contain alt text, which acts as a machine-readable placeholder when the image itself cannot be viewed. These are small points, but important to think about during formatting, so as to reduce any remediative work that might need to happen after your book is released. For more information about accessibility best practices when creating your open textbook, we highly recommend the BCCampus Open Education Accessibility Toolkit.

Cover Design

Some people may think that open textbooks don’t require book covers, because they are simply ‘digital texts.’ In fact, covers are an important way to give your book a face and visually engage potential readers and adopters! What’s more, open textbooks can be printed, just like any other book, and it’s nice to offer more than just plain text on a plain background.

Book covers also help to attract potential adopters by conveying the book’s subject matter and overarching themes. For students and readers who will interact with the book, the cover distinguishes it from other resources, and allows it to show its ‘personality’ up front. While the possibilities are endless, we suggest keeping book
covers simple, and dedicating a reasonable but not excessive time to creating the design. Enlisting the help of a student designer or another volunteer who is looking to grow their portfolio can be a good approach, but make sure to give them a clear briefing on what is wanted, as well as a specific timeline and set of deliverables.

As well, put a clear feedback and decision-making process in place, so that the cover doesn't end up getting stuck in ‘design-by-committee’ delays. When it comes to visual and textual elements, you may want to use open-source fonts and open-license photographs, so that your book cover can also be openly licensed. Public domain image repositories, and open license platforms such as Unsplash can be great resources. Let us know in the Rebus Community project home about your own go-to image and graphic sources – we’d love to share them!

Front and back matter

Adding front and back matter to your book is a good way to include information that complements or supports the main content, without necessarily being central. It can also help round out the appearance of your book and lend it some of that professionally created appeal. The table below contains a list of common front matter and back matter elements that you can choose to include in your book. (We'll be expanding on these in a later section, so stay tuned!)
Adoption & Adaptation

One of the challenges of OER creation is tracking the resource’s use following release. In conventional publishing, purchase serve as tracking metrics, but that is not the case with open textbooks. Nonetheless, it’s important to know who might be using your resource, and for what purposes, not only to grow the community around your book, but also to provide statistics, calculate savings, and report back to your administration or granting agency, if required. Given the technical challenges of tracking use, we advise
you to solicit users to self-report. Learning how your resource is used, and the impact it has on student success and retention, may also help you secure funds to improve the resource, create ancillaries, or work on another OER project.

An easy way to get notifications of new adopters and adapters is to have them fill out an adoption form. (You can take a look at our Adoption Form as an example.) Our form asks for the adopter/adapter's name, institution, course information, current course materials in use, cost, and number of students. Forms can be more detailed if you require additional information. Make sure that you link clearly to the form from your book, from the project's public listing page, and from the release announcement or other communications. The wider the form's reach, the higher the response rate!

Accessibility Assessment

With open publishing, creators are able to take enough time to ensure their resource is accessible and usable by all students and readers from the moment of release. This means planning for accessibility and inclusive design from the very beginning, and executing that plan during the subsequent phases. Then, prior to release, a final check of the resource, across the various formats you produce, ensures that the original goals have been met. We recommend running through an accessibility checklist to determine how your book holds up to these standards. We find this checklist from BCcampus to be a helpful starting point, but you can also use checklists or standards provided by your institution, state, or national governing body.

Once you've completed this work, it's important to then include the assessment in the back matter of your book, so that potential users can determine the suitability of the book for all students. There’s also value in surfacing this kind of information for those who
may not think of it otherwise, so be transparent and forthcoming with the work you've put in, as well as with any known shortfalls.

*Final Checks*

Other final checks include a visual test, during which you look at the layout in each format – web, PDF, and ebook – confirming consistency and coherence from beginning to end. (Note that this is not as close a read as you would do during proofreading, but instead, it is a more macro-level verification of the layout.) When you're checking content that is web-native, it's good to confirm that external links are all working, that the information about the book on its landing page is clear and descriptive, and that there is a link your adoption form. Licenses should also be clearly displayed, and contact information can be made available, using email links. Check also that the metadata attached to your book is updated, accurate, and comprehensive – this makes it much easier for your book to be discovered in repositories!

At this point, you may want to have your book proofread (or proofread a second time if you have already done one pass). Someone with fresh eyes can catch little errors that might have been introduced during formatting, or new (minor) edits that you make to the content as you go through all these last checks. Remember, however, that when you're so close to a resource, it may never seem perfect to you, so draw a line (and set a time limit) when it comes to ongoing tweaks and adjustments. Or, if you prefer, start up plans for a second edition, and feed this work into the next project!

*Submit your book to repositories*

To encourage adoptions or adaptations of your open textbook, it's
crucial that you make your book easy to find in various institutional and OER repositories. By submitting your book in multiple repositories, it increases the chances that your book will be discovered by educators and researchers looking for openly licensed content in your field. We recommend submitting to major OER repositories/repositories such as MERLOT, Open Textbook library, BCcampus Library, and OER Commons, in addition to your institutional repository, or other local or national repositories in your region.

*Print-on-demand (POD)*

Even if your open textbook has been born web-native, there's something to be said about the power of print. Print remains an important option for students, many of whom still prefer to engage with content in a physical format. There are also readers who will opt for print, given that digital and online versions necessitate reliable access to digital devices and an internet connection. Print-on-demand is therefore a good way to support accessibility and choice for students, even if you yourself don't plan to use a print book in teaching.

Giving your book a physical presence can also be invaluable for how your resource is perceived. Some adopters will still prefer to see a printed copy of a book: that materiality can make it all-the-more “real” in their perception.

If you're using Pressbooks, you can easily export a print PDF file that is optimized for printing. If you're using other formatting tools, you should check the specifications and requirements by the print-on-demand service that you plan to use. Some common providers are Lulu, IngramSpark, CreateSpace, and Kindle Direct Publishing. You may also want to look into the printing options at your campus bookstore, or with local printers in your area, as their rates might be more favorable. As this section of the *Guide* develops, we'll be outlining how to set up POD in detail, so check back soon!
Update & involve your community

Be sure to send a notification to your community regarding the release, and if possible, send a token of appreciation to anyone who has had a particularly significant role in the development. This could be as simple as a handwritten thank you card, and/or a print copy of the resource. Many people helped create it, after all, and it’s generally a small cost in exchange for a lot of goodwill (and another potential adopter!).

In your book’s acknowledgements, it’s also a nice gesture of gratitude to include a list of all the team members involved in the project, and those who have been part of its broader community. Sharing your thanks with them publicly makes it clear to everyone who uses the book how important the team has been in shaping it!

If you’ve been sharing updates about how your project is going, there will likely also be a certain amount of anticipation and enthusiasm about the impending release, which you can tap into in a number of ways. For instance, as you’re letting people know that the book is close to release, take the chance to ask people to share some feedback (a short review, a statement of endorsement, etc.) on the book and/or process. You can use their words in your promotional assets, and follows any recommendations they have about where to share the book (e.g., listservs you might not know about).

Promotional Assets

With all the care and thought that has gone into creating the resource, it’s only fitting to have a coordinated effort to make as much noise about the release as possible. While there is no limit to the number and kinds of assets you can create, we recommend the following as a minimum:

- a release announcement
• a short, shareable book description (you likely have this already in your project scoping docs)
• blurbs or praise for the book
• a book cover
• several Tweet-length blurbs that can be cut and pasted

If you have the time, it can also be valuable to write up a short narrative about how the book was conceived and created, including a description of your experience during the process. Since publishing open textbooks is fairly unconventional, highlighting what distinguishes the production process is bound to attract some attention. It may even inspire others to follow in your footsteps! You can also create pamphlets, slide decks, or other marketing items, but only do what is feasible given your timelines and workload. For more inspiration, take a look at our Marketing and Communications overview.

Whatever assets you prepare, be sure to share them widely – on a blog or other web page, in key listservs, at major conferences, on social media, within your team, and in the Rebus Community platform. Ask others to spread the word, too, and keep the momentum up so that your release is on the radar for a few weeks. You may want to create a detailed promotional plan, with key dates and major events, so you can add momentum over the course of the release. If you do, share the plan with anyone helping out, so that everyone is on the same page.

Execute the plan, and savor the moment!

Once you've completed the steps above, the only thing left to do is to execute your promotional plan and shout it from the rooftops. As this happens, build in some time for you and your team to celebrate the moment, and pat yourselves on the back for this incredible achievement. Creating an open textbook is no easy feat, but you've
done it! Take it all in, and enjoy the calm, before thinking about any next steps.

Start looking ahead

As your book becomes part of the disciplinary landscape, and communities of practice around the world begin to adopt and adapt it, it may be time to think about a long-term vision for your book. Do you want to create ancillary materials? Is there a series to be created, or a revised edition to be planned? Should the book be translated into different languages? Try to engage the community around you in this planning – they may become part of a future project’s leadership team.

Need further assistance?

We hope these suggestions will help you share your resource with the world. As we noted, we’ll continue to add to this Guide as we work with more projects, and we welcome your ideas on what else we could add, or your feedback on how these approaches have worked (or not!) for you.

If you have questions, or anything to add, please let us know in the Rebus Community project home.

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- Social Media
- Open & Online Repositories & Clearinghouses

- Working Groups

- Workshops & Conferences

- Libraries

- Encouraging & Tracking Reuse
20. Updates, Sustaining & New Editions

APURVA ASHOK, ZOE WAKE HYDE, LAURI AESOPH, LISA PETRIDES, DOUGLAS LEVIN, C. EDWARD WATSON, AND LYNLEY SHIMAT RENEE LYS

Introduction: Updates, Sustaining & New Editions

This chapter goes over best practices for keeping track of updates to your open textbook, sustaining your open textbook, and preparing for new editions of your open textbook.

Table of Contents: Updates, Sustaining & New Editions

Adoption

- Adoption Summary
- Adoption Overview
- Track Adoptions

Improvements and Maintenance

- The CARE Framework
- Updates and Revisions
- Maintain The Book
Adoption Summary — Rebus Guide 2.0, Apurva Ashok & Zoe Wake Hyde

Having your book adopted by an instructor for use in a given course is a vote of confidence about its overall quality and value to learners.

Whether or not adoption is the explicit goal you’ve been working towards, the open license on your book is nonetheless an indicator that you recognize that others can benefit from your book. It’s therefore worth putting in some effort to encourage and track adoptions.
Underlying principles

**Recognize the implications of the open license.** The openness of OER means a lot for students and instructors, including access and use with few or no barriers. At the same time, openness can make it hard to keep track of who's using the book. **Be transparent and consensual about the data you're collecting.** State explicitly what information you're asking for and how it may be used. Follow the guidelines in your region, so that adopters are comfortable and informed when submitting their details.

**Spread the word far and wide.** The larger the group of people who know about your book, the greater the likelihood of adoptions and reported adoptions.

**Be responsive to grow the community of practice.** Act on adopter and student feedback, and put adopters in touch with each other and the rest of the project team. Remain attentive to ways in which adopters can help expand and update the text.

**Be flexible!** Adopters might not follow your preferred methods of reporting, but it's still a win if they're using the book and letting you know!

Who’s Involved?
The community around your book will grow with time, but to start it includes:

- Project manager: sets up Adoption Forms, submits reports about the book’s impact, communicates with the group of adopters
- Authors: connect with potential adopters, can be adopters themselves, revise content based on feedback from adopters and students
- Editors: connect with potential adopters, can be adopters themselves, review feedback from adopters and students, decide which changes are immediate and which should wait for newer versions or editions of the book
- Reviewers: connect with potential adopters, can be adopters themselves
- Students: provide feedback about the book after using it in their classroom
- New Adopters: use the book in their classroom, join the community around the book, participate in revising or expanding the book

Key Tactics

While there are technical challenges in tracking how many people are using your book and in getting them to join your community, you can start with the following:
• Create a clear and simple Adoption Form that also explains why the information is being collected, how it may be used, and by whom.
• Ensure there are clear ways for adopters to find the form and communicate with the team.
• Keep a master spreadsheet of adopters.
• Poll all the existing team members to find out if they are going to use the book.
• Follow up regularly about the effect of the book on withdrawal and retention rates in classrooms.
• Introduce adopters to one another, and conduct conference calls during the semester about book usage.
• Get permission from adopters to use their names and affiliations, and any praise for the book, in promotional materials.
• Ask adopters to share their experience of using the book at conferences, in presentations, in their writing, on listservs, and elsewhere.
• Share ancillary materials with adopters and brainstorm with them about what else is needed to improve the book.

Not everyone who uses the book will want to engage with you and its community, including reporting their adoption. Not knowing the exact number of adopters may be a bit disappointing, so it’s important to focus on the limitless use of the book you've enabled with its license and formats!

Read on to learn more about the whys and hows of adoption.
Adoption Overview — Rebus Guide 2.0, Apurva Ashok & Zoe Wake Hyde

This part of The Rebus Guide to Publishing Open Textbooks (So Far) will take you through the life of the book following its Big Release and into its use in classrooms. Whether you've created an open textbook just for your classroom or for a much wider group of instructors, it's no doubt exciting, gratifying, and a little nerve-wracking to see the book adopted and put into action. In this section, we'll cover things like creating and using adoption forms, collecting feedback, tracking usage, and more. This section is mainly about how to find people to use your resource in their class, and engage with them; if you're looking for more instructions on how to design your course around an OER, keep an eye on expansions to the Guide!

As in the other sections of the Guide, these suggestions are based on our experience with open textbook projects. If you have questions about this overview, or suggestions for what else we should include, please share them in the Rebus Community project home. This document is an evolving draft, based on what we have learned so far in managing open textbook projects and gathering community feedback. We welcome your thoughts and contributions, including ways to improve the Guide overall.

The significance of adoptions

From having your open textbook used in a single section of a single course to seeing an entire university department incorporate it into all their classes, “adoption” can mean a variety of things. In our framing, having a resource adopted generally means that it has been assigned, either in part or in full, as part of the materials for a given course.
In any case, adoption is often the moment that you’ve been working for. Even if you embarked on this project simply to create a book for your own class or course, the fact that you decided to apply an open license to the book means that you’ve already been thinking of other educators and students that might benefit from your work in the long run. So, once you reach the point of releasing your book, it’s worth it to put in a bit of effort to encourage and track adoptions.

Adoptions are an important measure of impact for a book for all sorts of reasons. Given the amount of time and effort you and your collaborators have put into it, it can be incredibly validating to see your book go out into the world and be used by others. Adoptions can also demonstrate the value of a text to your discipline, as it’s a vote of confidence from adopters, and they also help validate the quality of the book, which in turn encourages more adoptions!

What’s more, tracking adoptions is also important when it comes to showing the impact of OER at your institution, to your professional associations, in grant reports, and for future funding applications. These processes often require hard numbers to show value (for better or worse!), so if you do a little bit of work up front, you can have these numbers to hand when the time comes. The information you collect about adoptions is a powerful tool to make the case for OER, as it demonstrates the direct impact on students. This helps make the case for increased institutional investment in the creation of new OER and to the maintenance and further adoption of existing resources.

Lastly, adoptions are yet another extension of the theme of all open textbook publishing as we see it: collaboration! Everyone and anyone who is using the book, who benefits from this content being openly licensed, is an asset. By connecting with adopters, you can create more opportunities to gather feedback, new contributions, ideas, updates, spinoffs, ancillaries and more, and it all comes from people who are just as invested as you are in the book being maintained and improved in the long term. Each time the book is adopted, the community around it becomes larger. Making sure you
can find those adopters (and they can find you!) can make all the
difference in keeping a book alive over time.

The basics of getting and tracking adoptions

As discussed in other sections of the Guide, a major portion of
setting up feedback and reporting channels for adoption takes place
during the release preparation. Even so, you can also start thinking
about adoptions as early as content creation, editing, and review.
Along the way to release, you have hopefully collected a list of
people (and their email addresses!) who are interested in the book
and have shown signs of wanting to adopt it when it is ready.

The main place to start is to set up an adoption form to track
usage, and find out if anyone has already started using the book in
their courses. Check out our Adoption Form as an example of what
this form can look like (it can be modified to include more or less
detail as needed). The best way to track adoptions is to ask users to
self-report via the adoption form, so make sure this form is visible
clearly from the book's home page, and that it is also in any major
communications about the book, like the official announcement.
Lastly, make sure to include clear pathways for communication, so
adopters know how to contact you or other folks who are using
the book. This can be as simple as a link to the Rebus Community
project home, your email address, or other contact information.

Once the form has been set up, you can start promoting your
book and encouraging educators to adopt it. An easy way to begin
is to poll all your team members (contributors, volunteer, advisors
etc.), asking if they might be interested in using the book now that
it has been released and to fill out the form if so. You can also turn
towards more traditional methods of soliciting adoptions, such as
sharing the release announcement and some copies of the book
with instructors or department heads. Following the big release,
keep the noise and momentum around the book going by talking
it up within your network, at conferences, and ask other members on your team and staff at your campus to do the same! Keep your resource’s unique selling points in mind during these conversations, and also point to any additional items that could be packaged along with the book (such as slide decks, question banks, instructor workbooks, or other ancillaries) to motivate and attract people to adopt your book. Remember, the larger the group of people who know about your book, the higher the possibility of reported adoptions.

After adoptions have been reported

Ideally, you should set up the Adoption Form and communications pathways prior to releasing your book. Once you start receiving adoption reports, we recommend reaching out to these people, both to let them know how appreciative you are, and to build on the momentum. Gauge how interested they are in giving feedback, and do your best to bring them into the fold! (Some people will just want to use the book and not get involved, which is perfectly fine. Just make sure they have a clear line back to you if ever they need or want to use it, and you never know when they might show up again.)

For those who are keen, here are some ways to engage them:

• Put adopters in touch with one another, so that there are multiple lines of communication within the community of users.
• Conduct conference calls with the group, so that they can share observations and feedback about the book as they are teaching with it.
• Request permission to use their name and/or affiliation in your own reporting about adoptions.
• Request quotes from them about using the book, which can be added to promotional materials in order to inspire others to
adopt the book as well.
• Ask each adopter to share their experience of using the book during conference presentations, in a blog post, on listserv messages, and within their networks.
• Share any ancillary materials with the group, or if none exist, brainstorm types that should be created, and ways to make them collaboratively.

Throughout, make sure you keep an eye on how adopters can help expand and update the text. This group of people believe in and are invested in your book, so they are more likely to be willing to help maintain and update it over time.

What information should you collect, and how?

We’ve found that it’s best to start with a simple form, so that those responding aren’t too overwhelmed. As you get more comfortable with the group of adopters over time, you can also ask them to provide more information about how the book is being used, building on the initial questions in your Adoption Form. Find the right balance between the full information you would like to have down the line and those details that you absolutely need up front.

Some information is easier to ask for outside of the form, too, so keep track of those questions (and why you are asking them) for when the right occasion arises. In the spirit of transparent and consensual data collection, it’s important to be clear and explicit about the reasons you are collecting certain information. If possible, also tell them what you will be doing with it. For instance, if you’re using the book in your course, you might want to get in touch with the folks on your campus who monitor information like student retention or withdrawal rates, and ask other adopters to do the same. With that kind of information collected, you can build the case for the relevance of your course, for a departmental adoption.
of your book, and for the increased use of OER. Telling your adopters the impact of the information that they share can help incentivize them to submit data and feel more comfortable doing so.

Another suggestion is to keeping an eye out for broader OER tracking projects, like SPARC’s initiative to report USD $1 billion in student savings, and see what information might be required for these projects. Accordingly, update your own Adoption form or follow-up questions that you routinely send new adopters. You might also look at repositories that ask for adoption information, to either expand your form or find out if any adoptions of your book have been reported. For examples, see BCcampus’ Adoption Form and their Open Textbook Statistics page.

Use whatever information you have available, whether it is data reported by adopters in the form, statistics from your institutional repository, statistics from other repositories, analytics from Pressbooks (or wherever your book is hosted), etc. In so doing, however, don't forget to also listen to adopter and student feedback about the book's content and structure. We have an entire section about improving your textbook, which includes what you can do with the feedback you receive. Ultimately, because tracking OER adoptions can't rely on the more conventional metric of unit sales, it will always be an issue of thinking creatively and paying attention to alternative forms and types of usage data.

Challenges with tracking open textbook and OER use

While we've set out what we've found to be best practices tracking adoptions here, things will always play out a little differently than expected in practice. For a start, when it comes to the data you collect, changing or adding metrics to your original Adoption Form over time, either based on your own needs, or what you've seen others collect, can result in a messy data set. You may need to
contact those who filled out older versions of the form, asking them to provide additional information. It is an extra step for both of you, but generally worth it for the data!

As well, be ready to collect information in other ways. Although you may have set up clear pathways to your adoption form (or other data-collection mechanism), it may be that adopters will end up contacting you via email or your Rebus Community project home. Make sure you record this information in a master spreadsheet. Even if they didn't use your preferred methods to communicate this information, it's still a win that they are using the book!

Keep in mind, too, that you might come across some adopters who are not interested in engaging with the community or contributing a lot of information. Don't try to force them to share or do more than they are willing. Not everyone has the time or energy or interest to be an active member of the adopter group, and that's okay. Thank them for being interested in the resource, and continue to update them as the book lives on. (You may win them over down the road.)

And finally, remember that one of the best things about your book is also what makes it hard to keep track of who's using it. Sharing your work as a web-native resource (we hope!) with an open license means it can be hard to know exactly who is using it, where, and how. Anyone can have access to your book's website, or download it in different formats, without barriers – which is a good thing! But while this kind of openness is a big part of the power of OER, and opens up all kinds of exciting possibilities, it also poses a challenge to assessing how the resource is being used. Think of it this way: the same barriers that traditionally limit access to books are also the most accurate ways to collect information about how a book is being used (think sales, account logins etc.).

With fewer barriers to access in place, open textbook creators have to rely on self-reporting by adopters. Many will happily do so, but some won't, for all sorts of reasons. It might be due to lack of clarity about the adoption form, not know the form exists, lack of time or attention, or a lack of incentive or motivation. While it can
be a bit annoying to not know the exact number of people using
your book (or to not even know if you know or not), take pride
in the limitless use you've enabled with the license and formats!
There’s something very exciting about sharing your work without
knowing exactly where and how it will be used. Moreover, you won’t
be alone in feeling frustrated – everyone in the OER community is
with you! Solutions to this issue are in the works, and if you have any
suggestions to offer based on your experiences collecting adoption
information, let us know in the Rebus Community project home!

Ultimately, even if you did everything possible to set yourself up
for success to track adoptions and engage adopters, it may not
happen the way you want. This is okay – your book is a gift, and what
matters is that it is available and accessible to all those who want or
need it.

Need further assistance?

We hope these suggestions will help you keep track of how your
resource is being used around the world. We'll continue to add to
the Guide as we work with more projects, and we welcome your
ideas on what else we might add, as well as your feedback on how
these approaches have worked (or not!) for you.

If you have questions, or anything to add, please let us know in the
Rebus Community project home.

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Commons Attribution 4.0 International License.

Track Adoptions — BCcampus, Lauri M. Aesoph

One of the side benefits of self-publishing an open textbook is
an automatic membership in the open education community for which it is written. As the author of an open textbook, you are in a unique position that not only allows you to pinpoint members of this community – by tracking instructors who use or adopt your book in the classroom – but also establishes you as an OER contributor.

Capturing and recording open textbook adoptions in British Columbia is a key task for BCcampus Open Education. We ask faculty using open textbooks to fill out our Adoption of an Open Textbook form [New Tab] by providing us with their name and institution, the course for which the textbook is used, the number of students enrolled in each section of the course, the cost of the displaced textbook, the terms in which the adoption occurs, and whether the adoption will be ongoing. We also ask adopters if we may share their information with other interested faculty.

Surprisingly, this work has proven to be more than just about numbers. It has also led BCcampus to our province’s flourishing open education community. Tracking adoptions has helped our team to connect with and support faculty and staff interested in open education. Paying attention to who is using open textbooks has revealed open education trends in B.C.’s colleges, institutes, and universities, and has given us the ability to connect the dots – and make introductions – between likeminded colleagues.

For your textbook, decide how you will track its adoptions and what statistics you'll collect. Add the details to your communications plan. (See Communications.) Here is a template that can be used to record these numbers:

- Adoptions Spreadsheet template [Excel file]

Remind colleagues who are using your textbook – or potential
adopters — that they are free to customize it to fit the requirements of their curriculum, students, and teaching style. (See the BCcampus Open Education Adaptation Guide [New Tab].) You can ask adopters for comments about what they like about the book and if they have suggestions for changes or additions that might improve the book, items you can take note of your next edition. These individuals might even agree to writing a review or assisting with an update. (See Maintain the Book and Textbook Reviews.)

Put your stats to work

Like reviews, posting adoption statistics will encourage other instructors to look at your textbook. The amount of information you share and post by your textbook will depend on the permissions granted by current adopters who have contacted you. You might choose to present anonymized numbers that show the total number of instructors, institutions, savings, and students affected.

At BCcampus, we display adoption statistics in two views. On our website's home page, a banner containing aggregated numbers on student savings, total adoptions, and number of participating institutions in British Columbia are posted.

The BCcampus Open Education website displays savings and adoption statistics for the B.C. Open Textbook collection. These stats are current as of January 2018.

When the “More Stats...” link [New Tab] (circled in red in the above image) is clicked, then details about these numbers are revealed on another web page, along with definitions for the various terms used to describe adoption statistics (see below).
Lastly, consider how to analyze your adoption statistics. For instance, you might examine them for trends by geography, course level and type, and term or semester. Use these numbers to guide the ongoing promotion of your book and to educate current and future users.

Long Descriptions

Image long description: The BCcampus Open Education website stats page
<table>
<thead>
<tr>
<th>Student savings</th>
<th>$5,240,407.00 to $5,755,283.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of B.C. students using open textbooks</td>
<td>56,667</td>
</tr>
<tr>
<td>Number of B.C. institutions currently adopting</td>
<td>42</td>
</tr>
<tr>
<td>Top 5 adopting institutions (in order)</td>
<td>1. Kwantlen Polytechnic University</td>
</tr>
<tr>
<td></td>
<td>2. Langara College</td>
</tr>
<tr>
<td></td>
<td>3. Douglas College</td>
</tr>
<tr>
<td></td>
<td>4. University of British Columbia</td>
</tr>
<tr>
<td></td>
<td>5. Camosun College</td>
</tr>
<tr>
<td>Number of known B.C. faculty adopting</td>
<td>407</td>
</tr>
</tbody>
</table>

Adoption: Each adoption refers to a course section within a specific term and year for which an open textbook has replaced a primary textbook or educational resource that must be purchased.

Faculty: The number of individual instructors who have adopted one or more open textbooks for one or more course sections. A faculty member is only counted once.

Savings: Savings include a range. The number at the lower end is calculated as follows: number of students (see “Students”) times $100 (This number was derived by OpenStax College based on a formula that takes into account used textbook purchases and rental costs as well as new textbook costs.) The number at the upper end is calculated as follows: number of students (see “Students”) times the actual cost of the textbook being replaced if purchased as hard copy and new.

Students: The total number of students in a course section within which an open textbook is used as the primary educational resource.
Introduction

The creation, curation, and widespread use of open educational resources (OER) is making a significant difference in democratizing access to a high-quality education. From a burgeoning movement launched over 15 years ago, to a growing field, to national and global impact, teachers and learners in increasing numbers are participating in and benefiting from a process driven by the collaborative development and sharing of educational materials that
are freely available for anyone to use, unrestricted by traditional copyright.

From K-12 districts, to academic libraries, to ministries of education, to consortia of community colleges and universities, what started as a small group of loosely coupled academic institutions, organizations, and education-facing foundations has catapulted to the front pages of education journals and the mainstream press. Aligned to issues such as college affordability, equal access to education, personalized learning, and the professionalism of teaching, it is clear that the field of OER is not only here to stay, but is central to global efforts to improve education outcomes for all students.

Rooted in analogous “open” efforts, including open source software and open access journals, the field of OER has come to be recognized as one that can inject innovation into long-standing institutional practices, such as procurement and curriculum decision-making, but also into business models that can better serve the interests of both students and educators.

However, similar to the debates in open source software over the past three decades, the mechanisms for how individuals, organizations, and institutions should be able to use and reuse OER have become more complex. In some cases, OER creators have expressed concerns about the perceived use of their contributions. In other cases, the restricted rights of users to access and use learning objects, especially in digital platforms and in a commercial context, add to uncertainty around OER adoption.

If the field of OER is to continue on its trajectory from a nascent movement to the mainstream of education, it is incumbent on OER advocates and stakeholders—including educators, librarians, instructional technologists, and content developers—to address how we might sustainably scale the movement over time and across diverse contexts, while still staying true to the values of openness that attracted so many to OER in the first place.

It is for that reason, we developed and are pleased to introduce the CARE Framework. Its purpose is to both support and make more
explicit the valuable work that is being done and needs to be done in building a sustainable open education ecosystem.

The CARE Framework

The purpose of the CARE Framework is to articulate a set of shared values and a collective vision for the future of education and learning enabled by the widespread adoption and use of OER. It aims to address the question of how an individual, institution, or organization seeking to be a good steward can contribute to the growth and sustainability of the OER movement consistent with the community's values.

While OER typically reside in the public domain or have an alternative license that specifies how a resource may be reused, adapted, and shared, the use of an open license is in itself insufficient to addressing broader sustainability and ethical questions. Indeed, the predominant business models of the educational technology and publishing industries have been predicated on the concept of access limitations and scarcity. As such, the time is past due for the OER community to be more explicit and intentional about the ways in which OER are produced, packaged, and delivered.

At the center of the CARE Framework (see figure below) are a wide variety of stakeholders—OER creators and users, working as individuals and as part of organizations, in traditional and non-traditional educational settings—seeking to act as good stewards of the values of a sustainable OER movement. Locating people at the center of the CARE Framework serves to remind us first and foremost of the broader social context and purpose of the OER movement.

**Figure 1: The CARE Framework for OER Stewardship**
People serving as OER stewards pursue a wide variety of strategies and tactics relevant to their specific context to improve access to education and opportunity over time. Yet, what all good OER stewards should have in common is a commitment to practices that serve to demonstrate their duty of care to the broader OER movement:

1. **Contribute**: OER stewards actively contribute to efforts, whether financially or via in-kind contributions, to advance the awareness, improvement, and distribution of OER; and

2. **Attribute**: OER stewards practice conspicuous attribution, ensuring that all who create or remix OER are properly and clearly credited for their contributions; and

3. **Release**: OER stewards ensure OER can be released and used beyond the course and platform in which it was created or delivered; and

4. **Empower**: OER stewards are inclusive and strive to meet the diverse needs of all learners, including by supporting the participation of new and non-traditional voices in OER creation and adoption.
It is our belief that if the four practices that comprise the CARE Framework—Contribute, Attribute, Release, and Empower—are widely adopted, the ecosystem of OER stakeholders will diversify, the use and adoption of OER will grow, and the future of education and learning will benefit via greater access, equity, affordability, and relevance.

**Contribute**

OER stewards actively contribute to efforts, whether financially or via in-kind contributions, to advance the awareness, improvement, and distribution of OER.

The OER movement is a growing community of individuals working across institutions and organizations all around the world, collaborating to improve educational access and outcomes for all learners. In any community, fostering the need or desire of people to contribute to its success is of paramount importance. It is not enough for individuals to simply take, but also to give back, if the goal is to create a sustainable and thriving community. The OER community is no different. It behooves good OER stewards to be intentional about the ways in which their actions support the health and well-being of the broader OER movement itself.

With respect to the OER community, we define ‘contribute’ to mean several specific activities and means of support. First, financial and in-kind contributions are necessary to support efforts that raise awareness of the benefits and affordances of OER, in policy and in the classroom. Second, the development, maintenance, continued improvement, and customization of OER is a vital service that OER community members can provide. And,
third, contributions and support are needed to help further the
distribution and dissemination of OER for students who have
historically lacked such access, including support for multiple
languages, accessible formats, and for low bandwidth use. Today,
while many benefit from the past contributions of members of the
OER community, the sustainability of the movement itself is directly
related to the future health and vibrancy of new community
contributions.

Attribute

OER stewards practice conspicuous attribution, ensuring that all who
create or remix OER are properly and clearly credited for their
ccontributions.

The invitation for anyone with the means and willingness to
contribute to the OER movement via the act of authorship—whether
of original works, such as activities, lesson plans or simulations,
or revisions to previously published works—is one of the key
innovations that differentiates the production of OER from
traditional educational publishing. This democratization of the
production and refinement of instructional materials elevates
practitioner and student voices and is welcoming of non-traditional
subject matter experts willing to share their expertise with others.

Inherent in this approach is the belief that the quality, relevance,
and usefulness of materials is derived, at least in part, from the
collaborative contributions of the OER community to those
materials over time. In this way, contributions of OER authorship
are leveraged time and again to the benefit of learners. At the same
time, good OER stewards recognize that the provenance of OER
materials matters and that the authors of and contributors to all OER materials deserve the community's respect and recognition for their efforts. For this reason, the CARE Framework asserts that we must practice *conspicuous* attribution to ensure that all who create or remix OER are clearly credited for their contributions.

**Release**

OER stewards ensure OER can be released and used beyond the course and platform in which it was created or delivered.

The day-to-day experience that educators and students have with OER is often mediated by one or more technological platforms. While there are many considerations in selecting a technological platform to access and manage OER, it is important to note that not all platforms are designed equally well to foster a sustainable and vibrant ecosystem of OER use and remix. For instance, if a platform mixes OER content with all rights reserved materials and obscures their difference to users, many of the most important benefits of OER are lost.

Therefore, good OER stewards, recognizing these issues, seek to design and use technology platforms and systems that facilitate the goals of the OER movement, including by supporting the broadest possible use and collaborative revision and remix of materials over time. This includes providing tools to allow users to download and share content beyond the course or platform in which it was created or delivered. The evaluation of the features of technological platforms are especially important to OER stewards, given that many students and educators are not able to make individual
choices about the platforms they use, as this is most often decided at the institutional level.

**Empower**

OER stewards are inclusive and strive to meet the diverse needs of all learners, including by supporting the participation of new and non-traditional voices in OER creation and adoption.

Time and again, policy and market forces have failed to incentivize the publishing and technology industries to proactively meet the needs of all learners. What resources get created, how academic topics are covered, from what perspectives, for which learners, and in what formats are all decisions that have been centralized in the hands of commercial publishers. Indeed, the scarcity of affordable, high-quality resources in specific subjects and for select populations has too often been presented as a *fait accompli*. Yet, this is a future that OER stewards reject. The OER movement values and supports both the creation and the remix of resources for diverse and underserved learners, whether they are individuals with disabilities, speak a minority language, or are seeking education in a non-traditional setting.

In the same way, OER stewards elevate the participation of new and non-traditional voices in OER production and remix. By reducing the traditional barriers to creating and sharing resources and with a commitment to conspicuous attribution, the OER movement benefits and is itself enriched from the broad participation of individuals seeking to share their expertise and contributions with others. In turn, this commitment to new and
non-traditional voices will help the OER movement to better serve a more inclusive and diverse set of educators and learners.

Applying the CARE Framework

The values expressed by the CARE Framework support a hopeful vision for the future of OER and education, positively impacting not only issues of access and affordability, but also the seemingly intractable issues of equity and inclusion. Thus the CARE Framework is meant to be applied by all individuals, organizations, and institutions who share a stake in the field's long-term success and sustainability. This includes individuals who create or adapt OER for their own teaching and learning purposes; nonprofit OER publishers and libraries; commercial OER publishers; as well as educational technology vendors looking to incorporate OER into their products or services.

For those new to OER, we hope that the CARE Framework serves to shine a light on a set of norms and practices that serve to encourage, rather than discourage, increased collaboration and sharing of content. And given the existing complexities of content ownership, licenses, and technology platforms, our goal is to provide insights into the mission-driven context of this work. In particular, it is our hope that through application of the CARE Framework that all educators will feel confident in their exploration and adoption of OER.

In advancing this framework, our goal is be explicit about the values that we think are core to the OER movement, including the practices of individuals and organizations that are involved in the production, dissemination, and use of OER. While it is beyond the scope of this initial paper to enumerate all of the many practices that support good OER stewardship, our intent is to invoke a more nuanced and meaningful discussion about the individual and organizational practice of OER and openness in education and for
learning. We hope that affiliation with the OER community means something to those who participate in it, and it is with that goal in mind that we offer up the CARE Framework.

Lisa Petrides, Ph.D., is CEO and Founder of the Institute for the Study of Knowledge Management in Education (ISKME).

Douglas Levin is President and Founder of EdTech Strategies, LLC.

C. Edward Watson, Ph.D., is CIO and Associate Vice President for Quality, Advocacy, and LEAP Initiatives at the Association of American Colleges and Universities (AAC&U).

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Updates and Revisions — Open Textbook Network, Melissa Falldin & Karen Lauritsen

Textbook updates and revisions generally fall into two categories: errata and editions.

An erratum is a writing or printing error. When errors are corrected in future versions, a list of corrected errata is sometimes included in the textbook.

An edition reflects significant changes to the textbook, often to reflect developments in the discipline or a new approach to the content. Whether or not changes warrant a new edition is often subjective.

Regardless, in order for a textbook to remain relevant, it’s good practice to set aside time to review the textbook and consider making updates and revisions. This ensures that the content you’re offering reflects current developments in the field. This can be done on an annual schedule, and is often most convenient in the summer.

Authors who publish their own open textbook have direct access to the content. That means authors can make changes whenever they see fit, including to correct errors as they are discovered (the
work of which can be efficiently crowd sourced by users). Libraries funding open textbook projects and supporting their publication can incorporate annual updates into the grant process and timeline development.

When a new edition is released, be sure to update all of the locations where the textbook is shared. For example, if the textbook is available through the Open Textbook Library or an institutional repository, you will want to inform them of the new edition. A simple email with a link to the latest files is usually sufficient and appreciated.

**Maintain the Book — BCcampus, Lauri M. Aesoph**

Another flaw in the human character is that everybody wants to build and nobody wants to do maintenance.

- Kurt Vonnegut

It can be said – or is assumed – that a textbook released with an open-copyright license is maintained by the community that uses it. However, the reality is that many open textbooks aren’t changed – at least the original versions – once they’ve been published. Instructors who adopt an open textbook might customize it for their own use and maintain a private copy, but the community may or may not benefit from these improvements.

Textbooks that have an individual or organization that takes

responsibility for its ongoing quality and viability tend to experience the highest adoption rates. At BCcampus Open Education, we have learned that the most successful textbooks are the ones with authors that take an active interest in their maintenance by paying attention to errors, noting potential improvements, and promoting their book amongst colleagues.

The first step when creating your post-publication plan is to layout how your completed book will be maintained. This involves setting up ways to receive and record feedback, fixing reported errors, and planning for revisions and new editions. There is a lot to keep track of, so setting up a schedule can be helpful.

Feedback

Invite feedback from your readers

Give your readers a way to offer feedback about your textbook. Some authors do this by adding a line to the preface or introduction that invites suggestions. You can provide your contact information such as an email or create a feedback page can be
added to the front or back section of the textbook. This feedback page should contain details about the kind of feedback you're looking for and how the reader can submit comments.

If the textbook is housed in an online platform that doesn't use page numbers, it can be difficult for readers to clearly describe what section of the text they want to comment on. In your call for feedback, encourage readers to be as specific as possible in their description of the location of their comments. Alternatively, some online platforms have a comments feature that can be enabled. Another option would be to use an external (and open source) annotation system, such as Hypothes.is [New Tab], which allows users to leave comments directly on a web page.

Think about how you will process feedback. The treatment for each item will depend on what has been reported: an error, new information, a potential resource to add, or suggestion on the structure of the textbook. It is also good practice to respond to recommendations by thanking your colleague for taking the time to write to you. If you have information about how to use your textbook or ideas about supplementary materials, include these in your response.

Another way to collect feedback on your textbook is to give instructors the opportunity to submit a review of your textbook. (See Textbook Reviews.)

Errors

Regardless of how carefully a book is copy edited and proofread, it will probably contain errors after publication. Your job is to accept this fact, create a system that allows readers to report errors to you, and develop a means to correct these errors. BCcampus Open Education uses a Report a Textbook Error form [New Tab]. A feedback form that invites error reporting might be sufficient for you, or you can just provide an email where people can contact you.
Think about who will make the corrections. This can be you or someone else, like a student assistant or copy editor. This will often depend on who has access to the book’s source files after publication. (See Remove Platform Access.) Also, how often will corrections be made? Will you fix them immediately? Monthly? Quarterly? And how will you respond to the individual reporting the mistake? A simple thank you with a description of how and when the error will be addressed is one way.

Develop a means to track and record corrected errors for your readers’ reference. You can use an erratum – a record of errors and their corrections for a book or other publication – that is added to your book. Or, like BCcampus, record adjustments on a Versioning History page. If there is more than one format or file type for which the textbook is available, remember to update these and note the date on the erratum or Versioning History page.

Revisions

Many authors are already thinking about the next edition of their textbook before the first edition is published. They realize that their textbook is a snapshot of information and that this information will continue to evolve after the book is published, so they plan for the next edition immediately. (Remember: Writing a book will never feel finished. There is always something that can be changed, improved, or added. At some point you will need to stop and say “good enough.”)

Some authors prepare by collecting notes about what they’d like to change, and material and resources they want to add to the next edition. Others create a duplicate copy of their book – easy to do in Pressbooks, for example – and use it as a template for the next edition. If you want to plan ahead for the next edition, decide how much new and changed information warrants a new edition, and how often this might occur.
Schedule

The maintenance schedule for your book can and should include all tasks that will keep your book relevant and current. Develop a timetable and process for each of the following:

- Responding to, reviewing, and incorporating feedback
- Checking and fixing links and embedded multimedia in online books
- Correcting reported/detected errors
- Adding minor updates to keep the content current
- Creating a new edition

Don't forget to inform colleagues and collections that use and host your textbook about significant changes. (See Communications and Track Adoptions.)

Improvements and Maintenance Summary
— Rebus Guide 2.0, Apurva Ashok & Zoe Wake Hyde

Every book should have an ‘afterlife’ beyond its initial use – changing and evolving to ensure ongoing relevance and continued adoption. Regardless of whether your resource is web-based or printed, it will need some amount of editorial attention in order to remain valuable.

In this way, your role shifts from creation to a focus on maintenance, updates, corrections, and planning or coordinating future versions and editions.

Underlying principles
Maintain the resource so as to strengthen it and improving its perception. Books that are not updated can be seen as out of date and therefore not be considered seriously by potential adopters.

Be responsive to changes in theory, discourse, and practice. Corrections, updates, and additions can be based on reviewer and adopter feedback, as well as wider shifts in the book’s discipline or subject area.

Be public about in-progress and completed updates. Anyone invested in the resource will be motivated to keep it up to date; informing them about expected improvements can prompt them to help or simply look forward to the update.

Carefully time when you carry out changes. Although making changes to OER is relatively easy and flexible, be considerate towards current users of the book. Updates in the middle of a semester or teaching period can have a disruptive impact on learning.

Parse, process, and plan before you do. Prioritize which tasks need completing first, based on the resources at hand and the complexity of the tasks. Use the scale of changes to determine timelines and the release of new versions and editions.
The possibilities of improvements, spinoffs, and adaptations are endless, but they don't all need to be done by you alone. Reach out to the rest of the team!

- Project managers: coordinate and notify teams about similar projects, make connections between new and current collaborators, oversee projects through to completion
- Authors: implement changes, record them in the Version History
- Editors: prioritize work for future versions or editions, implement changes, record them in the Version History
- Adopters: assist with implementing changes, take charge of a spinoff project
- New collaborators: assist with implementing changes, take charge of a spinoff project
- Adapters: share improvements back to the original book, implement changes, lead new adaptation projects

Key Tactics

Whether the changes you are working on are new, or were planned earlier in the project but never executed, keep the following in mind:

- Look for grammatical errors, broken links, and
accessibility of formats.
• Find newly created OER repositories and submit your book for inclusion.
• Make small maintenance changes to the webbook anytime during the year.
• Only make larger additions or updates to the webbook and other formats during breaks in academic sessions.
• Look for trends or shifts in your discipline or subject area, and make updates that reflect and respond to them.
• List error reports and corrections publicly.
• Record larger changes, like edits, additions, updates, and expansions in the Version History.
• Indicate new versions by point increments (e.g., from version 1.2 to version 1.3) and new editions by whole number increases (e.g., from edition 1 to edition 2)
• Add ancillaries, new formats, and media—another type of improvement that moves beyond simple corrections.
• Contact the team and collaborators, including adopters, to help as needs arise.
• Set up clear communication pathways from the book and ancillaries, so new collaborators can reach out.
• Identify an interim project manager if you need to step away or share the workload.
• Always keep everyone informed about ongoing work and estimated timeframes for completion.

Part of what makes open textbooks important is the community
building that goes hand-in-hand with their creation. This doesn't stop when the book is released, so continue to gather people together as you plan updates, and encourage them to add to or modify the resource as it suits their needs.

Keep reading to learn more about maintaining and improving your open textbook.

Improvements and Maintenance Overview — Rebus Guide 2.0, Apurva Ashok & Zoe Wake Hyde

This part of The Rebus Guide to Publishing Open Textbooks (So Far) will take you through the ‘afterlife’ of your book, and its journey beyond use in classrooms. The release and adoption of your open textbook are big milestones worth celebrating, but they also mark the beginning of a new set of steps. As a living document, your book will continue to change and evolve, and so will your role as creator. Your efforts now shift to maintenance, updates, corrections, and the planning and coordination of future versions.

In this section of the Guide, we cover things like following up on errata reports, updating formats, more substantive improvements and additions, and more.

As in other sections, these suggestions are based on our experience with open textbook projects to date. If you have questions about this overview, or suggestions for what else we should include, please share them in the Rebus Community project home. This document is an evolving draft, and continually incorporates community feedback. We welcome your thoughts and contributions, including ways to improve the Guide overall.
Why care about your textbook beyond release?

Once your OER is released, it’s understandable that you would want to savor the moment, to enjoy the book’s existence in the world and to celebrate having completed a huge piece of work! Nonetheless, while the bulk of your efforts is complete, it’s important to remember that maintaining the book is important – to ensure its ongoing relevance and continued adoption.

Books, regardless of whether they are web-based or printed, need some amount of editorial attention to remain valuable resources. This maintenance includes gathering feedback from adopters and readers, which is invaluable for strengthening the text. It’s also necessary, because you will never be able to catch every single typo in the book prior to release, and because you will need to routinely check for broken links, among other changes that are out of your control.

A book that is not improved, updated, and maintained can be perceived as being ‘too old’ and ‘out-of-date’ very quickly and therefore not seriously considered as an option by educators seeking course materials. In a way, a book’s usefulness can depend on the amount of attention that it receives – as people see news of updates, changes, or improvements to the book, they will be more likely to peruse the book and use it in their course!

What Maintenance Entails

Maintaining an open textbook doesn’t need to be a complicated matter. As we see it, maintenance includes ongoing changes that are more about function than content, made at any point, during the academic year. This entails keeping tabs on the book with an eye to grammatical errors, typos, or broken links. You may also choose to track and respond to any error reports that readers and adopters
of the book have submitted (including thanking them for their keen eyes, and perhaps asking if they want to get involved with other improvements!)

If your resource is hosted on the web, part of the maintenance process should involve ensuring that it is still accessible in its web format along with other offline and editable formats. And to ensure maximum distribution, find out if any new OER repositories have been created since the book’s initial release, and then make sure you submit it for inclusion there.

Further down, we get into more detail about the timing, order, and significance of different type of maintenance revisions.

Improvements and Additions

While “maintenance” refers to smaller, ongoing changes to an open textbook, we call more significant changes to content “improvements and additions.” These are made at particular moments following the book’s release, unlike the more frequent and unscheduled corrections that are part of maintenance. These changes can be split into three categories:

- qualitative improvements to existing content
- quantitative additions to existing content
- disciplinary or thematic updates

Following adoption and classroom use of the book, you are bound to receive different forms of constructive feedback regarding the content. For instance, you may have been told that a particular unit has proven to be very difficult for students to understand, or that specific elements like case studies, exercises, or references are not as clear as they should be.

These constitute opportunities for improving those parts of the resource, which should be done during this phase in the book’s life-
cycle. Improvements can also be implemented based on feedback from reviewers—those issues that were not addressed during the initial creation of the book. It’s also critical in this phase to revisit and resolve outstanding accessibility issues, as well as new ones that have been identified as the book has been used.

During this stage, you can also make additions to the content. These may include elements that were initially planned for inclusion but didn’t make it into the first release, suggestions from reviewers, proposals from adopters, and ideas you and your team came up with post-release. Additions can also come in the form of ancillary materials, like slide decks, question banks, exercises, and other supplementary content. We go into more detail about ancillary materials in later sections of the Guide, so keep reading!

The last category of revisions are those that become relevant due to changes within the textbook’s discipline or subject area, or in response to real-world changes that provide new or improved examples of theoretical concepts. It is particularly important to split out this category from improvements and additions, as it highlights how OER can be responsive to wider changes theory, discourse, and practice. For this part of the process, pay attention to these larger themes, including examples, case studies, language and terminology, methodologies that are cited, resource lists, and literature reviews.

All of these changes should be included in the book’s Version History, which serves as a record of the various changes, edits, additions, and updates that are made over time. Take a look at our version history template and adapt it as needed for your book.

Timing and Process

Depending on the extent of improvements, additions, and updates to be made, they will need to be carried out at different times after release. A major concern, therefore, is the impact that making
changes during the school year will have on students and teachers who are using the book in their courses. This includes the changes made to different formats of the book too, as students will be accessing the book in a variety of ways (on the web, in other digital formats like EPUB, PDF, MOBI, and as printed copies).

The upshot is that maintenance changes (correcting typos, broken links, etc.) are the only type of revisions we advise making during the school year, and these should only be made to the web-based version of the resource. Changes to the print version and other formats will need to wait for a pause in the academic year or until year-end, depending on how the in-school time is organized in your region. Each maintenance change does not need to be marked as a new edition of the book, nor does it necessarily require comprehensive tracking in the Version History. We do recommend, however, that error reports and corrections be listed publicly, so readers can see what those changes are and note them in their teaching and learning contexts, as well as avoid submitting duplicate error reports. Take a look at some example errata lists from OpenStax, along with examples of how to share these lists in printed PDF formats, and some inspirations for the errata form itself.

For other improvements and updates, we suggest that you first parse and process the extent of the changes needed, and then plan out a timeline to do so. Some changes may be easier or harder to implement, or require less or more participation from the team. As you're deciding on your tasks and timeline, also think through who will make these changes and assign the right people to them. The scale of changes, from classroom feedback to significant additions planned by the team, will determine whether a new edition or a new version of the book will need to be released (more on this below). The important thing is to be responsive to adopters, readers, and other scholars, and clearly surface the changes that you are making to the text in the version history.

When significant changes have been made and there is a new version or edition of your resource, inform all of its known adopters.
before replacing the old format of the book. And if possible, inform everyone of the specific updates, additions, corrections that have been made—either by pointing to the Version History, or to a list of improvements (if it is a new edition). See an example of this in *Media Innovation and Entrepreneurship*.

Editions and Versions

The differences between a new version of a textbook and a new edition of a textbook bear clarification. As we think of it, a new *version* contains only minor changes—maintenance and smaller-scale improvements to the existing content. A new *edition* of the book incorporates major changes to content, such as additions and updates to the original release.

New versions of a book are usually indicated by point increments (e.g., 1.1, 1.2, 1.3, …), while new editions are indicated by whole number increases (e.g., 1st edition, 2nd edition, 3rd edition, …) The release of a new edition is a time to rally more attention within and beyond your community, and perhaps some promotional efforts as well. If this is the case, do so strategically, and only if the revisions merit it. If there have only been subtle changes and updates, it may not warrant extensive promotion.

Releases of new editions can sometimes be disruptive, especially if they happen frequently (every year, for instance), as students might be working with older physical copies of the book that are more easily available and/or affordable. While one of the many advantages of publishing openly is the flexibility and ease of making changes, it is still important to be considerate towards ongoing users of the book, bearing in mind the impact that changes will have on them.

If you are working on a new edition of your book, be public about it, and communicate in advance with your team and adopters about the expected changes and updates. Doing so lets them know what
is coming, and may even motivate some people to help you make these improvements. Once the changes have been completed, reach out and update everyone, pointing to the new edition and Version History that clearly outlines updates you have made.

Spinoffs and side projects

So far, we've only addressed updates and improvements to the core textbook, but there are other ways in which you may like to expand on your book. Ancillary materials like slide decks, question banks, instructor manuals, and student workbooks can supplement your resource and make it a more appealing package for adopters. You can begin work on these projects following the book's release, or if you have the resources to do so, concurrent to the book's production!

With the open license on your book, the different types of spinoffs are endless. For instance, translations, spelling conversions (eg.: American to British spelling), or cultural adjustments can make it accessible for use in more regions. Other adaptations, small or large, can make the text work better in different pedagogical contexts, or incorporate regionally specific content that makes it relevant to a different set of users, thus expanding the pool of readers around your book.

While adaptations mostly maintain consistency of the content, other variants like remixing can involve blending content from the book with other openly licensed content. For example, Blueprint for Success in College and Career remixes sections from four other OER: Foundations of Academic Success, A Different Road to College: A Guide for Transitioning Non–traditional Students, How to Learn Like a Pro!, and College Success.

Other ways to build on your book is to think of new formats and media through which to share content. You could create an audiobook version of the text, a series of short videos summarizing...
each unit, or a poster series that creates visualizations of the content. The possibilities are endless!

Who makes these changes?

As we’ve seen so far, there’s a lot that you can do to maintain and improve on your already carefully crafted open textbook! The main thing to keep in mind that all these improvements do not need to be made by you alone. In fact, it probably won’t and can’t all be done by you – and that’s a good thing. Part of what makes creating open textbooks important is the community building that goes hand in hand. This doesn’t stop with the book’s release, but continues during improvements and maintenance. Keep gathering people around the book during this phase, from adopters to adapters, so that both the book and the community can grow with time!

The first source of help for maintenance and improvements is the team and collaborators who were involved in creating the resource. Reach out to them as needs arise, and you may be surprised at their response! You can also reach out to the people who are using the book – adopters may well be very motivated to help make changes, as they are the ones who directly benefit from improvements to the book.

Simply put, any individual or organization invested in the value of the resource has an incentive to contribute to maintaining it and keeping it up-to-date in the long term. Depending on the type of project or work that is being done to improve or add to the book, you may even find funders willing to invest financially, or others who can secure budgets through institutional, local, or state grants.

For this to happen, it is vital that you have clear communications pathways set up from your book and its ancillaries. That way, anyone who is interested in contributing in some way knows how to contact you or another team member. And if you find that you need to step away from the project at some point, make sure you’ve identified
and involved someone else to take over or manage things in the interim. Look to your leadership team for this, because there will likely be someone who is eager and willing to take on the mantle.

And lastly, do what you can to be public about the status of the book, of other projects, and of changes, even if it's in the form of a short notice in the book or in your team's public discussion space. Leave the possibilities for the book open – and watch eagerly how they unfurl!

Need further assistance?

We hope these suggestions will help you maintain your textbook and follow its life and journey around the world. We'll continue to add to the Guide as we work with more projects, and we welcome your ideas on what else we might add, as well as your feedback on how these approaches have worked (or not!) for you.

If you have questions, or anything to add, please let us know in the Rebus Community project home.

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Feedback & Suggestions — Sample from Rebus Guide 2.0, Apurva Ashok & Zoe Wake Hyde

We are actively and enthusiastically soliciting feedback from instructors, faculty, administrators, OER program managers, librarians, instructional designers, students, and others using this book. You can leave feedback and suggestions in the Rebus Community project home at https://www.rebus.community/c/open-textbooks-in-development/the-rebus-guide-to-publishing.
Version History — Sample, from Rebus Guide 2.0, Apurva Ashok & Zoe Wake Hyde

This page provides a record of edits and changes made to this book since its initial publication. Whenever edits or updates are made in the text, we provide a record and description of those changes here. If the change is minor, the version number increases by 0.1. If the edits involve substantial updates, the edition number increases to the next whole number.

The files posted alongside this book always reflect the most recent version. If you find an error in this book, please let us know in the Rebus Community project home.
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<td>• Authoring and Content Creation Overview</td>
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<td>• Review Guide Template (Google Docs)</td>
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<td>• Other Open Textbooks Created with Rebus Community Support</td>
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### Versioning History — Sample, BCcampus, Lauri M. Aesoph

This page provides a record of edits and changes made to this book since its initial publication in the B.C. Open Textbook Collection. Whenever edits or updates are made in the text, we provide a record and description of those changes here. If the change is minor, the version number increases by 0.01. If the edits involve substantial updates, the version number increases to the next full number.

The files posted by this book always reflect the most recent version. If you find an error in this book, please fill out the [Report an Open Textbook Error form](#).
<table>
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<tr>
<th>Version</th>
<th>Date</th>
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<th>Affected Web Page</th>
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<tr>
<td>1.0</td>
<td>February 20, 2018</td>
<td>Added guide to B.C. Open Textbook Collection.</td>
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<tr>
<td>1.01</td>
<td>May 2, 2018</td>
<td>For all Open Textbook Network logo references, changed “Open Textbook Network” when referencing chapters to the guide title, “Authoring Open Textbooks.”</td>
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<td>1.02</td>
<td>August 23, 2018</td>
<td>Correction: changed titles for contract templates to title-case.</td>
<td>Appendix 4</td>
</tr>
<tr>
<td>1.03</td>
<td>September 25, 2018</td>
<td>Embedded “What are Creative Commons Licenses?” video</td>
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</table>
| 1.04    | October 17, 2018 | Removed references to Pressbooks Training webinars (discontinued Oct 10/18) and added info about Pressbooks Tutorial videos. | • About the Guide  
• Technology: Accounts and Training |
| 1.05    | March 6, 2019    | Added Working Group Guide to list of BCcampus support resources, at bottom of page. Noted that the Accessibility Toolkit is now in its second edition. | Introduction                             |
| 1.06    | May 21, 2019     | Updated information on CC Search tool.                                 | Resources: Search and Find               |
| 1.07    | June 12, 2019    | Updated the theme.                                                     | Theme changed from Open Textbooks to Clarke. This affected the general look and feel of this book. |
| 1.08    | July 11, 2019    | Updated broken links.                                                 | Textbook Reviews                        |

Updated information on CC Search tool.
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<td>1.09</td>
<td>August 7, 2019</td>
<td>Added agreement template for students wish to publish course work with a CC licence.</td>
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<tr>
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<td>October 1, 2019</td>
<td>ISBN for Print and eBook added. Versioning history number changed from 0.1 to 0.01.</td>
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### Adaptations

**Adaptations Summary — Rebus Guide 2.0, Apurva Ashok & Zoe Wake Hyde**

Adaptations mark the beginning of a new set of steps (and lives) for your open textbook. As people make substantial alterations to the resource, they create a stand-alone “fork” of it. This expands the potential reach and use of the book for new audiences, contexts, regions, and languages.

### Underlying principles

**Adaptation is openness in action.** It’s easier and more collectivist to create a new resource by building on one that already exists. The freedom to do so with open texts is distinctinctive and rarely possible with conventional All Rights Reserved textbooks.

**As open as possible and as closed as necessary.** While there’s no single license that’s right for all creators, give
back to the ecosystem by selecting the most permissive license that works for your project.

**Boundless opportunities for customization.** Adaptation projects can range from small-scale to very large in scope. In both cases, adapters should reshape the resource to fit their exact needs.

**Modularity makes everything easier.** A clear, consistent structure across your book, including a common template for each chapter, not only makes it better for learners, but also helps adapters swap in and out some elements of your text while keeping others in place.

**Give what you get.** Help grow the community of practice around the book with your adaptation, and do what’s needed to track adaptations, demonstrate the book’s impact, and maintain and improve the adaptation over time.

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**Who’s Involved?**

There are two sides to adaptation: one is setting up the original book so it can be easily adaptable, and the other is embarking on a new adaptation project. Many different people can be involved:

- Project manager: coordinates with new adapters and connects them with the team, tracks adaptations, collects corrections from adapters, encourages editorial and authoring teams to think about modular content
• Adopters: use new adaptations, start new adaptation projects
• Adapters: start new adaptation projects, submit changes back to the original book, join the community of practice, check permissions and licenses
• Authors: use new adaptations, create modular content, join adaptation projects
• Editors: check permissions and licensing, assist with the creation of modular content, join adaptation projects
• Reviewers: joins adaptation projects
• Marketing and communications: shares new adaptation projects, promotes demonstrable impact and success of adaptations

Key Tactics

Creating an adaptation that stands alone from the original book (or setting out the pathway for others to do so) is no small feat, but you can get going with these suggestions:

• Select a license that is as permissive as possible.
• Make your book available in at least one editable format.
• Support modularity by referring to chapters by titles not numbers, and by keeping context-specific
information separate from theory or concepts.

• Create a backmatter section that gives adapters a reference for content-specific information in your book, as well as permissions or licensing information of elements.

• Provide sample messaging for attribution, which adapters and adopters can use to give their thanks to you and your team.

• Request that adapters remove the attribution if you do not want to be associated with the adapted version.

• Track adaptations by asking adapters to self-report.

• Clearly indicate how adapters can connect with you and the community.

• Join forces and collaborate with others who are already underway with adaptation projects.

• Consult the backmatter sections of books for permissions and licensing information.

• Adopt a license that meets the features of the original book's license, or consult with copyright librarians about fair-use or fair-dealing rules in your region.

• Define the differences between the adaptation and the original book, on the book's homepage, in front matter, or in the metadata.

• Provide links from the original book to the adaptation and vice versa.

• Update the original creators about your adaptation project's progress.

• Generate buzz around your book and community with the added value that an adaptation provides.
Ultimately, adaptations are a measure of the value of the book to its discipline, to educators, and to students. Stay proud of the opportunities that your open textbook creates, and use this kind of work to encourage more adoptions of the book and to boost your professional profile!

*Keep reading to learn more about how to set up or create adaptations.*

**Adaptations Overview — Rebus Guide 2.0, Apurva Ashok & Zoe Wake Hyde**

This final part of *The Rebus Guide to Publishing Open Textbooks (So Far)* takes you through the considerations around adapting an open textbook, including the benefits of adaptation, enabling adaptations, and other best practices. Like adoptions, adaptations also mark the beginning of a new set of steps (and new lives) for your open textbook.

As in other sections, these suggestions are based on our experience with open textbook projects to date. If you have questions about this overview, or suggestions for what else we should include, please share them in the Rebus Community project home. This document is an evolving draft, and continually incorporates community feedback. We welcome your thoughts and contributions, including ways to improve the Guide overall.

**What is adaptation?**

Broadly speaking, adaptation means making changes to an existing resource. Unlike creating a new open textbook, adaptation involves working with an existing text, and also relates to making more
conceptual or substantial alterations to a book, so that it can better suit your needs as a teacher.

Adaptations can serve to localize the book to your specific region, to customize it for your class, to translate it for increased use, or to make the book accessible in a different format (e.g., an audiobook). All these instances involve creating a “project fork,” that is, another version of the text that can stand alone and separate from the original book or work. Accordingly, adaptations need to be maintained and updated on their own, in parallel to the way that the creators of the original work have to ensure their book’s upkeep and continued use.

Benefits of adaptation

Adaptations are a great demonstration of the advantages of open licenses that permit reuse, remixing, and redistribution. Because it is sometimes easier to create a new resource by building on content that already exists, openly licensed texts are invaluable.

Adaptation also allows content to be shaped to better suit a variety of needs, from those of instructors and students, to the requirements of universities and individual courses. This level of freedom is distinctive of open texts, and is rarely available with conventionally All Rights Reserved books, which carry more restrictions on reusing and remixing content.

Adaptation also presents an opportunity to improve on the text by correcting errors or changing insensitive content. For instance, if your textbook contained inappropriate content, you can immediately make corrections to the web version. Not only is it this simple, but you could do so without affecting other sections, chapters, images, etc. At the end of the academic semester, you can conveniently apply this change to all the other formats, including print.

One of the other major benefits of adaptation is that it represents
an opportunity to generate additional value around the book. Because it is not a static or isolated process, it can be abuzz with communication, conversation, and collaboration, growing the community around the original book and allowing new people to discover its potential expansions!

Setting up for easier adaptation

If you're creating an open textbook, there are a number of ways that you can structure it to enable others to easily adapt your work. (We've mentioned the following suggestions previously in this Guide, so don't worry if you're already near the end of your book's creation.)

The first and possibly most important way to enable adaptation of your book is by choosing an open license. We encourage selecting a license that is as permissive as possible, understanding that there's no single open license that works for all creators. Try to be as open as possible and as closed as necessary with the license on your work. Ultimately, the open publishing ecosystem is one in which everybody benefits from the work that we all put in: keep this in mind when it comes to your own project.

In a similar vein, make sure that your book is available in at least one editable format when released, so adapters can reuse and repurpose the content without too much difficulty. A variety of editable formats is even better, giving adapters more options when it comes to pulling content from the book and remixing it.

As you're creating your content, try to do so in ways that make it modular. Part of this is to ensure that you have a clear and consistent structure across your book, so each chapter or unit follows a similar formula. Think about how units can be combined in different orders (that is, different from the one you have outlined yourself), or even stand alone and be used separate from the text. A simple way to assist future adapters of the text is to title and
refer to chapters and units by name (not number). That way, if the adapter decides to reorder units, or only use some units, they are not bound by a numerical naming system. We also suggest that context-specific information, such as local examples, laws from your region of governance, statistics from your country or state organizations, etc., be modular, so that it too can be extracted from other content in the unit, to then be easily modified in the adaptation.

The back matter of your book is a good location to list places in the book that contain context-specific information, giving adapters quick reference. You can also clearly state permissions and licensing information here, including elements in the book that contain a license that is different from the book's global license. This section can also contain a few lines of sample messaging for attribution, so adapters know how you and other creators would like to be attributed in the adapted work. This information can be helpful for adopters and adapters alike. Take a look at the Licensing & Remixing Information in Media Innovation and Entrepreneurship for an example.

Tracking adaptations

It can also prove helpful to keep track of the different adaptations that are made—those that you are aware of. While this can be hard to do, creating even a small list of projects that are using your book is a way for the book’s community to be aware of the work that is being done and possibly participate in it themselves! To help make this happen, give adapters clear pathways to contact you or the book’s community. If possible, also share pathways for adapters to submit changes back to the original book, in case they catch any errors as they making their adaptations.

Keeping track of adaptations is a good way to measure your book’s impact on the field, and in turn boost your professional profile.
Just as you can track and communicate news about adoptions, adaptations are another measure of success.

Keeping an eye on adaptations is also useful if and when you come across a version that doesn't sit well with you or the team. As the original creators, you have the right to be attributed on adaptations, but you can also request that adapters remove your attribution if you prefer not to be associated with their work. While we hope this is not a request you would have to make often, it can be applied if need be.

How to adapt an open textbook

If you find yourself on the other side of the equation, and are adapting an existing open textbook, we have some basic tips for you too. First, it’s always wise to check around to see if the type of adaptation you had in mind is already underway or completed. If you find that someone has started to create what you wanted, you can join forces and collaborate with them to avoid duplicating efforts. Even if no one is making a similar adaptation, putting out feelers for other adapters helps build community around the book.

Another practical step as you start out is to check the license of the book and make sure you have permission to adapt it in the way that you would like to. It’s also good to check the license of individual elements in the book, like multimedia elements, since these can sometimes be licensed differently that the book as a whole. If the creator has a back matter section listing the book’s permissions, licensing, and remixing information, be sure to consult it.

If you're not able to determine the license on the book or an individual element, we recommend you assume an “All Rights Reserved” license. In this case, consult the fair use or fair dealing laws in your region. These govern reasonable reuse of portions of the book within an adaptation. If you need assistance, consult
the copyright librarians at your institution, if present, or ask for help from the community of practitioners in the Rebus Community platform.

As an adapter, make sure you select a license that complies with the license on the original book. For instance, if the original work is licensed with the Creative Commons Attribution ShareAlike license (CC-BY-SA), you are obligated to also license your adaptation CC-BY-SA. Be sure to credit the original authors in your adaptation, using the suggested wording if it is available. It's a nice gesture to also include a note in the front matter of your book, stating that your adaptation draws on one or more openly licensed books. See an example of this in the front matter of Blueprint for Success.

When it comes to doing the work of adapting, remember that it doesn't just have to be you—you can form a team around the project and make this a collaborative effort! Reach back to the original creators, not only to let them know that you are working on this project, but to see if they or others on the team can help. Once this line of communication is established, you can use it to feed back any corrections to the original text, in the case that you come across errors.

You should also chat with the original creator to clearly define the differences between your adaptation and the original work. Of course, this is something you and your team may have already defined, early on. Make sure that these differences are stated clearly, either in the front matter of your book, or perhaps in the book’s description or metadata. That way, anyone coming across your book will also know whether the original work (or another adaptation) might work better for their course. From there, they can then make the appropriate comparisons of the book in a repository or referatory. You can also provide links back to the original work, so it is more easily discoverable. This might encourage the creators to also include links to your adaptation in the original book. You get what you give!

We also recommend taking a look at BCcampus Open Education’s Adaptation Guide for a more comprehensive guide to adapting an
open textbook. And of course, take another look at the other sections of this Guide with adaptation in mind! The principles, examples, recommendations, and templates we provide have been written with a variety of projects in mind, so you can always refer to them as you move forward with adaptation.

Need further assistance?

We hope these suggestions will help, either as you make your book more easily adaptable or as you work to adapt an existing textbook. We’ll continue to add to the Guide as we work with more projects. In the meantime, we welcome your ideas on what else we might add, as well as your feedback on how these approaches have worked (or not!) for you.

If you have questions, or anything to add, please let us know in the Rebus Community project home.

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Textbook Reviews

Textbook Reviews — BCcampus, Lauri M. Aesoph

Giving faculty and students the opportunity to read reviews about your textbook adds to the book’s credibility. A textbook with many positive reviews will reassure instructors looking for an open textbook that their colleagues approve of it. The reviews will also
help you improve the quality of your textbook. By reading reviews carefully, you will learn about reported errors and suggested improvements. Record errors that can be fixed immediately in your maintenance plan and note any suggestions for future editions of your textbook. (See Maintain the Book.)

**Review rubric**

Using an established set of questions – or rubric – yields consistent and comprehensive feedback from each individual who reviews your textbook. Several open-education organizations use the BCcampus Open Education Review Rubric [Word file] – an openly licensed document available to anyone to use or change. Feel free to use this rubric, either as is or customized to your needs, if you decide to solicit reviews once your textbook is finished. These are the topics it covers:

1. Comprehensiveness
2. Content accuracy
3. Relevance and longevity
4. Clarity
5. Consistency
6. Modularity
7. Organization, structure, and flow
8. Interface
9. Grammatical and spelling errors
10. Diversity and inclusion
11. Book recommendation
Find reviewers

There are several ways to locate reviewers. However, before looking for candidates, think about how you will determine a reviewer’s qualifications. At BCcampus Open Education, we ask that reviewing faculty fill out an application form and describe their credentials for and experience in teaching the textbook’s subject. We also ask for a list of current courses they are teaching at a post-secondary institution in the textbook’s subject area.

Once this information has been received, our team confirms this data by searching for the reviewer in their university or college’s faculty directory. If the individual is not listed, we ask for confirmation of their position from the department chair or dean.

How you canvass for potential reviewers will depend on your discipline, home institution, and the resources available to you. One obvious method is to include a request for reviews wherever your textbook is posted. This might be in your institution’s library catalogue or on your department or faculty website. Information should include details such as reviewer qualifications, the review process, and payment for a completed review. If payment, even a small stipend, is not feasible, consider a barter arrangement with fellow open textbook authors in the same discipline. In other words, you offer to review their textbook in exchange for a review of yours.

Some collections, such as the Open Textbook Library [New Tab] and the B.C. Open Textbook Collection [New Tab], make it a matter of course to gather reviews about books in their repositories. When you apply to add your book to a collection, ask if you may take a copy of the reviews generated for your textbook and place them in other spots where your textbook is posted. It is likely that these reviews, like the textbooks, are openly licensed. (See Communications.)
Procedure

Develop a procedure for processing reviews from beginning to end. For example, decide how reviewers should contact you with a request to review your book, whether it's by email, an application form, or other. Create a system for receiving the completed review, tracking in-progress reviews, and posting reviews. Consider constructing templates and standard language that can be used for communicating with reviewers at each stage of the process.

Deadlines are important for both you and the reviewer. At BCcampus, reviewers are given a deadline of three months to finish. If they don't, access to the review form expires and reapplication to review the book is required. It has been our experience that approximately half of all applicants complete reviews.

BCcampus Open Education follows standard procedures — including email templates — that provide efficient and consistent services to reviewers. The steps include:

1. Posting a call for reviews to Review an Open Textbook [New Tab] on the BCcampus OpenEd website and by each textbook in the B.C. Open Textbook Collection [New Tab]
2. Requiring that potential reviewers fill out an application [New Tab] to determine their eligibility
3. Vetting all applications to confirm each reviewer's qualifications
4. Emailing each successful candidate a copy of the BCcampus Open Education Review Rubric [Word file], instructions, and the deadline
5. Recording and monitoring all reviews at each stage of the process whether they are in progress, completed, or expired
6. Sending a confirmation email to the reviewer once the completed review is submitted, then posting the review, and updating records
Like the textbooks for which they are written, reviews are typically open, i.e. they are open peer reviews. This means that the reviewer's name, position, and institution are published along side the review.

- OTN library reviews
3.1 Formatting Output Files

- 3.1.1 LMS Integration (Laulima)
3.3 User Evaluation - Student & Instructor Evaluation

3.3.1 Peer Review

- Peer Review Process Summary
- Peer Review Process Guide
- Review Guide Template
- Review Guide Template Hypothes.is
- Review Statement Template

3.3.2 Collecting feedback

- Sample Feedback Form
3.3.3 Noting changes for next version
A.1 | Samples & Templates

- OER Textbooks
  - In Pressbooks
  - In Google Sites
  - In PDF, ebook, MOBI

- OER Textbook Chapters

- OER Materials
  - Style Template

- OER Lesson Plans

- UDL Templates
- Localization & Representation
  Samples (FSHN example)

A.2 | Planning Templates

- Project Charter

- Timeline

- Authors

- Roles & Responsibilities

A.3 | Use, Reuse & Modification

- Adoption & Reuse Log Template

- Adaptation Log Template

- Version Control
Appendix B | Pressbooks Extended Guide

Pressbooks Extended Guide

BC Campus Pressbooks Guide
Pressbooks Video Tutorials
FAQs & Contact Us
Glossary

5 Rs: The five tenets of the open movement: redistribute, remix, retain, reuse, and revise.

access: The ability of students, instructors, and others to obtain or gain access to education.

accessibility: The practice of creating online, digital, and print educational materials that are accessible to all, regardless of level of ability.

adapt: To customize or revise an open textbook or other open educational resource that has been released under an open-copyright licence.

adaptation: A work that has been revised or adapted. (See adapt.)

adopt: When instructors use an open textbook and/or other OERs in the classroom

adoption: An open textbook or OER that has been selected by an instructor to be used in their classroom.

Affordable Learning Georgia: A University System of Georgia (USG) initiative to promote student success by providing affordable textbook alternatives

APA (American Psychological Association) style: A style guide containing citation and styling information for works in the social sciences and education fields.
**appendix/appendices**: A part of the back matter of a book that provides supplementary material to information found in the main work.

**attribute**: To giving credit to the creator of an original work. This the most basic requirement of a Creative Commons Attribution (CC BY) licence. (See CC (Creative Commons) licence.)

**attribution statement**: A line crediting the original creator of a work, which fulfills the legal requirement of open-copyright licences. The statement should include the title of the work, the name of the creator, and licence type (with links to all).

**back matter**: The end section of a book. It typically contains material that supplements the main text.

**BCcampus**: An organization supporting the post-secondary institutions of British Columbia as they adapt and evolve their teaching and learning practices to enable powerful learning opportunities for the students of B.C.

**bibliography**: A list of all works used as references within a textbook, both those cited and read as background in preparation for writing. In the Chicago Manual of Style, the bibliography takes the place of a reference list. (See reference list.)

**Campus Manitoba/OpenEd Manitoba**: An initiative by Manitoba’s Minister of Education and Advanced Learning with the goal of making higher education more accessible by reducing students costs through the use of openly licensed textbooks in Manitoba.

**caption**: Text that accompanies a figure, table, or image within a work. A caption may include the image type, the
image number, a description of image, and possibly an attribution statement.

**CC (Creative Common) licence**: An open-copyright licence (also called a copyright licence) that allows the copyright holder to provide a defined set of permissions to their work which allow others to use, share, and change the work providing the creator of the work is given credit.

**CC0 (CC zero)**: A tool that can be used for individuals who have dedicated their work to the public domain by waiving all of their rights to the work worldwide under copyright law, including all related and neighbouring rights, to the extent allowed by law. See *public domain*.

**CCCOER**: A growing consortium of community and technical colleges committed to expanding access to education and increasing student success through the adoption of open educational policies, practices, and resources.

**Chicago Manual of Style (Chicago style)**: A style guide containing citation and styling information for works in the humanities. This style was developed by the Chicago University Press in 1906.

**choice overload**: A situation where it is difficult to make a decision because there are so many options.

**citation**: A method of providing the original source for information taken from a copyrighted work. The form a citation takes is generally determined by the style guide being used.

**citation style**: A standard for how citations should appear, either in-text or footnotes, and within the reference list or bibliography.
**colophon**: “A brief statement containing information about the publication of a book such as the place of publication, the publisher, and the date of publication.”

**Commons**: A general term often used to describe the entire body of OER and other open materials.

**Connexions**: A repository of open educational resources started by OpenStax where faculty, students, and others can view and share these items (https://cnx.org).

**copy edit**: To review and correct the grammar, spelling, punctuation, clarity, consistency, and style of a written work.

**copyright**: The exclusive legal right, given to an originator or an assignee, to print, publish, perform, film, or record literary, artistic, musical or other creative material, and to authorize others to do the same.

**copyright infringement**: To infringe (use without permission) or induce the infringement of any third-party copyrights.

**copyright licence**: A licence by which a licencor can grant additional copyright permissions to licencees. See open-copyright licence.

**copyright notice**: Information posted by the creator of a work that lists the copyright symbol (the letter C inside a circle) or the word “copyright” followed by the year in

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which the work was created, and the name of the copyright owner. Sometimes, a statement of rights is also included.

**Creative Commons (CC):** A nonprofit organization devoted to expanding the range of creative works available for others to build upon legally and to share. For more information see the [Creative Commons website](http://creativecommons.org).

**derivative:** See *adaptation*.

**ecampus Ontario:** A nonprofit corporation funded by the Government of Ontario to be a centre of excellence in online and technology-enabled learning for all publicly-funded colleges and universities in Ontario.

**editable file:** Files for a textbook that can be easily changed or edited. (See *Editable Files*.)

**EPUB:** A file type designed for e-readers. It can be downloaded and read on mobile devices such as smartphones, tablets, or computers. See MOBI.

**erratum (Pl errata):** A record of errors and their corrections for a book or other publication. Usually this statement gets its own page in the back matter. See *Versioning History page*.

**ethnocentrism:** “a tendency to view alien groups or cultures from the perspective of one’s own”²

**fair dealing:** An exception in Canada’s [Copyright Act](http://www.copyright.ca) that allows you to use other people’s copyright-

protected material for the purpose of research, private study, education, satire, parody, criticism, review or news reporting, provided that what you do with the work is ‘fair.’

**fair use**: A legal doctrine defined by the U.S. Copyright Office that promotes freedom of expression by permitting the unlicensed use of copyright-protected works in certain circumstances.

**figure**: A label applied to an image or picture posted in an open textbook to assist with numbering (e.g., Figure 1.1.).

**fixer**: Someone who oversees the layout, formatting, and correct treatment of the various elements of an open textbook.

**foreword**: A short piece typically written by an outside expert in the field at the request of the primary author to be included in the front matter of a textbook.

**front matter**: The beginning section of a book placed before the main body.

**GitHub**: A development platform that includes open source projects such as open textbooks. For more information see [https://github.com/](https://github.com/).

**HTML file (Hyper Text Markup Language)**: A file type designed for transferring information from one source to another.

**hypothes.is**: An open-source online annotation tool. For more information see [https://web.hypothes.is/](https://web.hypothes.is/).

**intellectual property**: A form of creative effort that can be protected through a trademark, patent, or copyright.

**intellectual property rights**: The permissions that cover
creative efforts of intellectual property, of which copyright is one.

**Internet Archive: Wayback Machine**: A digital archive of the World Wide Web and other information on the Internet created by the Internet Archive, a nonprofit organization based in San Francisco.

**LaTeX**: A program used to typeset complex scientific and mathematical notations correctly.

**licence**: See *copyright licence*.

**MERLOT (Multimedia Educational Resource for Learning and Online Teaching)**: A curated collection of free and open online teaching, learning, and faculty development services contributed and used by an international education community. For more information see [https://www.merlot.org/merlot/index.htm](https://www.merlot.org/merlot/index.htm).

**MLA (Modern Language Association of America) style**: A style guide containing citation and styling information for works in the literary and humanities fields.

**MOBI**: A file type that can be read on a Kindle e-reader or with Kindle software. See EPUB.

**OER (open educational resources)**: Teaching, learning, and research resources that permit free use and repurposing because they are under an open-copyright licence or because they reside in the public domain and are not copyrighted.

**OER Commons**: A public digital library of open educational resources launched by ISKME (Institute for the Study of Knowledge Management in Education) in 2007. For more information see [https://www.oercommons.org/](https://www.oercommons.org/).
open: A term used to describe any work (written, images, music, etc.) that is openly licensed and available to the general public to reuse. See Creative Commons.

OPEN Attribution Builder: A tool to help authors create attribution statements. It was built by the Washington State Board for Community and Technical Colleges and can be found at OPEN Attribution Builder [New Tab].

open-copyright licence: A copyright licence that allows people to share, use, and edit the content of the work as long as they give credit to the original creator. See copyright licence and Creative Commons licence.

open educational resources: See OER.

Open Oregon Educational Resources: A group, also known as Open Oregon, that promotes textbook affordability for community college and university students and facilitates widespread adoption of open, low-cost, and high-quality materials for all of Oregon’s public colleges and universities.

open peer review: A review where the peer reviewer’s name, position, and institution are published alongside the review. See peer review.

Open SUNY OER Services: An open access textbook publishing initiative established by State University of New York libraries and supported by SUNY Innovative Instruction Technology Grants [New Tab]. For more information see https://textbooks.opensuny.org/.

Open Textbook Network (OTN): An organization that helps higher education institutions and systems advance the use of open textbooks and practices on their campuses. It also maintains the Open Textbook Library [New Tab]. For
more information see http://research.cehd.umn.edu/otn/.

**Open Washington**: An OER network and website dedicated to providing easy pathways for faculty to learn, find, use, and apply OER.

**OpenEd Manitoba**: See *Campus Manitoba*.

**open textbook**: A textbook that is released under an open-copyright licence, which permits instructors, students, and others to reuse, retain, redistribute, revise, and remix its content.

**overchoice**: See *choice overload*.

**PDF (Portable Document Text)**: A file type designed to represent documents for easy reading, and is common format made available for downloading open textbooks.

**peer review**: A review of a book conducted by a subject-matter expert before or after publication. See *open peer review* and *subject-matter expert*.

**plagiarize**: “To steal and pass off (the ideas or words of another) as one’s own, use (another’s production) without crediting the source.”

**platform**: An online software system or website.

**Pressbooks**: An open-source platform based on WordPress used to create and edit books. (See the BCcampus Open Education *Pressbooks Guide [New Tab]* and the *Pressbooks Userguide [New Tab]*.)

**print-on-demand copy:** A printed hard- or softcover and bound version of a textbook made available through a printing service for which the reader pays a price typically set only for cost recovery.

**proofread:** The last stage of the copy-editing process. See copy edit.

**public domain:** A designation for works that are not restricted by copyright. They are owned by the public, which means that anyone is allowed to use these works without obtaining permission, but no one can own them.

**Public Domain Mark:** Used to “mark works already free of known copyright and database restrictions and in the public domain throughout the world”⁴ See CC0 (CC zero).

**public domain tools:** Tools created to enable the “labeling and discovery of works that are already free of known copyright restrictions”⁵

**Rebus Community:** As group made up of faculty, staff, and students from post-secondary institutions and others from around the globe who support the work of open textbook authors and projects. Their talents include copy editing, proof reading, writing, and other skills.

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**recto**: The front side of a page.

**redistribute**: One of the 5 Rs of openness. It signifies the right to share copies of the original content, your revisions, or your remixes with others.

**reference list**: A list of all resources cited within a textbook listed them alphabetically by the authors’ last names.

**remix**: One of the 5 Rs of openness. It signifies the right to combine the original or revised content with other open content to create something new.

**RDFa (Resource Description Framework in Attributes)**: A W3C recommendation that adds a set of attribute-level extensions to HTML, XHTML, and various XML documents for embedding rich metadata within web documents.

**retain**: One of the 5 Rs of openness. It signifies the right to make, own, and control copies of the content.

**reuse**: One of the 5 Rs of openness. It signifies the right to use the content in a wide range of ways and to continue using the content.

**revise**: One of the 5 Rs of openness. It signifies the right to adapt, adjust, modify, or alter the content itself. See **adapt**.

**source statement**: An optional statement that can be appended to an attribution statement that notes the type of source from which an open educational resource is curated, such as a museum collection. This is used when noting the source type is significant to the textbook subject matter. An example of a source statement is: This image is available from the Toronto Public Library under the reference number JRR 1059.
**statement of rights**: A statement that clarifies the rights permitted for a work by the copyright owner. See *copyright notice*.

**style guide**: A guide that outlines the elements that an author follows when creating or adapting a book, or other work such as spelling, word use, punctuation, citation style, measurements, and layout. See *APA, Chicago Manual of Style, or MLA*.

**style sheet**: A list or sheet that contains the elements of a book or other work that differ from the style guide. A style sheet can also list frequently used element styles for easy reference when copy editing and proofreading.

**subject-matter expert (SME)**: An expert in the subject matter of a textbook who can provide a peer review prior to publication. See *peer review*.

**URL**: A web address. URL is short for Uniform Resource Locator.

**Versioning History page**: A record placed in the back matter of a digital book where minor corrections and updates are noted.

**verso**: The back side of a page.

**write for hire**: An individual who is paid to write but does not own the copyright of the work. The copyright belongs to the individual or organization who hires the writer.

**XML (Extensible Markup Language)**: A markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable. An XML file is an editable, plain-text file that helps transfer content from one format to another. See *HTML*. 
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