



UH OER Training

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Introduction

This is a set of training materials designed to support instructional faculty as they begin working with OER, including a set of learning objectives for each area that describe what is accomplished at the conclusion of each chapter. The topics include:

1. Open Education Resources (OER) 101
2. Copyright and Creative Commons for OER
3. OER Adaptation and Creation

Chapters and lessons have been designed to provide a fundamental understanding of each area related to OER, and are not meant to be a comprehensive. Consider this a start with the basic skills and knowledge needed to confidently work with OER.

No part of this content should be considered legal advice.

This material is being piloted with faculty and staff at the University of Hawai'i at Mānoa during the 2017-2018 academic year, with support from the UH system-wide OER committees. We welcome forking and reuse of this content that conforms to the Creative Commons Attribution (CC BY) 4.0 International License.

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Please email oer@hawaii.edu with any questions regarding reuse beyond the scope of the CC BY license.

Training Structure

This training content has been structured to be flexible and adaptable depending on your needs as a learner or facilitator. Each chapter contains:

- Learning objectives
- Narrative content (and links to external resources)
- Formative practice/assessments at the lesson level
- An end-of-chapter summative assessment

The learning objectives and their complementary summative assessment are the most crucial parts of the training. The narrative content has been included as a way to bring newcomers up to speed quickly, and to serve as a reference for those already working with OER. In reality, a variety of learning content and experiences working with OER may have adequately prepared you to complete the assessments and meet the objectives.

The learning objectives for each lesson have been derived from existing OER training materials by Kapi'olani Community College, Leeward Community College, and the Washington State Board for Community and Technical Colleges. We expect this training to grow and adapt as the needs of faculty and staff at UH change – this is a set of living documents.

Knowledge Checks and Benchmarks

At the end of most sections you will find embedded knowledge checks. Your completion of the practice will be recorded when you are signed into the book.

Each of the three chapters also ends with a benchmark activity that allows you to demonstrate the basic skills and knowledge about OER that you've acquired. By chapter, here are the benchmarks:

1. Find relevant OER content
2. Upload an OER to the UH OER Repository
3. Create an OER adoption or creation plan

Each benchmark requires that you submit evidence of your learning to a Google form, linked from this book.

PART I
OER IOI

I. Defining Open Educational Resources

Learning Objectives

By the end of this lesson, you will be able to:

- Define OER

Introduction

Open Educational Resources (OER) are any learning, teaching, or research resources that are both free of cost and come with reuse rights. This includes a wide variety of resources such as textbooks, full courses, journal articles, datasets, and interactive learning content. OER are separated from other “free” content by the reuse rights that have been granted through an open copyright license such as Creative Commons (CC). With these rights, or permissions, we are able to adapt OER content for various contexts without worrying that we are running afoul of copyright law. Without an open license, free content is probably not OER.

Hewlett Definition

A long-time philanthropic supporter of the Open Education movement, the Hewlett Foundation's definition of OER is widely referenced around the globe:

Open Educational Resources are teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and repurposing by others. OER include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.

MORE RESOURCES

- OER Defined (Hewlett Foundation)
- Open Educational Resources (Wikipedia)

Knowledge Check



An interactive or media element has been excluded from this version of the text. You can

view it online here:

<http://pressbooks.oer.hawaii.edu/oertraining2018/?p=25>

2. Why OER?

Learning Objectives

By the end of this lesson, you will be able to:

- Give common motivations for OER adoption and use

Introduction

Open Educational Resources (OER) offer a number of advantages to closed or fully-copyrighted content, but each person will find their own reason for adopting or promoting OER use. The two primary motivators for the UH OER initiative are:

1. to save students money on course materials, and
2. to facilitate academic innovation

There are many factors at play when discussing these reasons, so we will begin to unpack them below. The hope here is that you will be able to discuss various motivations behind OER with a sense of depth beyond the basic argument – which is more likely to lead to action.

Cost Savings

Quite possibly the easiest motivating factor to understand is the cost savings associated with switching to an OER text. With textbook and homework codes for a single course reaching \$300–400 per student, significant cost savings can be achieved with the adoption an OER textbook.

More detailed aspects of the cost savings motivation are:

- The extreme rise in the cost of textbooks and materials
 - The cost of these materials has risen at 3-4 times the rate of inflation since 2006
 - Digital textbooks are nearly free to copy, yet are often compared in price to print textbooks
 - Textbook rentals typically limit when and how students access materials, keeping nothing at the end of the course
- The cost of textbooks driving students to make poor academic decisions¹
 - Students regularly skip buying the required book for a course
 - Students take fewer courses or delay taking a course due to the textbook cost
 - Students obtain required texts through whatever means necessary, with potential legal consequences

1. U.S. PIRG (2016). Covering the Cost. Retrieved from <http://www.uspirg.org/reports/usp/covering-cost>

Academic Innovation

OER come with a set of permissions that allow instructors to engage with content in unique and valuable ways which are not allowed with traditional content. From simple things such as correcting typos or grammatical errors to more involved activities like updating the content with the latest research, OER allow faculty to have full control over the material.

This shift in the relationship between faculty and content takes time and careful guidance, but here are some of the interesting and innovative ways OER is already being used at UH:

- Localizing content with relevant local or regional examples
- Reorganizing and aligning OER content with an existing course structure
- Working with students in the upkeep and growth of the OER
- Incorporating practice or assessment items directly into the content

Remember, the above are things that OER enable based on their reuse rights – if there is no open license, we are very limited in what we are allowed to do.

Knowledge Check



An interactive or media element has been excluded from this version of the text. You can

view it online here:

<http://pressbooks.oer.hawaii.edu/oertraining2018/?p=26>

3. Open Licenses and OER

Learning Objectives

By the end of this lesson, you will be able to:

- Describe the importance of open copyright licenses for OER

Introduction

Open licenses such as Creative Commons (CC) support knowledge sharing and collaboration by granting copyright permissions in an easy-to-understand, interoperable way. Without open licenses, a great deal of time and resources would be required to create one-off copyright agreements between creators and those who wish to collaborate or build on existing work. CC licenses were created to make it easy for anyone to grant copyright permissions broadly, for others to use without having to ask each time. Open licenses help grease the gears of collaboration by making it clear what you can and cannot do with the creative work of others.

Attribution

A foundation aspect of open licenses like CC is that attribution, or credit, is required for any reuse. This means that anyone reusing your work will need to make reasonable effort to provide full attribution to you if they reuse your work. This is often displayed in the caption of an image, the credits of a film, the footer of a webpage. What creators often care about most is that they receive credit for their work, and all CC licenses require attribution.

Conditions

Creative Commons (CC) licenses come in six flavors, ranging from the most open Creative Commons Attribution (CC BY) license to the least open (CC BY-NC-ND). At the core of every license is the Attribution (BY) requirement, and these additional terms have been combined into licenses that share your work with different conditions for reuse:

- Share-Alike (SA): All derivative work(s) must be shared with the same license
- Non-Commercial (NC): Commercial use rights are not given
- No-Derivatives (ND): The work can be shared, but only if it remains unchanged

Note: The ND Creative Commons licenses are not considered “OER licenses” because they do not allow customization or modification.

Permissions

Copyright restricts use of our creative work without expressed permission from the creator or copyright owner, and there hasn't always been an easy way to grant permissions to others. Open licenses take care of this for us, telling others how they can use our work in terms that are easy to understand – and that are interoperable with OER that carry similar licenses. David Wiley is well known for having coined the “5 R Activities¹,” which are an easy way to understand the permissions associated with content that is OER.

Retain – the right to make, own, and control copies of the content (e.g., download, duplicate, store, and manage)

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 material 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)

If you are working with content that cannot be involved in the 5 R activities, you may not be working with OER.

1. <http://www.opencontent.org/definition/>

Interoperability

CC licenses were designed in a way to allow straight-forward mixing of content that carry different licenses. The important thing to note here is that standardized licenses such as Creative Commons makes content easier to combine and remix legally, whereas custom agreement and contracts have very limited interoperability and would require a great deal of effort to customize to each potential sharing or collaborative arrangement.

Knowledge Check



An interactive or media element has been excluded from this version of the text. You can view it online here:
<http://pressbooks.oer.hawaii.edu/oertraining2018/?p=27>

4. Knowing Where to Find OER

Learning Objectives

By the end of this lesson, you will be able to:

- List useful repositories and search tools for finding OER

Introduction

Locating useful OER is both critical for OER adoptions and is a common stumbling block when first engaging with OER. According to the 2015–2016 Babson OER Survey¹, the top three barriers to OER adoption are related to discovering and selecting appropriate OER. This lesson will help you focus on the use case for the OER, and take a look at a variety of locations and methods for finding OER.

1. <https://www.onlinelearningsurvey.com/reports/openingthetextbook2016.pdf> Retrieved September 27, 2017.

Knowing What to Look For

Perhaps the most important first step when searching for OER is knowing what you are looking for. Are you seeking OER video lectures that discuss Microeconomics? Or are you looking for a full 100-level OER course on Psychology? If you are able to narrow down your search to a particular field of study and have an idea of the types of OER content you are seeking, your searching will be much easier. The syllabus for a course is often a great place to see what content is already being used.

OER Repositories

INSTITUTIONAL REPOSITORIES (IR)

Like many higher education institutions, the University of Hawai'i has a system-level OER repository meant to store OER created and adapted by UH faculty and staff. Repositories like this have OER organized into collections and communities, usually following a subject-focused organizational structure, or one that represents OER from the different colleges and departments within the institution. IRs like this can be very useful in terms of finding OER that have been curated by librarians and educational staff. Full downloads of OER content are typically hosted here.

Examples of Institutional Repositories for OER:

- University of Hawai'i OER Repository
- SUNY OER Repository
- MIT Open Courseware

OPEN REPOSITORIES

Open repositories provide free hosting for OER content, and typically offer services that make it easy to find and curate OER on their platform. These repositories may or may not be associated with educational institutions, and OER content from all over the world can be found in them. Full downloads of OER content are typically hosted here, as well.

Examples of Open Repositories:

- OER Commons
- **Wikimedia Commons**
- The Internet Archive

REFERATORIES

Referatories are websites that curate reviews and collections of OER, but send visitors to other website to access the full, downloadable content and files. In some cases, Open Repositories can also act as referatories, storing some OER content collections, and referring visitors to other websites for some OER downloads.

Examples of Referatories for OER:

- The Open Textbook Library
- MERLOT
- The Learning Registry

Search Tools

GOOGLE ADVANCED SEARCH

Google's Advanced Search allows you to filter results by usage rights,

but they do not offer a list of licenses to search by. Instead, they give their own descriptions of the licenses:

- not filtered by license (default)
- free to use or share (CC BY-NC-ND)
- free to use or share, even commercially (CC BY-ND)
- **free to use, share, or modify (CC BY-NC or CC BY-NC-SA)**
- **free to use, share, or modify, even commercially (CC BY or CC BY-SA)**

To find content that you can modify, select one of the two last options in the dropdown menu.

Then narrow your results by...

language:

region:

last update:

site or domain:

terms appearing:

SafeSearch:

file type:

usage rights:

- not filtered by license
- free to use or share
- free to use or share, even commercially
- free to use share or modify
- free to use, share or modify, even commercially

You can also...

- [Find pages that are similar to, or link to, a URL](#)
- [Search pages you've visited](#)
- [Use operators in the search box](#)
- [Customize your search settings](#)

[Help](#) [Privacy](#) [Terms](#)

Google Advanced Search “usage rights” filter

CC SEARCH

Creative Commons has its own search tool called CC Search, which makes it easy to activate filters for CC-licensed content on multiple search tools and platforms at once.

cc Search
Find content you can share, use and remix.

Enter your search query

I want something that I can... use for commercial purposes;
 modify, adapt, or build upon.

Search using:

Europeana Media	Flickr Image		Google Web
Google Images Image	Jamendo Music	Open Clip Art Library Image	SpinXpress Media
Wikimedia Commons Media	YouTube Video	Pixabay Image	ccMixter Music
SoundCloud Music			

These search tools rely on license metadata being detected on the source webpage(s), but it is wise to confirm the CC license on the content you want to reuse before doing so.

5. Benchmark: Find Relevant OER

Learning Objectives

By the end of this lesson, you will be able to:

- Find OER that are relevant to a specific area of study or research

Introduction

Now that we have a basic understanding of what OER are and where or how we might find them, let's put this knowledge to practice. Before you begin, select both a specific area of learning or research (eg Geography, Biology, Economics, etc) and a type of content you wish to find. The OER artifact (content) you are seeking can be as small as a single image or as large as an entire course. Whichever you choose, be sure you know what you are looking for before you begin.

Share your Exploration

For benchmark completion of this chapter, please tell us about your OER exploration by filling out this form:

<https://goo.gl/forms/vZwvnyTByd4c9ZgP2>

By submitting your OER to this form, you agree to license your response under a CC BY license and have it included in this book for others to view.

PART II
COPYRIGHT AND OER

6. Copyright, Creative Commons, and Public Domain

Learning Objectives

By the end of this lesson, you will be able to:

- Differentiate between Copyright, Public Domain, Creative Commons licensing, and Fair Use.

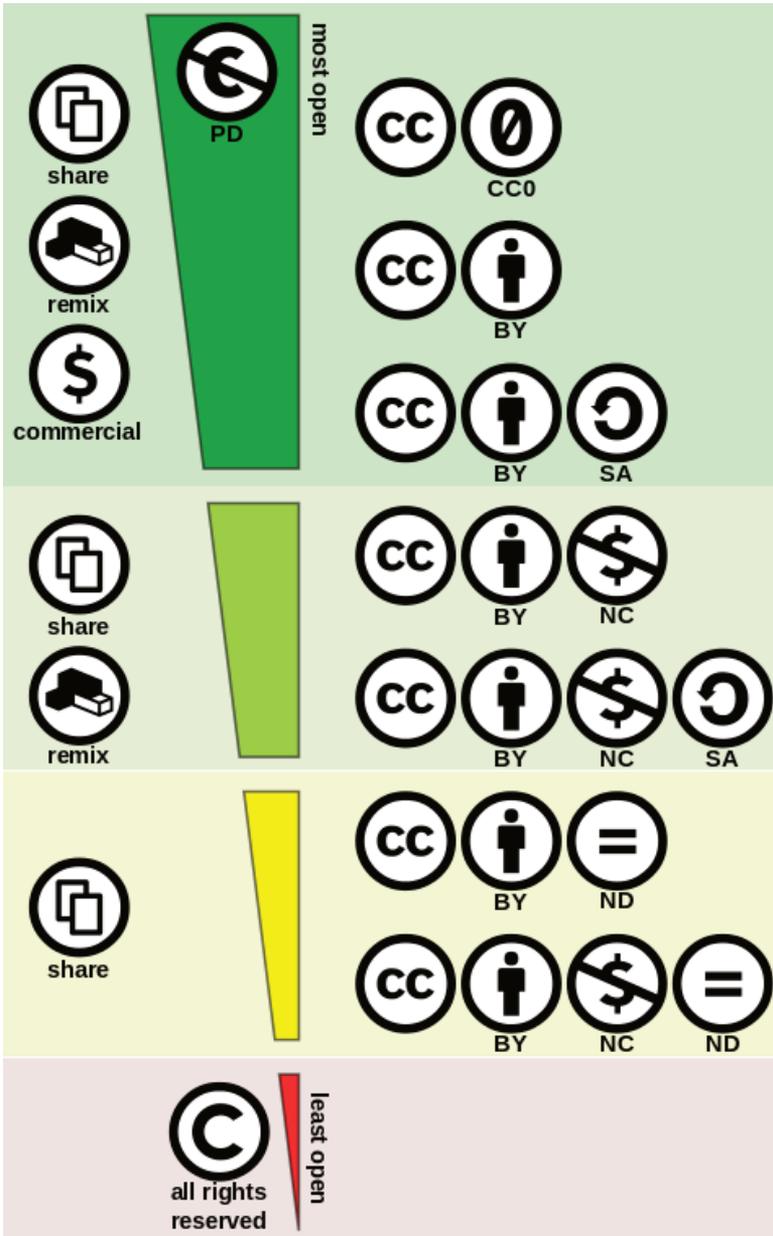
Introduction

Open Educational Resources (OER) rely on bending copyright law with tools such as Creative Commons (CC) licenses to enable frictionless sharing and collaboration that would otherwise be difficult to manage from an intellectual property perspective. Open licenses tell others how they can use your work by explicitly granting them copyright permissions to share and adapt your work, with CC licenses being the gold standard in interoperable open licenses for content. This lesson explains essential aspects of copyright, Creative Commons licenses, and reusing openly licensed content that are helpful in supporting faculty who are adopting or authoring OER.

Why is this important?

The copyright status of a work will (along with other factors) determine what you can and cannot do with the creative work of someone else. U.S. Copyright law has changed over time, creative works are usually put into three buckets in terms of their copyright status. Knowing how to identify and differentiate between common types of copyright status will be useful when determining which content you may reuse, and how.

As you search for OER, you will become familiar with the markings of each copyright type, and that there often is no marking that indicates the copyright status of a work.



Copyright

The rights to fully copyrighted works a.k.a. All Rights Reserved (ARR) are held by the creator(s) of the work. It can be unlawful to use copyrighted works of others without their permission, and no permissions are granted in the case of ARR works. Activities such as copying, modifying, publicly displaying, publicly performing, and distributing copies of ARR work may be illegal unless legal permission is granted by the creator.

Copyright in the U.S. is automatically assigned to creators of work, with no registration necessary. You may have seen copyright marks or statements at the beginning of books or in the credits of a film, often in the format of “Copyright [creator name] [year]”. Due to the automatic nature of copyright, work that has no marking should be seen as having all rights reserved – no permissions granted until you are granted them specifically from the owner of the rights.



Copyright symbol

MORE RESOURCES

- [Copyright Law in the U.S. \(Wikipedia\)](#)
- [Copyright and Fair Use \(Stanford University Libraries\)](#)

Public Domain (PD)

Work in the public domain can be reused freely for any purpose by anyone, without giving credit or attribution to the author or creator. With few exceptions such as being unable to claim the PD work of others as your own, works in this category can be used with great confidence as copyright has either expired or the works were produced by the U.S. Federal Government, and so entered the U.S. PD immediately after creation or publication.

Currently in the U.S. creative works will enter the public domain 70 years after the death of the creator. Creative Commons (the organization) created a legal tool called CC0 (see-see-zero) to help creators place their work as close as possible to the public domain by releasing all rights to it.



Public Domain Mark



Creative Commons CC0 Public Domain Mark

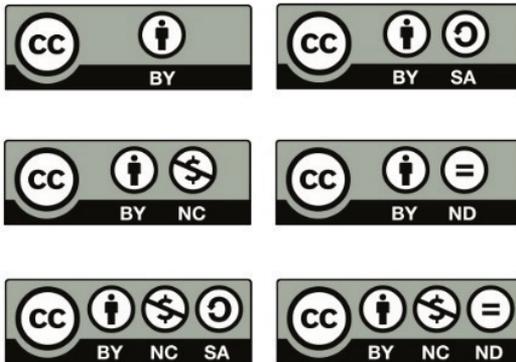
MORE RESOURCES

- [Public Domain \(Wikipedia\)](#)
- [The Public Domain \(Stanford University Libraries\)](#)
- [Improving Access to the Public Domain: the Public Domain Mark \(Creative Commons blog\)](#)

Creative Commons (CC)

Creative Commons (CC) is a non-profit organization that offers free legal tools to make creative work more shareable. There are six different CC license that explicitly grant permission for others to use your work in certain ways, forming a spectrum of openness. The most open CC licenses requires only attribution (giving credit) but otherwise permits nearly any use imaginable. The less open licenses include components that limit or prevent commercial reuse and modification.

CC license marks are visibly symbols telling others that work can be reused, not requiring direct contact or permission from the creator. Properly applied to digital content, a CC license contains a link to a human readable description of the license with a further link to the legal deed behind the license.



Creative Commons Licenses by Paul Stacey (CC BY 3.0)

MORE RESOURCES

- [About The Licenses \(Creative Commons\)](#)
- [Share Your Work \(Creative Commons\)](#)

Fair Use

Fair use is not a copyright status, but is actually a copyright principle that suggests that the public can make certain uses of copyrighted works without permission. Whether or not a specific use falls under Fair Use is determined by four factors:

1. the purpose and character of your use
2. the nature of the copyrighted work
3. the amount and substantiality of the portion taken, and
4. the effect of the use upon the potential market.

There are additional exceptions and limitations to Copyright, but for the purpose of streamlining sharing and remixing, explicit permission to reuse and adapt work (such as through a CC license) is preferable to seeking defense under Fair Use or related exceptions.

MORE RESOURCES

- [Fair use \(Wikipedia\)](#)
- [Fair Use \(Stanford University Libraries\)](#)
- [Limitations and Exceptions \(World Intellectual Property Organization – WIPO\)](#)

Knowledge Check



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

<http://pressbooks.oer.hawaii.edu/oertraining2018/?p=38>

7. CC License Conditions

Learning Objectives

By the end of this lesson, you will be able to:

- Describe the combinable conditions of a CC license

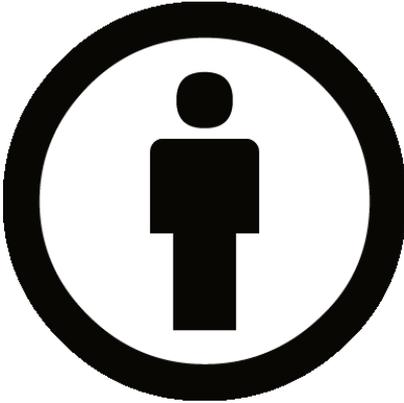
Introduction

There are six different Creative Commons (CC) licenses that are useful combinations of conditions, all including the primary condition of Attribution. Understanding the meaning of each condition can be useful when deciding which CC license to use.

CC license conditions in short form are pronounced:

- BY (bye)
- SA (es-say)
- NC (en-see)
- ND (en-dee)

Attribution (BY)



The Attribution (BY) condition is fundamental to all CC licenses. What many creators care about most is receiving credit for their creative work, and so when reusing CC-licensed work, proper attribution must be given to the original creator – and to other contributors on the work, if any.

Share-Alike (SA)



The Share-Alike condition adds a requirement for anyone reusing your work to also license their own creation (based on your work) under the same license. Both the CC BY-SA and CC BY-NC-SA licenses include this condition, effectively making them ‘copyleft’ or ‘viral’ licenses. While this condition effectively “locks open” the content, remixing SA content with non-SA or other-SA licensed work may not be straightforward or allowed at all.

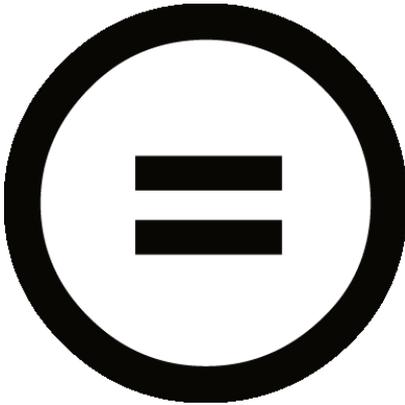
Non-Commercial (NC)



The Non-Commercial condition allows for reuse and sharing, but reserves commercial rights for the creator. The meaning of the NC condition itself and its ability to prevent commercial reuse is not always clear, but the license condition does clearly indicate that commercial reuse rights are not being granted.

Note: CC licenses allow certain kinds of **reuse**, and do not discriminate against the **user**.

No-Derivatives (ND)



The No-Derivatives condition allows sharing and reuse but only if the content is left unchanged. This presents an issue when searching for OER, as no customization or adaptation is allowed by the license. For this reason, ND content is not considered OER and should be considered for reuse only in situations where no adaptations are needed.

Combining the Conditions

The BY condition is a part of all the licenses, but not all of them work together. For example, the SA and ND conditions do not appear in the same license because there is no reason to include the share-alike condition when no derivatives are being allowed. Together, the conditions form the six CC licenses:

- CC BY
- CC BY-SA
- CC BY-NC

- CC BY-NC-SA
- CC BY-ND
- CC BY-NC-ND

Knowledge Check



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An interactive or media element has been excluded from this version of the text. You can view it online here:
<http://pressbooks.oer.hawaii.edu/oertraining2018/?p=43>

8. Putting a CC License on Your Work

Learning Objectives

By the end of this lesson, you will be able to:

- License a work with a Creative Commons license

Introduction

A Creative Commons (CC) license can be placed on a wide range of content, indicating to potential reusers what they are allowed to do with your work. Many content sharing platforms such as YouTube, Vimeo, Flickr, and more have tools for marking content as you upload them. In other cases, you may wish to individually mark content that will be shared in places other than a public platform. This lesson will cover the basics of marking your content with a CC license.

What's in a license?

When we “get” a CC license, all we are doing is placing a license icon

or statement on our work, and linking back to the legal documents for the license we chose. For example, a CC BY 4.0 license is seen below:



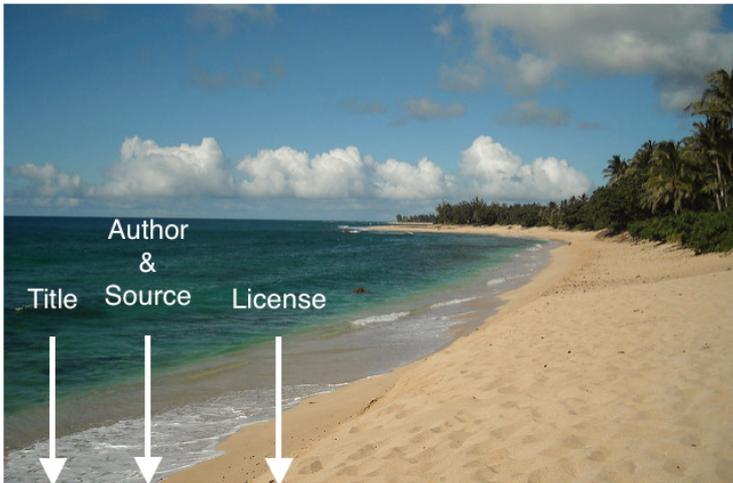
This work is licensed under a Creative Commons Attribution 4.0 International License.

This license was generated by the CC license chooser, and the HTML code from the license chooser was pasted into this webpage. While not a requirement of the license, using the HTML code for the license is the ideal way to mark individual pieces of content with a CC license because it is machine-readable and allows CC-licensed content to be found more easily. As you will see below, using the CC license chooser is not necessary if you provide complete attribution in other forms.

Attribution (TASL)

According to CC best practices, proper attribution includes:

- Title
- Author
- Source (link back to creator, if applicable)
- License (name of license and version)



Ehukai Beach by [Daniel Ramirez](#) / CC BY 2.0

The above is an example of a basic attribution for a single piece of content.

CC License Chooser

The CC license chooser can make short work of marking your work with a CC license. To begin, go to <https://creativecommons.org/choose/>.

You will be prompted to select conditions for sharing your work, as mentioned earlier in this chapter.

License Features
Your choices on this panel will update the other panels on this page.

Allow adaptations of your work to be shared?
?

Yes No Yes, as long as others share alike

Allow commercial uses of your work?
?

Yes No

Once you have chosen the conditions you wish to share under, the chooser will show you which license fits your terms:

?

Selected License
Attribution 4.0 International

This is a Free Culture License!



If this is the license you wish to use, you are almost done. If not, revise the conditions from the earlier step to match the license you wish to share under.

Then, you will have the option of adding descriptive metadata to the license.

Help others attribute you!

This part is optional, but filling it out will add machine-readable metadata to the suggested HTML!

Title of work	<input type="text"/>	?
Attribute work to name	<input type="text"/>	?
Attribute work to URL	<input type="text"/>	?
Source work URL	<input type="text"/>	?
More permissions URL	<input type="text"/>	?
Format of work	Other / Multiple formats ↓	?
License mark	HTML+RDFa	?

Last, you will have the option of having the chooser give you a CC license mark in a format that fits your content well.

?

Have a web page?



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

Copy this code to let your visitors know!

```
<a rel="license"
href="http://creativecommons.org/licenses/by/4.0
"/> PUBLIC DOMAIN |  PUBLIC DOMAIN |  CC BY |  CC BY SA |  CC BY ND |  CC BY NC |  CC BY NC SA |  CC BY NC ND |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
|  PUBLIC DOMAIN | ✓                                                                                               | ✓                                                                                               | ✓                                                                                       | ✓                                                                                          | ✓                                                                                          | ✗                                                                                          | ✓                                                                                             | ✗                                                                                             |
|  PUBLIC DOMAIN | ✓                                                                                               | ✓                                                                                               | ✓                                                                                       | ✓                                                                                          | ✓                                                                                          | ✗                                                                                          | ✓                                                                                             | ✗                                                                                             |
|  CC BY         | ✓                                                                                               | ✓                                                                                               | ✓                                                                                       | ✓                                                                                          | ✓                                                                                          | ✗                                                                                          | ✓                                                                                             | ✗                                                                                             |
|  CC BY SA      | ✓                                                                                               | ✓                                                                                               | ✓                                                                                       | ✓                                                                                          | ✗                                                                                          | ✗                                                                                          | ✗                                                                                             | ✗                                                                                             |
|  CC BY ND      | ✓                                                                                               | ✓                                                                                               | ✓                                                                                       | ✗                                                                                          | ✓                                                                                          | ✗                                                                                          | ✓                                                                                             | ✗                                                                                             |
|  CC BY NC      | ✗                                                                                               | ✗                                                                                               | ✗                                                                                       | ✗                                                                                          | ✗                                                                                          | ✗                                                                                          | ✗                                                                                             | ✗                                                                                             |
|  CC BY NC SA   | ✓                                                                                               | ✓                                                                                               | ✓                                                                                       | ✗                                                                                          | ✓                                                                                          | ✗                                                                                          | ✓                                                                                             | ✗                                                                                             |
|  CC BY NC ND   | ✗                                                                                               | ✗                                                                                               | ✗                                                                                       | ✗                                                                                          | ✗                                                                                          | ✗                                                                                          | ✗                                                                                             | ✗                                                                                             |

You will notice two things:

- Content under an ND license cannot be combined with any other content (because it cannot be adapted)
- Content under an SA license can only be combined with content under the same license

With those things in mind, there is still great remixing potential among content licensed under the more permissive CC licenses.

## Collections and Curations

In specific use cases, it may be possible to combine content that has been licensed under a more restrictive license (SA and ND) that

would not normally allow free remixing. For example, if you were to collect chapters from various OER books into one, these chapters may be able to carry their own licenses separate from the overall license on the book itself. If most of the content in the book were under a specific license, say CC BY, and there were a small number of chapters under a CC BY-SA license, it may be possible to license the entire book at CC BY so long as the license on those BY-SA chapters remained.

The details and nuances of this are beyond the scope of this training, but it is useful to know which licenses explicitly allow combination and remixing, and which licenses require more care when considering their reuse.

## Knowledge Check



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<http://pressbooks.oer.hawaii.edu/oertraining2018/?p=54>



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<http://pressbooks.oer.hawaii.edu/oertraining2018/?p=54>



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# 10. Benchmark: Share an OER to the UH OER Repository

## *Learning Objectives*

By the end of this lesson, you will be able to:

- Upload a work to the UH OER Repository

Sharing back OER that you have created or used is an important part of the content life cycle. The UH system institutional repository (IR) has a section specifically devoted to hosting OER used by UH faculty, staff, and students, in which we encourage you to deposit open content there. If it has an open license and has been considered or implemented for instructional purposes at UH, we want it in our IR.

## Upload Process

The process for submitting content to the UH OER Repository has been documented in the following guide:

[UH OER Repository Info](#)

## UH OER Repository Info

UH OER Committee

Billy Meinko, Beth Tillinghast, Kathleen Lushek

 READ

## UH OER Repository Info

*How-to Guide*

Updated 8/17

University of Hawai'i OER  
oer.hawaii.edu

The uploading process consists of two parts:

- Preparing your content for submission
- Submitting your content to the repository

## Preparing Content for the OER Repository

As you prepare to submit content, you will need to do the following:

- Locate the appropriate repository Sub-community or Collection
- Locate relevant keywords and other metadata to your submission
- Gather all files needed for the submission
- Select the appropriate Creative Commons (CC) license for the submission

All of above important information and metadata will be required by

the submission form, so it's best to get these things together ahead of time.

## Submitting Content to the OER Repository

The actual submission process includes the following:

- Create a new submission in the UH OER Repository
- Place the content in an appropriate Sub-community or Collection
- Include descriptive metadata in the submission form
- Check the status of a completed submission

Submissions to the OER repository are moderated to ensure that accurate metadata is a part of all uploads. Over time, the pool of UH OER will grow to include hundreds or thousands of titles, all available for reuse by UH faculty and beyond.

## Share Your Submission

For benchmark completion of this chapter, please notify us of your deposit by filling out this form:

<https://goo.gl/forms/3LZQGwgahii3xbQD2>

(Note: You will need to share your submission link, so don't close your browser tab before completing the form!)

PART III  
OER CREATION AND  
ADAPTATION



# II. Determining Technical Openness

## *Learning Objectives*

By the end of this lesson, you will be able to:

- Download an OER from the UH OER Repository
- Assess the technical openness of an OER (ALMS framework)

## Introduction

It is often said that OER are, “free like puppies,” implying that there may be no up front costs, but that OER require care and attention to be happy. We can safely assume that having some knowledge pet care would help us better care for our puppy. Analogies aside, your effectiveness working with OER and advising others in their work will depend on having basic knowledge of common instructional design practices and being able to work with digital media files.

This section will offer basic guidance in understanding the technical side and workflow processes for developing OER.

## The ALMS framework

As David Wiley explains on the [opencontent.org](http://opencontent.org) definition page, CC licenses give us permissions to exercise the 5 R's (reuse, revise, remix, redistribute, retain), but poor technical choices can make open content less open (and thus, harder to work with).

The ALMS Framework provides a way of thinking about those technical choices and understanding the degree to which they enable or impede a user's ability to engage in the 5R activities permitted by open licenses.

The framework includes four buckets (or whichever your preferred container is) that questions about the technical openness of an OER likely fit into. Here are the descriptions of each bucket.

(This material is based on original writing by David Wiley, which was published freely under a Creative Commons Attribution 4.0 license at <http://opencontent.org/definition/>)

### ACCESS TO EDITING TOOLS

Is the open content published in a format that can only be revised or remixed using tools that are extremely expensive (e.g., 3DS MAX)? Is the open content published in an exotic format that can only be revised or remixed using tools that run on an obscure or discontinued platform (e.g., OS/2)? Is the open content published in a format that can be revised or remixed using tools that are freely available and run on all major platforms (e.g., OpenOffice)?

*Takeaway: Can you edit the OER without the need for specialized or expensive tools?*

#### LEVEL OF EXPERTISE REQUIRED

Is the open content published in a format that requires a significant amount technical expertise to revise or remix (e.g., Blender)? Is the open content published in a format that requires a minimum level of technical expertise to revise or remix (e.g., Word)?

*Takeaway: Would most faculty be able to edit the OER at their current skill level?*

#### MEANINGFULLY EDITABLE

Is the open content published in a manner that makes its content essentially impossible to revise or remix (e.g., a scanned image of a handwritten document)? Is the open content published in a manner making its content easy to revise or remix (e.g., a text file)?

*Takeaway: Can all parts of the OER be edited?*

#### SELF-SOURCED

Is the format preferred for consuming the open content the same format preferred for revising or remixing the open content (e.g., HTML)? Is the format preferred for consuming the open content different from the format preferred for revising or remixing the open content (e.g. Flash FLA vs SWF)?

*Takeaway: Can you edit the OER directly or is a separate editable file needed?*

## Using the ALMS framework

Like with any framework or set of guidelines, the usefulness of the ALMS framework vary. At the very least it is important to understand

the kind of technical aspects to be aware of when considering which OER can be easily incorporated into your work. Here is an example of a simple application of the ALMS framework on an OER in the UH OER repository:

*Writing for Success* <https://dspace.lib.hawaii.edu/handle/10790/3180>

The screenshot shows the UHOER (University of Hawaii Open Educational Resources) repository page for the item 'Writing for Success'. The page features a blue header with the UHOER logo and navigation links. Below the header, there is a breadcrumb trail: Home > Open Education Resources > Languages, ... Literature > English > Writing for Success. A search bar is visible in the top right corner. The main content area displays the item title 'Writing for Success' and a table of available files. Below the table, there is an 'Item Summary' section with metadata fields such as Title, Issue Date, URI/DOI, Rights, OER Owner, and Appears in Collections. At the bottom of the page, there are three buttons: 'Show full item record', 'Recommend this item', and 'View Statistics'.

| File                                               | Size     | Format    |                           |
|----------------------------------------------------|----------|-----------|---------------------------|
| <a href="#">Writing-for-Success-1445970582.pdf</a> | 45.74 MB | Adobe PDF | <a href="#">View/Open</a> |
| <a href="#">WritingforSuccess1445970636.mobi</a>   | 21.23 MB | Unknown   | <a href="#">View/Open</a> |
| <a href="#">WritingforSuccess1445970630.epub</a>   | 8.54 MB  | Unknown   | <a href="#">View/Open</a> |

**Item Summary**

|                         |                                                                                 |
|-------------------------|---------------------------------------------------------------------------------|
| Title:                  | Writing for Success                                                             |
| Issue Date:             | 15 Mar 2016                                                                     |
| URI/DOI:                | <a href="http://hdl.handle.net/10790/3180">http://hdl.handle.net/10790/3180</a> |
| Rights:                 | Creative Commons Attribution-NonCommercial-ShareAlike                           |
| OER Owner:              | Arizona Western College                                                         |
| Appears in Collections: | <a href="#">English</a>                                                         |

[Show full item record](#) [Recommend this item](#) [View Statistics](#)

Go ahead and take a look at the item record. You'll see the persistent identifier (for citation purposes), the license on the content, ownership metadata, and more. If the content has been uploaded in multiple formats, each of these will be presented to you here.

But how technically open is it? Which file format do we want to download?

The ALMS framework applied to this work in a way that helps

us understand the technical openness of this OER might look somethings like this:

---

**Access to editing tools:** The content is available in PDF, which isn't usually editable without Adobe Acrobat Pro. But there is an ePub version that can be ingested by Pressbooks as well as edited with open source tools like Calibre. The PDF could also be scraped (copied from the screen) and pasted into a simpler format such as a Word document, which could be very time consuming. So, we can say that the basic editing tools are available at no or low cost.

**Level of expertise required:** Editing this OER in Pressbooks or Calibre would require some knowledge of HTML, the markup formatting used for content on the Web. Additionally, editing this book may require file management as the chapters exist as separate files in the ePub or HTML version. If the content were placed in a Word file (as mentioned above), editing could be simplified further.

**Meaningfully editable:** The OER content is fairly flat (primarily text, no embedded media) and all content appears to be editable. There aren't any features I would be concerned about being able to edit.

**Self-sourced:** The ePub file is self-sourced, so at minimum we have one read-and-edit file available to us.

---

When in doubt about the effort required to edit an OER you find, it may be worth searching the Web for other copies or instances of the OER that have been converted to a friendlier file format. For instance, many of the OpenStax OER textbooks have been ported into Pressbooks so that they can be easily edited and then exported to a variety of formats.

## Knowledge Check



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<http://pressbooks.oer.hawaii.edu/oertraining2018/?p=59>



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<http://pressbooks.oer.hawaii.edu/oertraining2018/?p=59>

## 12. Making OER Accessible

### *Learning Objectives*

By the end of this lesson, you will be able to:

- Describe techniques for creating accessible OER

### Introduction

Content should be created in a way that makes it accessible to all learners. As you plan an OER adoption or adaptation, plan to check the accessibility of your content before making it available to others. Not only is this a generally good practice, content published by public institutions may be subject to state and/or federal mandates for accessibility. In short, making your OER accessible from the get-go will help learners consume the content in the way that best suits their needs.

This section will explain techniques towards making instructional content more accessible, including OER. More thorough recommendations for making content accessible can be found in this adaptation of the Accessibility Toolkit originally published by BCCampus.

## Lowest common denominator

While it is often fun to use different font types (“fonts”), colors, and clip art on your instructional materials, content that follows a more structured approach will likely be more accessible. As OER is passed between authors and editing tools, it’s advisable to leave the fancy styling as a last step and share out “clean” versions of the content without custom fonts and floating elements. When in doubt, leave your custom styles out.

## Four steps towards authoring accessible content

When writing text-based content, sticking to these four suggestions will greatly improve the accessibility of your content. In particular using stricter markup will help screen readers convey the content more clearly. MS Word, Google Docs, and many other common tools used for OER editing will have these built in into their menus, making it easy to structure your content cleanly.

### USE HEADING LEVELS (H<sub>1</sub>, H<sub>2</sub>, H<sub>3</sub>)

Text-based OER benefits from being structured with heading levels. Many editing tools support TOC (table of contents) generation based on where these section markers are placed. Individuals using screen readers will also more easily navigate the sections of your content when headings levels have been applied consistently throughout.

### USE TRUE LISTS (ORDERED, UNORDERED)

While they may “look” similar to bulleted lists, using asterisks with

hand-spacing to create lists can really jam up a screen reader that is expecting structured content. Whenever listing items, use the true list features of your content editor. This applies to both unordered (often bulleted) and ordered (numbered or lettered) lists.

**Example** – clear and accessible:

- First list item
- Second one
- And a third

**Nonexample** – unclear:

- \* First list item
- \* Second item
- \* And a third

## GIVE ALT TEXT DESCRIPTIONS TO IMAGES

No matter the subject of an image or figure used in your content, we need to offer descriptive text to support those with visual impairments. A screen reader will look for a contextual description of an image to share with the learner, which should live in the text surrounding the image (title or caption) or as alternative (“alt”) text. This is one of the most common overlooked accessibility aspects of content created for instruction, but editors for both online and offline content nearly all include tools for adding alt text to images.

## USE DESCRIPTIVE LINK TEXT

Ensure that all web pages and weblinks have titles that describe a topic or purpose. The purpose of the link can be determined by the text alone. That is, you don’t need to include additional information justifying the use of the link. You want the link to be meaningful in context. For example, do not use generic text such as “click here”

or “read more” unless the purpose of the link can be determined by meaning in the surrounding content.

**Example** – clear and accessible:

Information on the BC Open Textbook Project is available online.

**Nonexample** – unclear:

Click here for information on the BC Open Textbook Project.

## Use the WAVE tool

A great deal of OER content is displayed on websites, where we can use accessibility-checking tools to identify areas that can make it difficult for assistive technology tools to work properly. The WAVE tool does just that: identifies errors and possible issues with the accessibility of webpages.

For example, we can see the WAVE tool’s accessibility check on [opencontent.org/definition](https://opencontent.org/definition). As far as content structure and formatting is concerned, the page looks great. The WAVE tool caught a couple small errors (a missing page title, missing language declaration) and had a couple warnings for parts of the page that may be troublesome from an accessibility perspective.



**WAVE**  
web accessibility evaluation tool

http://www.opencontent.org/definition/

Styles No Styles Contrast

**Summary**

WAVE has detected the following:

- 2 Errors
- 1 Alerts
- 1 Features
- 6 Structural Elements
- 0 HTML5 and ARIA
- 0 Contrast Errors

**Panel Options**

- ➔ DETAILS: A listing of all the WAVE icons in your page.
- i DOCUMENTATION: Explanation of the WAVE icons and how you can make your page more accessible.
- 📄 OUTLINE: The heading structure of the web page.

[Feedback](#) | Powered by [WebAIM](#)

The following apply to the entire page:





## h2 Defining the "Open" in Open Content and Open Educational Resources

The terms "open content" and "open educational resources" describe any copyrightable work (traditionally excluding software, which is described by other terms like "open source") that is licensed in a manner that provides users with free and perpetual permission to engage in the 5R activities:

1. Retain - the right to make, own, and control copies of the content (e.g., download, duplicate, store, and manage)
2. 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)
3. Revise - the right to adapt, adjust, modify, or alter the content itself (e.g., translate the content into another language)
4. Remix - the right to combine the original or revised content with other material to create something new (e.g., incorporate the content into a mashup)
5. 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)

## h2 Legal Requirements and Restrictions Make Open Content and OER Less Open

While a free and perpetual grant of the 5R permissions by means of an "open license" qualifies a creative work to be described as open content or an open educational resource, many open licenses place requirements (e.g., mandating that derivative works adopt a certain license) and restrictions (e.g., prohibiting commercial use) on

## Knowledge Check



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<http://pressbooks.oer.hawaii.edu/oertraining2018/?p=61>

# 13. Benchmark: Scope an OER Adoption or Creation

## *Learning Objectives*

By the end of this lesson, you will be able to:

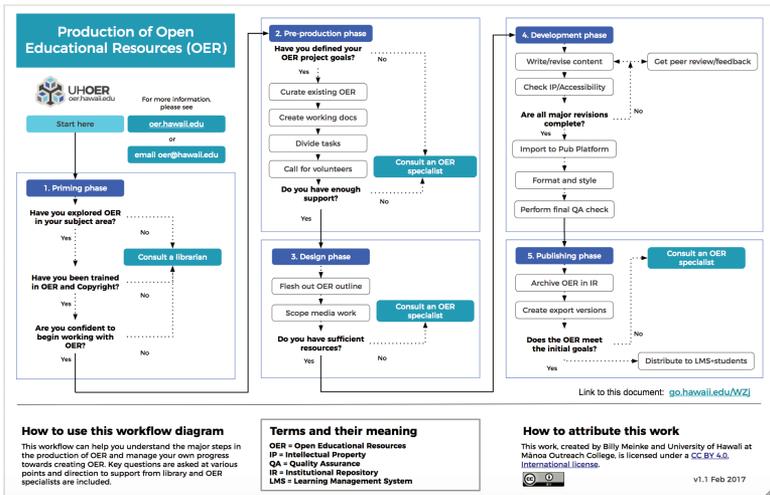
- Describe introductory steps needed to plan an OER adoption

## Introduction

OER adoption, adaptation, and creation is unique. While providing a general workflow for such a process is difficult to do, you should have knowledge of the overall process involved with most OER projects. This section will attempt to do just that.

## High Level OER Production Workflow

At the beginning of 2016, this OER production workflow was created with the intention of simplifying the major steps in an OER project so that scoping such work would be manageable.



The workflow was shared with the broad OER community via mailing lists and direct appeals to experts in the field, soliciting comments from more than a dozen contributors. It can be useful when performing the initial scoping of an OER project.

## PRIMING

If you are viewing this content as part of a training workshop, then you are in the first phase of the process. Here we ask key questions about your potential adoption or creation. Once you have completed a basic training or consultation and have performed a cursory search of content that may work for you, you can move onto the next phase.

## PRE-PRODUCTION

Before any direct work on content is done, we need to get organized. This means defining the project goals and creating the planning

documents you'll need to manage the process. More attention put towards properly scoping your project the better, and you should use management documents and tools you and your collaborators are familiar with. It is at this point that a call for volunteers (contributors, copyeditors, reviewers) can be sent out if your project would need such support to be successful. Continue in this phase until the necessary resources are secured and commitments have been gathered from collaborators.

## DESIGN

This phase is the last step before we get our hands dirty with OER. It is here that we flesh out any outlines for the content and confirm major planned revisions of existing OER you have found for the project. If media development (image/video editing, visual design) is a planned need, scoping this work is done here. Before leaving this phase, you should have a clear idea of both *what you are building* and *how it will get done*.

## DEVELOPMENT

This phase is the real meat of the OER production process – and the most time consuming. It is here that we take existing OER (if applicable) and move it into a shared editing environment to ease the collaborative development of it. The content will go through a feedback loop where new content is added, comments and clarifications are made, and the changes are revised by the collaborators. Commenting, track changes, and annotation can facilitate this process well, depending on the software used to develop content. As an example, many UH OER projects utilize shared documents in Google Drive to collaborate on content in this phase.

## PUBLISHING

This is the final step in the process of adapting or creating OER. It is at this point that we select the final publishing platform to be used, which for bookish OER would likely be the UH Pressbooks platform but may be something as simple as a website or course inside the LMS. OER published through the UH Pressbooks platform have the advantage of being both editable through the OER's website and exportable in a variety of formats. If print on demand and advanced typesetting are needed to complete the project, they are done in this step.

## Keep It Simple

As with any project, OER projects are subject to scope creep – meaning that the goals of the project can grow or become blurred by the excitement of what we can do with OER. For this reason, it is recommended that a project manager keep track of progress and not be afraid to push new features or extensions of the original project into a second development cycle. We can do many things with OER, but we need to accomplish the original goals first. First build the foundational content for your book or course, then take off and fly.

## Knowledge Check



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<http://pressbooks.oer.hawaii.edu/oertraining2018/?p=64>

## Share Your Plan

For benchmark completion of this chapter, please share your OER adoption or creation plan with us by filling out this form:  
<https://goo.gl/forms/Vgjp0HFQsBrTVnw72>