In this third tutorial (of four) we will investigate how to adapt existing OER to better suit your teaching context and how to develop your own resources and license them with a Creative Commons licence.

INTRODUCTION

- Learning pathway and outcomes

ADAPT

- Why adapt open content?
- Adaption options: the 5 Rs
- How to revise open content
- Revision considerations
- How to remix open content

CREATE
Create your own resources

License your own open resource

SUMMARY

Summary

Attribution, references and licence
Introduction

At the end of tutorial two it was mentioned that African educators have more to benefit by sharing their teaching resources than by hiding them away. A call for a more caring and sharing mindset among African educators was made. Were you convinced? Are you ready to share?

As most teachers who use OER are initially consumers of open content before they become contributors of open content, we have organized this tutorial into two parts:

- How to adapt existing OER to better suit your teaching context and learners' needs
- How to create your own OER with appropriate Creative Commons licences.

Outcomes

Outcome 1 - Why adapt?

This learning pathway will outline the benefits of adapting or 're-purposing' open resources.
Outcome 2 - Identify the right resource

You will investigate which Creative Commons licences permit resource adaptations and re-purposing.

Outcome 3 - Revise a resource

You will, on completion, have some practical tricks and tips to effectively revise open content to suit your specific learning context.

Outcome 4 - Remix resources

You will, on completion of the learning pathway, be able to 'remix', or combine, multiple open resources to create a new resource.

Outcome 5 - Create your own resource

You will understand what considerations to keep in mind when developing new content that you intend to share with others as an OER.

Outcome 6 - License your resource

On completion of this learning pathway you will understand the process of generating and inserting a Creative Commons licence in your new resource.
It is rare that a search for OER reveals resources perfect in every way for a new learning context. It is possible that the language style is not suited for your students. Perhaps a full translation into another language is necessary? Images that accompany a resource might need to be replaced with familiar local examples. It is also possible that not the entire resource is appropriate and needs to be shortened or supplemented with additional information or activities.
Think: In what ways do most educational resources need to be different to better suit your learners?

Image: [OER Africa](https://flic.kr/p/oc4S9j) on Flickr (CC BY)

**Repurpose?**

Open Educational Resources (OER) are useful because they are free, don't require permission to download, and can mostly be adapted or re-purposed. OER authors usually know that educators and course developers want to adapt their resources to suit new contexts and audiences. To this end, users of open content must have some digital skills and choose an appropriate Creative Commons (CC) licence that omits No-Derivatives (ND) in order to permit re-purposing.
The vast majority of Creative Commons (CC) licences do encourage re-purposing. When sourcing OER to adapt, avoid those that include the No-Derivative (ND) right as those CC licences don't permit changes to the original.

Sort the CC licences below into either 'Permits re-purposing' or 'Does not permit re-purposing' depending on whether adaptation of the resource is allowed or not.
Does not permit re-purposing
Reflect: As re-purposing or adapting resources requires digital know-how, what basic computer skills do you need to adapt OER?

Reflect: Feedback

Open content is not exclusively digital in nature as it is possible to find paper-based resources. However, the vast majority of open resources are digital. It can be argued that the open content movement came about because of the Internet. The Internet provided the mechanism for people across the globe to connect and share resources on a scale not possible prior to the Internet.

Consequently, users of open content will at some point require digital skills to harvest existing resources and then share their content widely. It is worth spending some time acquiring basic digital skills.

This tutorial assumes that you have basic ICT skills and productivity application experience, such as using a word processor and or presentation package.
Adaption options: the 5 Rs

Think: When you say you want to 'adapt' or 're-purpose' a resource, what exactly do you mean? What adaptation options are there?

Image: OER Africa on Flickr (CC BY)

The 5 what?

Before you start adapting resources, let us be clear on just how OERs can be used. A popular understanding of what can be done with OERs is called, 'the 5 Rs'. Within the boundaries of what is permissible under Creative Commons (CC) licensing there are five key ways to use OERs:
Revise

Content can be adapted, adjusted, modified or altered.
Retain

Users have the right to archive and 'own' copies of the content.
Redistribute

Copies of the content can be shared with others in its original, revised or remixed form.
Reuse

Content can be reused in its unaltered form.
Remix

The original or revised content can be combined with other open resources to create something new.

1. **Retain** - Copies of content can be retained for personal archives or reference - the right to own and control copies of the content (e.g. download, store and manage)

2. **Reuse** - The right to use the content in a wide variety of ways (e.g. in a class, in a study group, on a website, in a video)

3. **Revise** - Content can be modified or altered to suit specific needs - the right to adapt, adjust, modify, or alter the content itself (e.g. translate the content into another language)

4. **Remix** - Content can be adapted with other similar content to create something new - the right to combine the original or revised content with other material to create something new (e.g. incorporate the content into a mash-up)

5. **Redistribute** - Content can be shared with anyone else in its original or altered format - 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)

**CONTINUE**
Drag the item in the first column and match it with the correct description in the second column.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Remix</td>
<td>Users can combine multiple OER into a single new resource.</td>
</tr>
<tr>
<td></td>
<td>Reuse</td>
<td>Users of the resources can make copies and share with students and colleagues.</td>
</tr>
<tr>
<td></td>
<td>Retain</td>
<td>Users of the resource can store a copy of the resource for their own personal use.</td>
</tr>
<tr>
<td></td>
<td>Distribute</td>
<td>Users can share either the original resource or the new derivative with others.</td>
</tr>
<tr>
<td></td>
<td>Revise</td>
<td>Users can make changes to a resource to suit a specific learning context.</td>
</tr>
</tbody>
</table>
Which of the 5Rs involve adapting?

The first two options, retain and reuse don't require any adaptation techniques as the resources stay the same. Redistribution also does not require any changes as it focuses on sharing resources.

- **Retain**: Simply means you can download a copy of the OER for your own use and keep it. You can store it for future use and incorporate it into your own file management system.

- **Reuse**: The open resource can be duplicated and shared with others – perhaps with your colleagues, class members or study group.

- **Redistribute**: Simply means that each new iteration, or derivative, of a resource is made accessible and can be discovered by the open community.

However, Revise and Remix uses do require changes.

Now OERs are beginning to make a lot of sense! It is possible to take an OER and 'fix' it so that it responds to your (and your students') specific needs. Perhaps you want to shorten the resource, rework the language, add images, translate it, expand it so that it covers your syllabus requirements etc.
Sometimes you might want to use and adapt more than one OER. We call this 'remixing'. In fact, some teachers like to 'mash' together lots of text-based OERs to create a textbook, or combine text, images and music/sounds into a multimedia learning experience.
The ability to **revise** and **remix** is expressly forbidden in fully copyrighted works. The phrase 'All Rights Reserved' means that you would have to negotiate directly with the author and publishing house if you wanted to adapt the resource in any way.

Also, keep in mind that CC licences that contain **No-derivatives** (ND) cannot be revised or remixed.
Reflect: When creating resources for your class, have you ever combined multiple resources to create something new? If so, you most likely you already have some experience of remixing!

For hundreds of years educators have created their own resources by synthesising whatever they can get their hands on, such as textbooks, magazines, newspapers, library resources etc. Adapting existing resources to better suit our students is part of our DNA!

In recent years, however, publishers have been tightening copyright regulations to outlaw these practices. Adapting open content means we don't have to worry about the legality of our actions and it also allows us to network globally with like-minded educators who encourage the free use of their resources.
How to revise open content

Think: Most OER editing tools can be found on the average PC, laptop or tablet. Do you have access to, and the skills to use, common software programmes?

Editing tools to revise a resource

When we start revising OER to respond to specific learning needs, it begins to make a lot of sense! Perhaps you want to shorten the resource, rework the language, add images, translate it, or expand it so that it covers your syllabus requirements.
Most of the tools required to edit OER can be found on your laptop or tablet. Think about productivity suite software, such as your word processor, presentation package and graphics package. Usually OER are available as files that can be viewed and edited in the most popular application software or apps, including Office applications for PC and iOS and Android applications. OER are not exclusive to only Open Source software formats. This means you probably already have access to the software you need in order to do adaptations.

Here are some simple steps to revising open content.

1: Find the right open resource
The first step to editing an OER is searching for and finding it! We have a learning pathway dedicated to doing just this.

Need a refresher? Revise tutorial 2 that covers how to search for open content and decipher Creative Commons rights and permissions.
2: Save to your device

If you are viewing the OER file in the same software in which it was authored e.g. in word processor software, then retaining a copy of the resource is relatively simple. Just save it directly to your device using that software's 'Save' function.

Copy and paste

Don't underestimate the power of 'copy' and 'paste'. Sometimes it is easiest to select the part of the OER that interests you and 'copy' and 'paste' it into another application and then save it directly to your device. If you are not sure how to 'copy' and 'paste', view the video tutorial on how to do that.
How to COPY and PASTE text & images.

3: Edit

Once you have an editable copy of the OER saved to your device, it is time to start adapting and making it your own! Use whatever software you are familiar with and create a version that speaks to your students and your context. You can change terminology, add in additional text and new images.

Don't, however, forget to attribute the original resource and the author(s) somewhere in your new version of the resource. That's the right thing to do.
4: Edit online

OER Commons, a popular OER repository, allows you to revise some of the OER registered on their platform using their online revision tool. This tool is called 'Open Author'. Once you have created a new version of the existing resource it too is available to others inside the OER Commons platform. Attribution is automated by the platform.

How to Use Open Author on OER Commons

Learn more about authoring and remixing open resources using ISKME's OER Commons teaching and learning network and tools: https://www.oercommons.org/authoring/4466-how-to-use-open-author-on-oer-commons/view Find more free and open curriculum at oercommons.org

Video licensed by ISKME Creative Commons Attribution-NonCommercial-ShareAlike (CC BY-NC-SA)
Open Author on OER Commons
Visit OER Commons and investigate their OER revision and authoring tools.

CONTINUE

Reflect: What is your preferred revision technique? Would you restrict yourself to OER distributed in a specific format?

Image: Pexels (Pexels licence / CC Zero)

Reflect: Feedback
Educators who regularly adapt open content, claim that the intended function of the resource will determine whether they create from scratch or revise an existing resource. The more generic the purpose, the more likely they would revise an existing resource while the more specialised the purpose, the more likely they will need to develop something new.

Obviously these teachers feel that to restrict themselves to specific formats is very limiting.

Open content comes in numerous formats and the better your skill-set the more options you have in terms of finding, and fixing, the 'right' resource.
Considerations

Revising resources requires a specific skill set and not everyone is familiar with the process. Here are some issues to keep in mind when revising an OER:

Think: How much revision is too much revision? At what point should you develop a new resource rather than investing time and resources revising an existing resource?

Image: PXhere (CC Zero)
When does creating 'from scratch' make sense?

The Health OER initiative decided to produce their own OER because sourced open resources were not suitable for use in Africa. The sourced OER, developed for a Developed World context, included equipment that was not available, funding models that did not exist, responsibilities for health practitioners that did not align with local training etc. After a careful analysis of available OER, the decision was made to create new materials relevant to the African context and through an open licence share these new resources regionally.

When does revision make sense?

Some educators claim that they would rather create a resource from scratch than fix someone else's resource. They claim revising is time consuming and can result in a resource becoming 'disjointed'. Revising a resource does require a specific skill-set and not everyone is good at it. Therefore, it is worth spending time searching for, and identifying, OER that requires minimal revision in order to save time and effort.

Mr Andrew Moore – Instructional Designer (OER Africa)
Instructional designer’s perspective: A courseware developer at OER Africa provides his perspective on when resources should be revised and when a new resource should be developed instead. He discusses the following issues:

- An analysis should be done before revision
- Apply the 15% rule
- Too many designers don't revise enough

Click the small audio arrow below to hear his insights.

Audio: To revise or not to revise

Troublesome resources

Steer clear of resources that are difficult to revise unless you have the specific editorial know-how and/or the correct editing tools. Troublesome resource types include:

1. **Video files** – YouTube videos, for example, rarely allow you to download the actual file, making editing very difficult. There are, however, online video download sites to get around this problem. Even if you do acquire the file, revision will require specialised video editing software.

2. **PDFs** – Some PDFs don't allow users to copy and paste text out of the document.
Learning Management System (LMS) courses – LMS units of study are often locked inside an institutional LMS making access difficult unless public access has been granted. These study materials are also composed of multiple text blocks and individual files. The easiest way to access all the resources is to request the LMS administrator to send the course back-up file and then to re-install on a different institutional LMS platform.

Attribution: Note the OER you revise

Ensure that you have collected the attribution data from the original OER you decide to revise. Make a note of the 'Author', 'Title', 'CC licence' and the web address of where you found the original resource so that you can provide attribution information somewhere in the new resource.

Reflect: In which format do you normally distribute and share your resources? Is it 'revision' friendly?

Image: Melissa Wiese on Flickr (CC BY)
Reflect: Feedback

Keep in mind that if you have used an existing OER there is an obligation to share your new derivative of that resource. Just as the original author could never have guessed how you ended up using their resource, so neither can you guess how your OER will end up being used.

Consequently, you want to share it in a format that will encourage others to adapt and add value to what you have done. Use common software formats that allow others to manipulate and change the resource.
How to remix open content

Think: When is revising just one OER not enough? Have you had a need to combine multiple resources into something new?

Combining resources

Sometimes you might want to use and adapt more than one OER. We call this 'remixing'. In fact, some teachers like to mash together lots of text-based OERs to create a textbook, or combine open text, open images, and open music/sounds into a multimedia learning experience. To do this you would use the same tools used to revise OER in the previous section.
A remix exemplar

Consider this example of a remix.
A university faculty in Malawi required an affordable textbook that all students and staff could own. They developed the text by searching for, adapting and then compiling multiple OER into a single digital book.

An additional advantage was that the textbook aligned perfectly with both the faculty and student needs.

At the back of the textbook the faculty developers dutifully attributed the open content they had adapted and developed further. (See below).
Remix considerations

To create a remix, however, you do need to consider the following issues:
Bear in mind that the tutorial *Use OER for teaching and learning* looks closely at the four rights Creative Commons (CC) licences do reserve. One of the CC rights *explicitly* excludes re-purposing or changing the resource and consequently those resources can't be used for remixing.

Which of these CC licences permit remixing?

- [ ] CC BY
- [ ] CC BY NC SA
- [ ] CC BY SA
- [ ] CC BY ND
- [ ] CC BY NC ND
Besides No-Derivatives (ND), the Share-Alike (SA) right can also cause consternation to those wanting to combine OER. The SA right requests users of a resource to license derivatives with the same CC license. This causes issues when resources, licensed with different SA combinations, for example CC BY-SA and CC BY-NC-SA, are to be combined. Technically it is not permitted.
Remixing often requires some editing of the resources to ensure they 'flow' into each other seamlessly. Ideally one should identify and use OER that lend themselves to adaptation. Some file types encourage new users to edit and adapt while others prove to be very difficult to change. Therefore, choose adaptable formats.

Sort the resources below according to how easily they can be edited.

- Word processing document (e.g. docx or .txt)
- PowerPoint file (pptx)
The size of an image (jpg)
Text on the Internet (html)
Resource is difficult to edit
PDF document (pdf)
Video on YouTube
Music file on Spotify
The colours and subject of an image (jpg)

Can you attribute the authors of each of the remixed OER?
Even though we might 'mash' multiple resources into something new, it is important to acknowledge the original authors. Therefore, as you identify which resources to remix ensure that you keep record of them in order to attribute each resource. An Attribution section should be added at the end of your remix.

Consider this example of an Attribution page.
Attribution

The following Open Education Resources (OER) were consulted and/or adapted to create this unit:

1. OER4schools. (2013). Unit 1: Introduction to interactive teaching and the use of ICT. University of Cambridge, Faculty of Education. CC BY SA. Available online at http://oer.educ.cam.ac.uk/wiki/OER4schools/Introduction_to_Interactive_Teaching_and_the_use_of_LeICT
4. OER4schools. (2013). One Zambian teacher’s experience of introducing interactive teaching with ICT. University of Cambridge, Faculty of Education. CC BY SA. Available online at https://sms.cam.ac.uk/media/1093072

References


License

All materials in this ICT Essentials for Teachers Course unit are licensed by the Ministry of Education, Rwanda under a Creative Commons Attribution-ShareAlike 4.0 International License with the exception of the resources listed above.

Hyperlinking back to the original

Available online at https://sms.cam.ac.uk/media/1165259

Note that it is possible to trace back the original resource as there is a link.
The new CC Licence

Note that the remixed resource also has a Creative Commons licence that is in keeping with rights and permissions reserved by the original remixed resources. In this case CC BY-SA.
The Attribution section also references any resources that were consulted but NOT adapted because they were not openly licensed.
Attribution

The following Open Education Resources (OER) were consulted and/or adapted to create this unit

4. OER4schools. (2013). One Zambian teacher’s experience of introducing interactive teaching with ICT. University of Cambridge, Faculty of Education. CC BY-SA. Available online at https://cct.cam.ac.uk/media/1199072

References


License

All materials in this ICT Essentials for Teachers Course unit are licensed by the Ministry of Education, Rwanda under a Creative Commons Attribution-ShareAlike 4.0 International License with the exception of the resources listed below.

Attribution

The following Open Education Resources (OER) were consulted and/or adapted to create this unit

Notice that in this section the developers have identified which OER were adapted and remixed to create their course
Attribution

The following Open Education Resources (OER) were consulted and/or adapted to create this unit:

4. OER4schools. (2013). Colombian teacher’s experience of introducing interactive teaching with ICT. University of Cambridge, Faculty of Education, CC BY SA. Available online at https://rsc.cam.ac.uk/media/1093072

References


License

All materials in this ICT Essentials for Teachers Course unit is licensed by the Ministry of Education, Rwanda under a Creative Commons Attribution-ShareAlike 4.0 International Licence with the exception of the resources listed below.

Creative Commons Licence

Note that the original Creative Commons licence of each remixed OER is identified.

Remix in OER Commons

If the open resource was found on the OER Commons platform they provide online tools to help you remix right there on the platform.
Reflect: Does your current textbook align perfectly with your teaching style and syllabus? Would a remix of resources prove useful?
Textbooks have become a touchy subject of late. They are often expensive and analysts say the average price of textbooks has outstripped inflation over the years as publishers try to squeeze the education community for as much profit as possible.

This is particularly problematic if the textbook does not cover the subject adequately. Also commercially published textbooks are nearly always fully copyrighted and forbid copying and especially adaptation.

In this instance it might be worth creating your own remixed textbook. Consider for example the South African Siyavula series of open textbooks, that have a CC BY licence and encourage educators to adapt and expand on them. (https://www.siyavula.com/)
Create your own OER

In the previous section we have discussed the technicalities of adapting existing OER but it's highly possible that you have already created your own materials that could be shared with colleagues across the continent.
Technically, there is little difference in creating an OER and creating a traditional teaching resource. First create a resource the way you would normally, using tools you are familiar with. For example, you might use common productive suite tools like a word processor, a presentation package or a graphics package. However, a good resource design would consider the following, before starting any development,

1. What is the purpose of the resource? What do you hope it will achieve? Is it a productivity tool, planning document or does it offer learning support etc?

2. Does it link to the curriculum? This is especially important if the resource is a learning support tool. Is it a tool to help either yourself achieve some of the teaching objectives, or alternatively, support student acquisition of any of the curriculum competencies?

3. Will it be current? Does it reflect up-to-date information, ideally is it contextually relevant too?

4. If the resource is for students, will it be engaging, colourful, attractive and designed to evoke interest?

5. Will the resource be professional, devoid of spelling, grammar errors and clumsy layout?

**Additional design considerations for OER**

However, for the resource to be a good OER there are a few additional considerations. Keep in mind that others will want to share your new resource widely, revise and remix it further. So...

1. Will it be in a format that encourages adaptation? Is it easy to distribute and edit?
2. Will it have a Creative Commons licence that is truly 'Open' allowing users room to adapt it and make it their own?

3. Is it of good quality? Is it something you would be proud to have your name attached to when it's shared?! Will it have your attribution information available to make it easy for others to acknowledge you as the author/creator of the resource?

“Digital content and learning resources have the potential to fulfill much of the “content delivery” requirements of teaching, allowing teachers to focus more naturally on creating compelling and personally relevant learning experiences that engage their particular students.”

-Michael Fullan and Maria Langworthy

Image: Whytock, K. on Flickr (CC BY-NC)
Reflect: What did you choose to share? How might it be used by others? What licence will you choose for it?

Creating an OER is the same as creating any teaching resource. There really are only three provisions that make it stand out as an OER:

1. What licence will you choose?
2. Will you share it in an editable format
3. Have you provided 'attribution' details?

In the next section we will investigate how to generate a CC licence.
License your own open resource

Think: What do you have to do to get your very own CC licence plate on your resource?

Creative Commons Licence Generator

It is surprisingly simple to generate your own CC license plate and insert it into your new open resources. Have your resource ready, be it a digital document, website or blog or even a document you intend to print out. Then follow the steps in the video tutorial below that outlines how to use the Creative Commons Licence Generator.
Video tutorial

CC License Generator
Use this link to access the Creative Commons Licence Generator on the CC website.

NEW LICENCE GENERATOR

New Licence Generator (Beta)
This more comprehensive version is available for use too although still under development and might change from how it is described in the video.

BETA VERSION
License your Open Educational Resource

Reflect: Which licence did you choose?
Summary

It's when open licences permit adaptation that OERs really start to make sense! Some argue a resource is not really 'open' unless adaptation is permitted. So when you license your own resources try to make them as open as possible. In this learning pathway we covered the following:

1. What can you do with OER? What are the 5Rs?
2. The difference between 'Revise' (an adjustment to a single resource) and 'Remix' (a mashing together of multiple resources)
3. What digital tools to use when revising and remixing – predominately common productivity suite applications
4. The revising and remixing considerations including: Which licences permit changes, which file formats are easy to edit, and the need to acknowledge original sources
5. Considerations for creating your own new resources
6. A step by step guide to inserting your own CC licence on your new OER.
Attribution

The following OER were adapted to create this learning pathway:


2. Wiley, D. (nd). Defining the "Open" in Open Content and Open Educational Resources. Available online at https://opencontent.org/definition/ (CC BY)


References

ISKME. (2013). **How to Use Open Author on OER Commons.** Available online at [https://youtu.be/kaFbQcvF9r4](https://youtu.be/kaFbQcvF9r4) (Standard YouTube Licence)

Create your own OER by UNESCO–MoPSE (Zimbabwe) is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).