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CREATING OVER

Open educational resources (OER) are transforming the way educational content is created, distributed, and used by educators and learners.

The free and open licensing of content provides a mechanism for educators and learners to use, reuse, adapt, remix, share, and redistribute educational materials. OER has the potential to reduce student inequality in access and affordability of learning materials and invite learners to become co-creators of knowledge.

This set of postcards will help anyone who wants to explore OER. You'll find:

- lists of free and open resources
- strategies and examples for creating high quality OER
- connections to OER research.

If you find this set of postcards useful, you can also visit the USQ Open Practice website which provides information and support about OER and open practice.

<https://www.usq.edu.au/open-practice>

We would like to thank the team of the **University of Siegen** in Germany – particularly Alexander Schnücker – who created this postcard set (see <http://hd.uni-siegen.de/oerhd>).

Creating OER 1

Which OER can I create?

Developing OER can be a relatively easy process with support. There are a few questions you could ask yourself before beginning:

- What is the benefit of making my resources free and open?
- What type of licence do I want to use?
- Are there institutional (or other) restrictions on freely and openly licencing my resources?
- Have I only used free and open resources in my content?
- Where can I store my resource so that it can be easily found, accessed, and shared with others?

OER often require support from across the institution, so always remember – *help is available, all you have to do is ask.*

Creating OER is not about using new technologies or changing your teaching style; it is about communication, collaboration, and co-creation – an act that will benefit many.

OER contribute to the goals of open education, giving people the right to learn¹. For example, people with limited access to learning or teaching resources benefit from OER.

In addition, openly sharing your resources can help build your learning and teaching profile for academic promotion, enhance your professional reputation, and provide new opportunities for collaboration.

¹UNESCO: Open Education Resources. <http://bit.ly/1aPI58f>



The way you create OER is up to you, and what you think can be relevant, supportive or helpful for others. You can make video recordings, PDFs, or learning platforms. The important thing is that you set up a licence to show everyone that you agree to the reuse, revision, remixing and redistribution of your material. We have outlined a plan to make your material an open resource on the postcard titled **OER Scenario 1**.

Enhancing student learning is at the heart of OER. Consider how you would adjust learning resources and plans to the learning goals you want your students to achieve. It includes all learning steps from asking questions, to offering learning resources and finalising a learning course. Optimally, those steps and their learning goals are evaluated by your students. The postcard **OER Scenario 2** outlines a model for this activity.

Another example is partnering with students to actively create and curate resources that add value to their context and learning. Here, your students are involved in determining, adapting and creating resources that lead to their desired learning outcomes. This is a strategy that can increase student engagement, and build authentic learning opportunities. Ultimately, this learning path is the final “product” to be openly shared with others. With your students’ agreement, you can adjust and add relevant material to their product and make it a useful teaching resource for others. The postcard **OER Scenario 3** outlines a process for this activity.

CREATING OER 2

How can I create Open Educational Resources?

The first step to using OER is locating resources that are both free and open. The Public Domain, and Creative Commons licences are the most powerful tools in open education. It is through these licences that we are legally able to retain, revise, reuse, remix, and redistribute resources (*these affordances are referred to as the 5 R's of open*).

The major change in using free and open resources is that the conversation about reusing content becomes positive. Recently, an increasing number of content producers are openly licensing their content on a number of media platforms. In addition, the open-source software (OSS) community has for many years collaboratively and iteratively developed open source code and software for others to use freely. All these developments make it easier to create pedagogically useful learning materials that are both appealing and engaging to learners and can be shared with other educators.

From a simple filtered Google image search to dedicated OER repositories, in this collection we have listed some online platforms to allow you to access open media and software.

Any OER that you create requires a Creative Commons (CC), or Public Domain licence to be attached to it with properties that you specify. There are a number of licences, and each one describes the extent to which the OER can be reused and repurposed. The CC website (www.creativecommons.org) has a number of services to help you choose the right licence and understand what rights you are giving to others.

To be truly open you should use one of the three licences below. CC also allows you to register your OER. This makes it easier for others to find the resource and to assist anyone interested to use it with confidence.

These are the available licences that conform to the nature of OER:

OER



PUBLIC DOMAIN LICENCE Open to and owned by the public. State that it is in the public domain.

CC-BY Free to share and retain, reuse, remix, reuse, redistribute as long as you attribute.

CC-BY-SA Free to share and retain, reuse, remix, reuse, redistribute as long as you attribute and share under the same licence.

Creating OER 3

How can I use Open Educational Resources?

Try something new

OER are openly available, you can retain, reuse, revise, remix and redistribute them¹. You can use OER to get to know new learning content or methods for your teaching. OER are able to show concrete learning and teaching examples and, thus, offer the option to challenge, improve and progress your own teaching. Furthermore, they also offer new ways to communicate and collaborate with colleagues. For example, if you contact the creators of OER and share ideas, this can result in materials that are of higher quality (and potentially have higher impact) than resources that have been solo-authored.. Resources showing examples of other teaching methods open up ways to see what colleagues from other disciplines use. Maybe there is something you find useful for your own teaching.

Collect resources

OER are a way to fill up your own teaching resources. However, quantity is not quality. The idea is to open up educational resources, to use, remix, revise and adapt them to your own teaching goals. For example, to solve teaching and learning challenges, to test new teaching methods, and to improve student learning outcomes. If your students struggle to understand a topic, would a different introduction into the topic suit their pre-knowledge in a better way and facilitate their learning? OER are often available in a range of formats, so students can have the choice of text, video, or audio resources – which supports personalised learning. Likewise, you may

locate resources that are designed for a different context, but have engaging activities and approaches. A free and open licence allows you to revise the context, and keep the activities.

The next step is to co-create resources together with students and to agree on making them openly available. Here, students, themselves, have the opportunity to collect resources. Even more, in creating learning resources, they get another perspective and access a learning topic in another way. This again improves their knowledge and skills. For example, you may find a resource that is designed for another cultural or geographical context – a learning activity could be set that encourages students to revise the resource for their local application, and justify their changes based on their discipline knowledge.

OER are publications

When you create, remix, and redistribute your own resources, you are not only just contributing to the OER community of people using those open resources. You show that you reflect on your teaching and try to constantly improve it. Your OER show the progress of this process. That is to say, OER are similar to your research publications that show your current research outcomes and practices. As teaching is an important part of an academic, OER can contribute to show your academic progress, and can form an evidence-base for promotion applications. Furthermore, OER show your commitment to a research-based and learner-centred teaching.

¹Orr, D., Rimini, M., & van Damme, D. (2015). *Open Educational Resources: A Catalyst for Innovation*, Paris: OECD Publishing.
<http://dx.doi.org/10.1787/9789264247543-en>

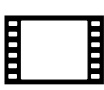
OER Scenario 1

Producing your OER

Resource Type

Introductory readings, lectures, course modules, case study ...

Format



Add Licence

Publish

Who can support you?

Learning designers

Librarians

Learning technologists

Copyright Officers

Professional learning staff

Graphic designers

Photographers

Multimedia producers

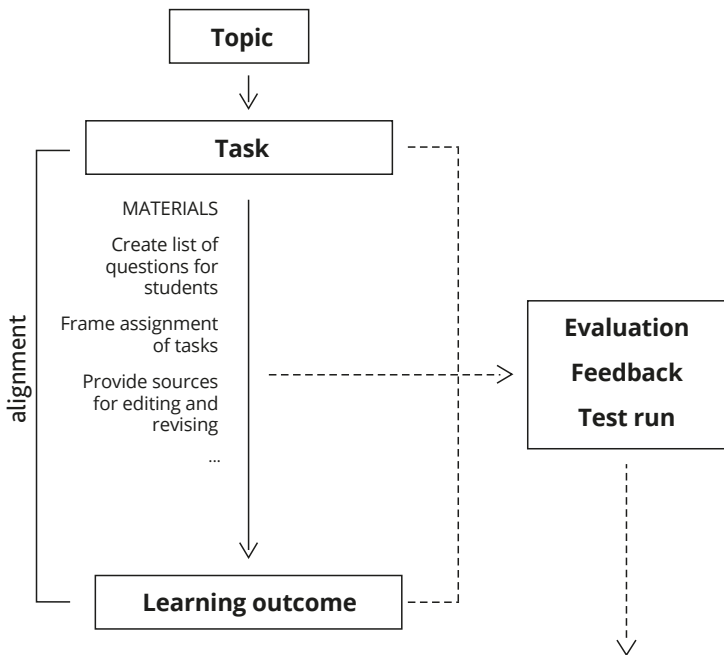
Repository staff

My ideas

for the creation of free and open content ...

OER Scenario 2

Creating processes



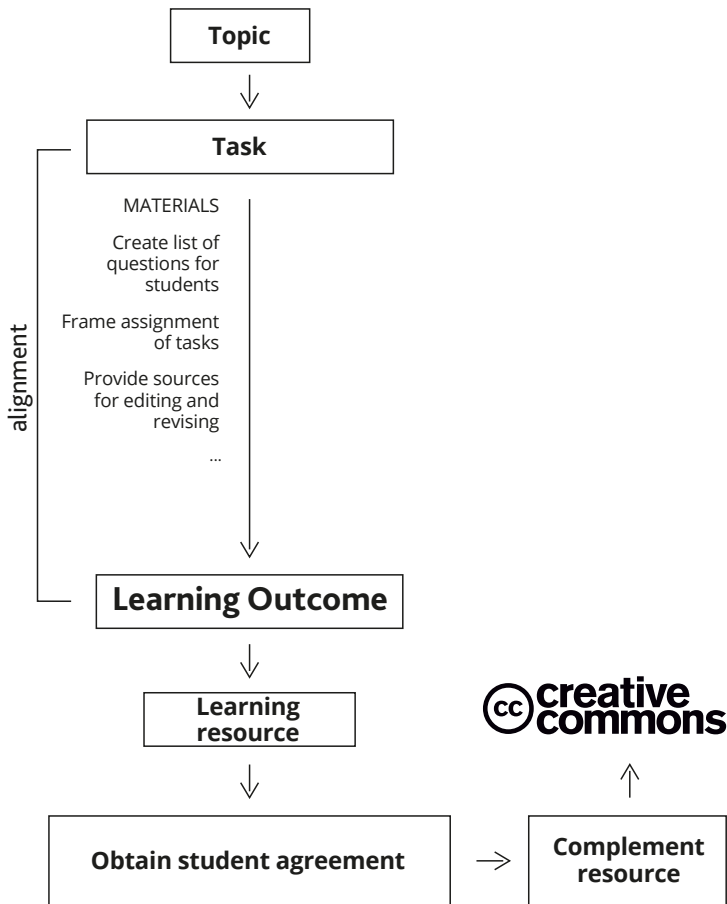
My ideas

for free and open tasks and materials ...

OER Scenario 3

13

Sharing learning outcomes



My ideas

to publish learning outcomes from my teaching ...



MUSIC

THEORY

PRACTICE

EXAMPLES

RESOURCES



<http://www.ccmixer.org>



<http://freesound.org>

OPSOUND

<http://opsound.org>



<https://www.jamendo.com>



<http://soundbible.com>

INCOMPETECH

<http://incompetech.com/music/royalty-free/>



<http://audionautix.com>



<https://en.wikipedia.org/wiki/Wikipedia:Sound/list>



<http://freemusicarchive.org>

MUSIC

IMAGES



THEORY

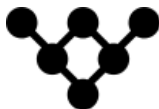
PRACTICE

EXAMPLES

RESOURCES



<https://www.pexels.com>



<https://thenounproject.com>



<https://pixabay.com>



<http://openphoto.net>



<https://unsplash.com/>



<https://mooselakecartoons.com>



<https://commons.wikimedia.org/wiki/Category:Images>



<https://stocksnap.io>

IMAGES



VIDEOS / SIMULATION

THEORY

PRACTICE

EXAMPLES

RESOURCES



<https://videos.pexels.com>



<https://www.khanacademy.org/>



<https://phet.colorado.edu>



<https://commons.wikimedia.org/wiki/Category:Videos>

https://commons.wikimedia.org/wiki/Commons:Free_media_resources/Video

VIDEOS / SIMULATION

SOFTWARE

A person is sitting on a wooden bench, using a laptop. The laptop screen displays a web browser with a teal background. The person is wearing a light-colored sweater and blue jeans. The background is a red brick wall. The word "SOFTWARE" is written in large white letters at the top of the image.

THEORY

PRACTICE

EXAMPLES

RESOURCES

VIDEO EDITING

LIGHTWORKS

<https://www.lwks.com>

Shotcut

<https://www.shotcut.org>

IMAGE EDITING



<https://www.gimp.org>

SOFTWARE

GRAPHIC PRODUCTION



<https://inkscape.org/de/>

AUDIO EDITING



<http://www.audacity.de>

SOFTWARE

OFFICE PROGRAMMES



<http://www.libreoffice.org>

EBOOK-EDITOR



<https://sigil-ebook.com/>

CODE SHARING



<https://github.com/>

SOFTWARE

Making your work open

Open Education Licensing (OEL) Toolkit

<http://www.oel.edu.au/>

If you work for an Australian higher education institution, bookmark the Open Education Licensing (OEL) Toolkit – it provides plain language guidance based on your local policies and needs to help choose the best licence. It does so by asking a series of questions about the types of resources you would like to use, and what you'd like others to be able to do with your work. The result is some guidance on selecting a licence.

Please note that the Toolkit provides guidance only – you should always double-check the requirements of your own institution as this does not replace legal advice.

On the reverse of this card, you will find a 'Continuum of openness' that considers the legal, technical, and accessible qualities of your OER. Resources described by the indicators at the top of the continuum are 'more open' than those lower on the chart. In essence, the more open a resource is, the easier others will be able to reuse, repurpose, remix, and revise your work – and provide you with credit as the creator of the resource.

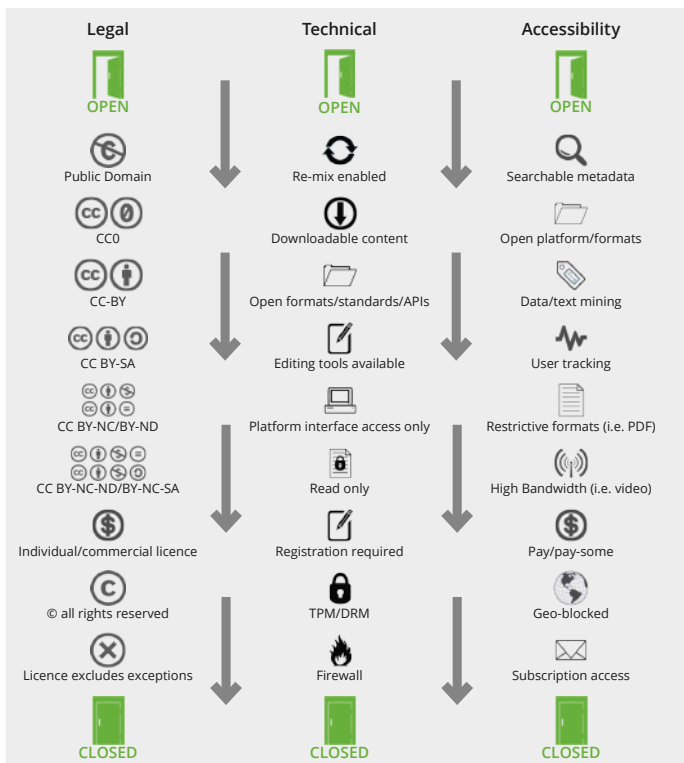


Image attribution: Continuum of openness, from the Open Education Licensing Toolkit (<http://www.oel.edu.au/resource/>), used under a CC-BY-SA 4.0 Unported Licence (<https://creativecommons.org/licenses/by-sa/4.0/>)

Advanced OER Search Tools

Google Images (https://www.google.com/advanced_image_search) and **Flickr** (<https://www.flickr.com/search/advanced/>) provide advanced search features that allow you to filter your search exclusively to open licenced and public domain content.

ImageCodr (imagecodr.org) is a tool that uses the web link to the Flickr image and then generates a good practice attribution.

The Flickr CC Attribution Helper

(<https://cogdog.github.io/flickr-cc-helper/>) provides an attribution “bookmarklet” tool that you can add to your browser to generate attributions.

OER Commons (oercommons.org) is a global repository of open content. You can search by discipline, year of study, resource format, and licence type.

BC Campus Open Texts (<https://open.bccampus.ca/find-open-textbooks>) and **The Open Textbook Network** (<https://open.umn.edu/opentextbooks>) are collections of hundreds of open textbooks that can be freely assigned (or revised) for courses.

Creative Commons Search (<https://search.creativecommons.org>) is a meta search tool that allows you to search for OER. A new beta version of CC Search is available at <https://ccsearch.creativecommons.org>.

The Harvard Law School Library

(<http://guides.library.harvard.edu/c.php?g=310751&p=2072816>) provide an excellent list of CC and Public Domain resources.

Partnering with students

Many university courses assign proprietary textbooks as learning materials. A number of equity issues with this approach have been identified (<http://www.studentpirgs.org/reports/sp/access-denied>).

However, there are some interesting alternative approaches to the proprietary textbook model that may involve students to create open learning resources; for example:

Students review open content

Dr Badri Basnet (University of Southern Queensland) realised that his courses required an expensive licence for proprietary software. Switching to a free open source software (FOSS) required a range of new instructional materials. Dr Basnet designed and developed a suite of instructional videos that focused on applied use of the software – and students have continued to offer suggestions for improvement every semester, including ideas about how to present complex concepts to their peers.

Students as authors of learning materials

James Neill's (University of Canberra) course needed a new textbook – one that could easily be distributed, updated, and engaged with by students. Over a single semester, students in his course designed, developed, and refined an open textbook that could be used by future students – who would continue to not only access their learning resources for free, but were also able to update, modify and distribute the work legally. https://en.wikiversity.org/wiki/Activities,assignments_and_assessment/Student-generated-textbook

What is Creative Commons licensing?

Creative Commons Australia factsheets

<https://creativecommons.org.au/learn/fact-sheets>

The Conversation Explainer: Creative Commons

<https://theconversation.com/explainer-creative-commons-21341>

Creative Commons Open Affiliate Network

<https://creativecommons.org/about/global-affiliate-network/>

What are OER?

From Creative Commons:

https://wiki.creativecommons.org/wiki/What_is_OER%3F

Defining the “Open” in Open Content and Open Educational Resources:

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

Iterating toward openness by David Wiley: <https://opencontent.org/blog/>

Open Educational Resources: A Catalyst for Innovation

http://www.oecd-ilibrary.org/education/open-educational-resources_9789264247543-en

The JISC OER InfoKit and Guide

<https://openeducationalresources.pbworks.com/w/page/24836480/Home>

Information on Open Education

Information by the global network for open education

<http://www.oecconsortium.org/info-center/>

OpenEd OZ, a Federally-funded Australian project that examined the state of OER nationally, includes case studies from across the globe

<http://openedoz.org>

Go further

Australian research

Albion, P., Jones, D., Campbell, C., & Jones, J. (2017). Open Educational Practice and Preservice Teacher Education: Understanding past practice and future possibilities. In P. Resta & S. Smith (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference* (pp. 798-806). Austin, TX, US: AACE.

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James, R. & Bossu, C. (2014). Conversations from south of the equator: Challenges and Opportunities in OER across Broader Oceania, *RUSC Universities and Knowledge Society Journal*, 11 (3), 82-95.

Reushle, S., Antonio, A., & Keppell, M. (2016). *Open Learning and Formal Credentialing in Higher Education: Curriculum Models and Institutional Policies* (pp. 1-343). Hershey, PA: IGI Global. doi:10.4018/978-1-4666-8856-8

Smyth, R., Bossu, C., & Stagg, A. (2016). Toward an Open Empowered Learning Model of Pedagogy in Higher Education. In S. Reushle, A. Antonio, & M. Keppell (Eds.), *Open Learning and Formal Credentialing in Higher Education: Curriculum Models and Institutional Policies* (pp. 205-222). Hershey, PA: IGI Global. doi:10.4018/978-1-4666-8856-8.ch011

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Udas, K., Partridge, H., & Stagg, A. (2016). Open education practice at the University of Southern Queensland. In: *Open Education: International Perspectives in Higher Education* (pp. 321-341). Cambridge, US: Open Book Publishers.

Global research

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McGreal, R., Kinutha, W., & Marshall, S. (2013). *Open Educational Resources: Innovation, Research and Practice. Perspectives on Open and Distance Learning*. Vancouver, CA: Commonwealth of Learning and Athabasca University.

Wiley, D., Bliss, T. J., & McEwen, M. (2014). Open Educational Resources: A Review of the Literature. In J. M. Spector, M. D. Merrill, J. Elen, & M. J. Bishop (Eds.), *Handbook of Research on Educational Communications and Technology* (pp. 781-789). New York, US: Springer.

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All images

www.pexels.com

Audacity Logo

For Vaughan Johnson (initial upload to SVN) – Part of Audacity source code released under GPLv2., GPL,

<https://commons.wikimedia.org/w/index.php?curid=22458728>

Free Music Archive Logo

By Bronwyn Bishop –

<https://commons.wikimedia.org/wiki/File:Free-music-archive.jpg>

Gimp Logo

By Tuomas Kuosmanen – Wilber Construction Kit, GPL,

<https://commons.wikimedia.org/w/index.php?curid=15273719>

Inkscape Logo

For Andrew Michael Fitzsimon –

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<https://commons.wikimedia.org/w/index.php?curid=34369081>

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