

Understanding OER





Need to know more about Open Educational Resources (OER)? There is currently a lot of buzz about OER. Educators being compelled by the argument for using existing OER and releasing their own materials with an open licence. As a result, the number of resources being shared under an open licence has increased exponentially. In May 2017, Creative Commons estimated that there were 1.4 billion open resources. But, what exactly are OER and do they live up to the hype?

In the following topics, we will explain the concept and help you understand OER. These OER topics have been divided into two tracks designed to support different orientations:



Practice Track

Aimed at people who will be interacting with OER directly, such as course and materials developers, teachers and lecturers, who are essentially OER users. These topics aim to provide skills to find, evaluate, adapt and distribute OER.



Trends Track

Aimed at people who are interested in OER as a movement and are wanting to investigate how best to encourage the growth of local, national, and regional communities of practice. This would include policy makers, education support staff, and researchers. Topics here focus on changing patterns of use, identifying exemplary OER initiatives, developments in open licensing, and adoption rates for African academics and institutions.

The tracks provide a suggested route through the topics, but you can work through both tracks in whatever way suits your needs best.





There are many definitions for OER but, we have settled on:



'Open Educational Resources are teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property licence 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'.¹

Note the emphasis is ours, as we feel strongly that OER should:

- be free
- not require permission to use
- allow new users to adapt and find new ways to use resources

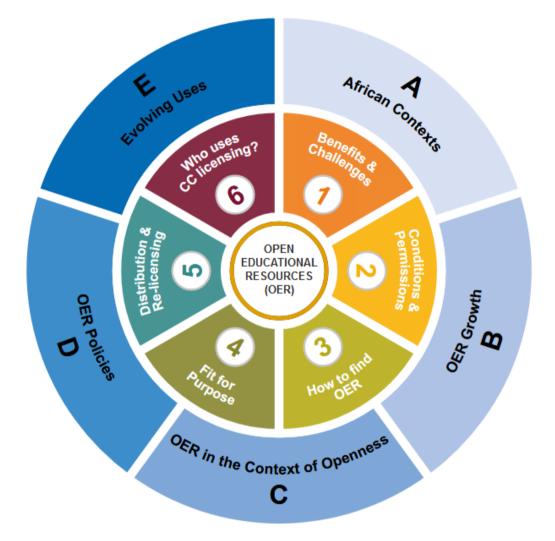
If used correctly, OER can make a significant contribution to advancing the principles of open learning (although many people in the OER community make the mistake of assuming that OER and open learning or 'open education' are similar concepts). Open learning is an approach to all education that enables as many people as possible to take advantage of affordable and meaningful educational opportunities throughout their lives through: sharing expertise, knowledge, and resources; reducing barriers and increasing access; and acknowledging diversity of context. OER can play a significant role in bringing this idea to life. In African higher education, this is a compelling reason to engage with OER.

¹ Hewlett Foundation, OER Defined, http://www.hewlett.org/strategy/open-educational-resources/.



Selecting a Track or Specific Topic

Use the image map below and select either one of the tracks or, if you prefer, individual topics.









1] Benefits and Challenges of OER

What is the value proposition of OER? In this topic, we will investigate both the benefits and challenges of using OER.

Benefits

In the introduction, we mentioned that OER should be considered a subset of a broader term, open learning. Key open learning principles include:

- Learners are provided with opportunities and capacity for lifelong learning.
- Learning processes centre on the learners and the contexts of learning, build on their experience and encourage active engagement leading to independent and critical thinking.
- Learning provision is flexible, allowing learners to increasingly determine where, when, what and how they learn, as well as the pace at which they will learn.
- Prior learning and experience is recognized wherever possible; arrangements for credit transfer and articulation between qualifications facilitate further learning.
- Providers create the conditions for a fair chance of learner success through learner support, contextually appropriate resources and sound pedagogical practices.
- These principles should be applied to develop meaningful educational opportunities, regardless of the 'mode of delivery' used. Sometimes learners do not enjoy proximity to conventional learning centres, or if they do have access to classes and courses near to the place where they live, they may be working, or have family responsibilities which render them unable to attend fixed face-to-face classes at a centralised venue. Or, they may simply prefer to study in their own environment, at their own pace. To provide access for these learners, education programmes should be designed using open learning principles.

The use of OER can support implementation of the principles of open learning if used creatively and thoughtfully. After all, OERs:

- are free
- are digital, allowing access via the internet, and are not geographically bound
- can be adapted allowing others to repurpose for new uses
- provide access to huge amounts of data and information via OER repositories and search tools
- can, if structured carefully, offer students the ability to study at their own pace

The two lists above shows how OER can support open learning. However, OER can be harnessed to support any model of education and the benefits can be experienced by all educators.

Examples of the potential benefits offered by OER, drawn from the OER Africa database, include:



- Bunda College of Agriculture *Communication Skills* textbook, created by adapting and combining a number of OER to produce a free student textbook.
- Kamuzu College of Nursing *Counseling by Caregivers, Nurses and Midwives*, a course developed by adapting OER to work for a Malawian context.
- United States International University (USIU) Agribusiness Course, created by different faculties pooling their expertise to support Kenyan farmers in becoming entrepreneurs by openly licensing their various contributions.

Challenges

Despite the noble intentions described above, using OER is not always straightforward. There are various challenges that face practitioners when it comes to harnessing OER. Frustrations for users of OER often include:

- **Sourcing appropriate OER** This is an issue because there is no single repository for OER. They are scattered across the internet. (To find ways around this problem, see Topic 3.)
- Understanding open licences Not everyone is familiar with Creative Commons open licences and what they permit. (To overcome this problem, see Topic 2.)
- Adaptation of OER requires new skills To adapt and repurpose OER, the practitioner needs practice in revising and remixing resources, in addition to basic ICT skills.
- **Traditional mindsets** Many educators are uncomfortable or feel it is wrong to use other people's work and they choose to protect, rather than share, their own resources.
- Access to ICT Robust internet connectivity and good access to ICT are essential to access and adapt OER (even when the intention is to supply these resources to students in printed form).
- Incentives Universities seldom incentivize course creation, so many educators spend relatively little time preparing their materials due to competing priorities.

During OER Africa's support to African institutions, we have often been confronted with these frustrations. See this report from our archive, based on experiences in Malawi, particularly the section on 'Lessons Learned', which highlights key challenges.



(i) Taking into account the challenges mentioned above, ascertain the state of readiness of your institution to engage with OER. You can use this OER Institutional Analysis template to assist in this exercise with a representative group from your institution.
(ii) Which henefits mentioned above relate to your content?

(ii) Which benefits mentioned above relate to your context?



2] Conditions and Permissions

We return to the William and Flora Hewlett Foundation (2016) OER definition provided in the introduction and unpack the implications of the statement with respect to realizing the related conditions and permissions.

'Open Educational Resources are teaching, learning, and research resources that reside in the public domain or have been released under an **intellectual property licence** 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.'

Why Open Licensing?

The term 'intellectual property licence' may sound daunting, but the concept and practice of sharing OER using an open licence is an advantage as it provides resource creators with control over how their work is accessed, used, and disseminated by others. This is important to academics at higher education institutions who may place great value on retaining their own (or their institutions') intellectual property rights, while sharing their work with others.

The most common form of legally sharing your own educational resources openly is to use the Creative Commons framework of licences. The organization 'provides free, easy-to-use copyright licences to make a simple and standardized way to give the public permission to share and use your creative work – on conditions of your choice'. So, we need to understand these licences to apply them to our own work and to find out if and how we may use the work of others.

What are the Creative Commons licences and how do I recognize them?

CC licence permissions are made up of one or more component conditions:

•	Attribution (BY) You require that others who use your work in any way must attribute it – that is, must reference the work, giving you credit for it – the way you request, but not in a way that suggests you endorse them or their use of the work. If they want to use your work without giving you credit or for endorsement purposes, they must obtain your permission first.
Ì	Non-Commercial (NC) You permit others to copy, distribute, display, perform, and (unless you have chosen No Derivatives) modify and use your work for any purpose other than commercially. If they want to use your work commercially, they must obtain your permission first.
	No Derivative Works (ND) You permit others to copy, distribute, display and perform only original copies of your work. If they want to modify your work, they must obtain your permission first.
0	Share Alike (SA) You permit others to copy, distribute, display, perform, and modify your work, provided they distribute any modified work on the same licence terms. If they want to distribute modified works under other terms, they must obtain your permission first.



Some of these conditions can be used in conjunction with each other and some are mutually exclusive. For example, if you are not allowed to modify an OER (ND), then there is no relevance to the sharing condition (SA).

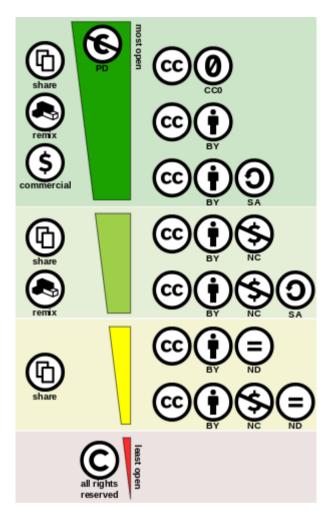


Image Source: Creative Commons

The above diagram shows some valid licence combinations as depicted by Creative Commons, ranging from most open (free cultural work) to least open (most restrictive).

The CC licences on the OER you create or find should then incorporate and display the conditions, using the appropriate CC logo for easy recognition, as shown below.

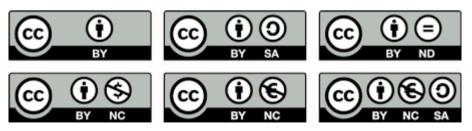


Image source: Creative Commons



Let's illustrate, using an open video resource:



Creative Commons Licences Explained 2011 (5.32 min)

OER COPYRIGHT AND LICENSING TOOLKIT

A guide for higher education institutions interested in creating and using Open Educational Resources

February 2012

An informative CC licensing document is available on the OER Africa database: *OER Copyright and Licensing Toolkit*.

This toolkit is aimed at higher education stakeholders who are working with OER. It explains copyright and describes the different licensing options available to the author/creator of a work. Whether you are wanting to license your own work or are tasked with clearing copyrighted documents, you will find comprehensive information about the basic concepts in copyright and licensing, the types of open licences that exist, and tools and techniques to provide support.

Permissions

What do all these open resources mean for us in terms of use? Essentially there is a group of permissions to guide us. David Wiley has clarified this for the OER community by developing what he has termed the '5Rs' of Open Content and OER. This is a framework of permitted activities when working with OER under the CC licence conditions:

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Retain – the right to make, own, and control copies of the content

Reuse – the right to use the content in a wide range of ways (e.g., in a class, in a study group, on a website, in a video)

Revise – the right to adapt, adjust, modify, or alter the content itself (e.g., translate the content into another language)

Remix – the right to combine the original or revised content with other open content to create something new (e.g., incorporate the content into a mashup)

Redistribute – the right to share copies of the original content, your revisions, or your remixes with others (e.g., give a copy of the content to a friend)

Below is a short video summary of these permissions:



'5Rs' of Open Content and OER (0.27 min)



- (i) Do you need any clarification around open licensing? See Creative Commons licensing for more detailed explanations of the Creative Commons licences.
- (ii) Are you clear on what the permissions involve?



3] How to find OER

Where do you find OER? There is not an online 'one-stop shop' for OER, no single repository where they are stored. Instead they are scattered across the internet, often stored within institutional repositories or organizational websites. If you are going to use OER, then you need to know how best to search for them and identify where relevant resources for your particular discipline are most likely to be found. In this topic, we will investigate OER search techniques.

Search Techniques

There are a few dedicated web tools designed to find OER.

Dedicated Search Tools

Several search engines exist that are designed to search specifically for OER.

- CC Search is a customizable search engine designed and hosted by Creative Commons that offers image, media, video, music, and web content search tools.
- OER Commons can be used to find free-to-use teaching and learning content from around the world. It also provides tools to organize high school lessons, and college courses based around core OER. OER Commons also hosts an OER Evaluation Toolkit.
- OER Africa has a searchable database that focuses specifically on OER generated by African contributors.

Besides these specialized search tools, you can also use Google's advanced search, which allows the user to adjust the usage rights field to receive results that include only openly licensed resources. If you would like to improve your searching techniques, the Google Power Searching self-paced online courses are recommended, as they provide a quick and effective path to learn new tips and tricks. The example below takes you through the steps required to filter results according to licence.



Google Advanced Search

Google is one of the most commonly used search engines in the world, but did you know you can use Google to find Creative Commons (CC) licensed content? Using Google Advanced Search, you are able to search for CC material by keyword and refine your results to show only material available under certain CC licences.

Step 1: Start a Google Advanced Search.

Access Google's Advanced Search options directly by typing www.google.com/advanced_search into the address bar on your web browser or use the link above.

boogle		
Advanced Search		
Find pages with		
all these words:		
this exact word or phrase:		
any of these words:		
none of these words:		
numbers ranging from:	to	

Step 2: Filter results based on what you want to do. By default, Google search results are not filtered by licence. To filter your search results, look for the 'Usage rights' field. It is the last editable item on the page. Select the option from this menu that is appropriate to your needs. All CC licences grant the user the right to use and distribute the licensed content. Therefore, if you select the 'free to use or share' option, your search will return content available under any of the CC licences.

If you restrict the results to material that **can be used commercially**, you will exclude content under a NonCommercial licence (e.g. Attribution-NonCommercial, Attribution-NonCommercial-Share Alike or Attribution-NonCommercial-No Derivative Works). Likewise, selecting the **'free to use share or modify'** option will return results that you can legally remix (i.e. that do not have the No Derivative Works restriction). If you select **'free to use, share or modify, even commercially**', you will only return results under the two CC licences that allow both adaptation and commercial use (i.e. Attribution and Attribution-Share Alike).

Step 3: Search for keywords. Enter your keyword in the field at the top of the page and click 'Advanced Search' to begin your search. You can also combine Google's CC search tool with other fields on the Google Advanced search page to refine your search even further. For example, you can search for CC within a site or domain, or in a specific language, or in a specific file format.

Adapted from 'How to find Creative Commons materials using Google for Teachers and Students' CC BY



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You can view a video on OER Search Techniques:

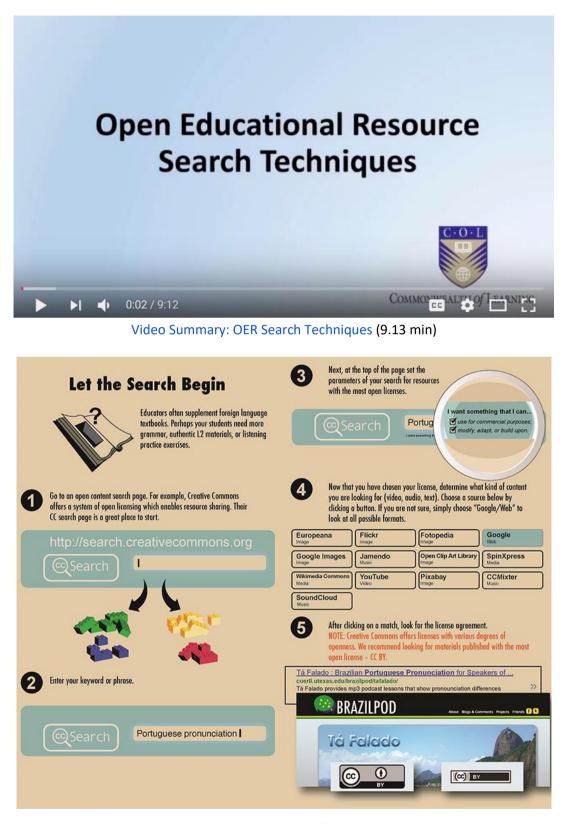


Image source: www.coerll.utexas.edu



Well-known Repositories



The following list identifies useful repositories where you can look for OER. It is worth familiarizing yourself with the different types of OER offered by each repository.

Open Courseware (OCW)

Some well-known institutions that offer open courses are:

- Massachusetts Institute of Technology Open Courseware
- Open Michigan
- John Hopkins School of Public Health
- Class Central Nottingham Trent University (NTU) Open Courses (requires login)
- Open Yale

Open Repositories with an African Focus

- OER Africa
- African Virtual University
- National Open University of Nigeria
- Kwame Nkrumah University of Science Technology OCW
- University of Cape Town Open UCT
- AgShare
- African Health OER Network
- African Teacher Education Network
- Teacher Education in Sub-Saharan Africa (TESSA)
- University of Western Cape School of Public Health
- University of South Africa (Unisa) Open

OER Short Courses/Resources

- The Open University UK OpenLearn
- Saylor Academy
- Khan Academy

Creative Commons hosts a comprehensive list of repositories for specific resources and media types.





Self-Reflection Activity

(i) Are these searching tips sufficient for you to have located open educational resources relevant for your discipline? Try out the Power Searching with Google course and/or some of the steps recommended.

(ii) Make a list of repositories that you have found most useful for your course areas.



4] Fit for Purpose

When we have identified an OER of interest, what steps do we need to take to ensure that it is appropriate for our context and is of suitable quality for our purpose?

You should take the same steps that you do to ensure that any learning resource you want to use is fit for purpose, regardless of how open or closed its licence is. The process of ensuring the quality of our learning resources should be revisited from time to time and would include using institutional quality assurance processes for courses, as well as our own evaluation of individual resources.

Evaluating Resources

One way of ascertaining fitness for purpose is by using an evaluation toolkit provided by the Achieve organization. This tool is hosted at OER Commons and the evaluation system comprises eight rubrics addressing various aspects of quality that are appropriate to an open learning resource.

The following rubrics are included in the evaluation toolkit:

- Rubric I: Degree of Alignment to Standards
- Rubric II: Quality of Explanation of the Subject Matter
- Rubric III: Utility of Materials Designed to Support Teaching
- **Rubric IV**: Quality of Assessment
- Rubric V: Quality of Technological Interactivity
- Rubric VI: Quality of Instructional Tasks and Practice Exercises
- Rubric VII: Opportunities for Deeper Learning
- Rubric VIII: Assurance of Accessibility

The Common Core Alignment and OER Evaluation Tool is found on all Resource Pages in OER Commons. You can use the tool to align appropriate resources to the Common Core State Standards and to evaluate the resource against certain aspects of quality.

Becoming Proficient at Resource Evaluation

OER Commons also offers training modules (OER Academy Series) to provide training on how to use its OER Evaluation Tools:

- OER Academy: OER Quality Evaluation Module 1 'provides participants with an exploration of OER quality evaluation. We have designed these modules to first spark the learner's interest in the topics covered and then dig deeper into the content through presentations, storytelling, and demonstrations of the tools. We will offer opportunities for learners to practice exploring the resources and tools, and reflect on how they might use them in their work.'
- OER Evaluation Tools Module 2 'provides participants with an introduction to OER evaluation tools.'
- Another toolkit available is UKOER Synthesis and Evaluation (JISC HE Academy). The toolkit is made up of three elements:
 - Information and resources to support your evaluation activities;



- An interactive tool to guide you through the Evaluation and Synthesis framework, providing an opportunity to submit findings, observations and links to evidence, feeding this back to you for inclusion in your project reporting mechanisms;
- Examples of evaluation materials, instruments and reports from other UKOER projects.

Quality Guidelines

Useful guiding resources on quality standards include:

- Quality Principles for Digital Learning Resources (BECTA, n.d.)
- Quality Assurance Guidelines for OER TIPS Framework v2 (CEMCA, 2015)
- Adapting Quality Assurance to Innovative Programs (Uvalić-Trumbić, S. & Daniel, J., 2016)
- Course Design Rubric Standards (Quality Matters, 2014)

Some resources on developing good quality resources:

- Five best practices for creating quality learning materials (Digital Book World, 2016)
- Developing Curriculum and Learning Resources Teacher Development Programme (TDP, 2015)
- How can we ensure good quality learning? Course Design and Materials Development Guide (Saide, 2013)



Self-Reflection Activity

(i) How do the elements in the various quality evaluation toolkits relate to quality assurance practices at your institution?



5] Distribution and Re-licensing

The video below provides some tips on choosing a Creative Commons Licence using the Creative Commons Licence Generator.



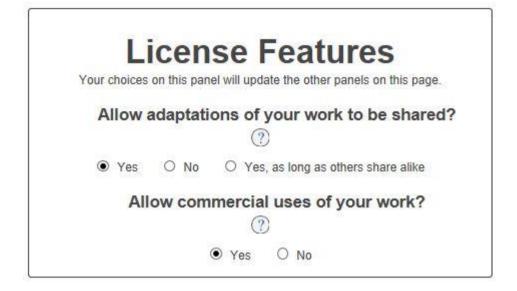
Choosing a Creative Commons License (6.05 min)

Assume you have a resource you want to release with an open licence. How do you go about doing this?

Go to https://creativecommons.org/choose/

- 1. In the first panel, 'Licence Features', answer these two questions by selecting the appropriate radio button:
 - a. Allow adaptations of your work to be shared?
 - b. Allow commercial uses of your work?





- 2. Your licence appears in the panel 'Selected Licence'. If you have selected a combination of rights that is considered open, the panel displays the 'This is a Free Culture Licence', however, if your selection of rights is restrictive, it says, 'This is not a Free Culture Licence.'
- 3. For others to attribute their use of your work, you need to fill in the next panel, 'Help others attribute you!' Click on the blue hyperlink and six fields are revealed.
 - a) The first is the 'Title' of your resource.
 - b) The second field, 'Attribute Work to Name', asks you to identify the copyright holder, either an individual or an organization.
 - c) Insert the copyright holder's URL or web address in the third field.
 - d) Should you have adapted another's work, then insert their URL in the fourth field so that it can link back to the original resource.
 - e) Select the resources type in the fifth field.
 - f) Finally, say whether the licence will be inserted on either an HTML page or on something not connected e.g. a printed document.
- 4. Now you can select which size licence plate you would like, either normal or compact.
- 5. The final step is to copy the code and paste it into the resource itself. If your resource exists on the web, then the licence is interactive with hyperlinks.



(i) Does your institution have a default CC licence? If so, make sure that you know how to accommodate licences of the various OERs that you may reuse in a new resource intended for publishing.



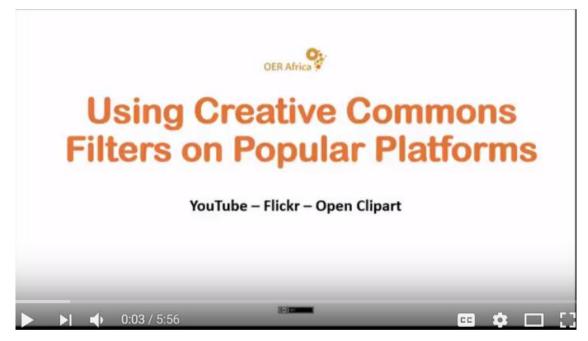
6] Who uses Creative Commons licensing?

You may have already discovered websites that provide access to resources, some of which are open, but you want a way to filter out the proprietary resources and leave only those resources that are free-to-use OER.

Some sites, like Wikipedia, offer everything under one Creative Commons licence. In Wikipedia's case, all text is licensed under a CC BY SA licence. Open ClipArt offers everything under a CC Zero licence, which is basically Public Domain and allows users to take and use the artwork as they need.

Many resource-sharing websites provide the opportunity to filter search results according to various CC licences, such as Flickr (photographs), YouTube (video) and SlideShare (presentations) and Google Advanced Search (web resources both text and images).

The following video provides some guidance about how these filters work. Be aware that, on sites such as these, you need to check the licence conditions to reuse the resource, even though the resource may appear to be freely available.



Using Creative Commons Filters on Popular Platforms (5.56 min)







Self-Reflection Activity

- (i) Can you decipher the terminology these filters often use? For example, which Creative Commons licences are assumed under the following descriptions drawn from Google Advanced Search usage rights filter?
 - 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





A] African Contexts

The OER World Map provides a picture of the extent and activity of the global OER movement. Information is collected on people, organizations, services, projects, and events related to OER.



Image source: https://oerworldmap.org/

While OER activity on the African continent appears sparse in comparison to some other continents, there is growing uptake of OER in Africa. Global projects that include African countries bring together existing expertise and interested parties who see the benefits of working with OER in Africa. OER Africa is in a unique position to support these efforts within the African environment.





'OER in Africa' (11.44 min)

Recent and ongoing sub-Saharan Africa OER projects and organizations include:

- Saide's OER Africa initiative supporting higher education institutions across Africa in the development and use of OER to enhance teaching and learning; particular areas of focus include the Health OER network, Teacher Education and Agricultural Education
- African Storybook project open access to picture storybooks in the languages of Africa
- ROER4D project a 'global south' OER research network including researchers in Southern, East and West Africa
- OER4Schools interactive teaching with and without ICT in sub-Saharan Africa
- Siyavula science and mathematics textbooks for the South African curriculum
- TESSA Teacher Educators in Sub-Saharan Africa

Some examples of Sub-Saharan African Universities embracing OER:

- Africa Nazarene University (ANU) Kenya
- African Virtual University (AVU) Kenya
- Cape Peninsula University of Technology South Africa
- Kwame Nkrumah University of Science and Technology (KNUST) Ghana
- National Open University of Nigeria (NOUN) Nigeria
- Open University of Tanzania (OUT) Tanzania
- University of Cape Town (UCT) South Africa
- University of the Free State (UFS) South Africa
- University of Pretoria, Veterinary Sciences Faculty South Africa
- University of South Africa (UNISA) South Africa
- University of the Western Cape, School of Public Health (UWC) South Africa





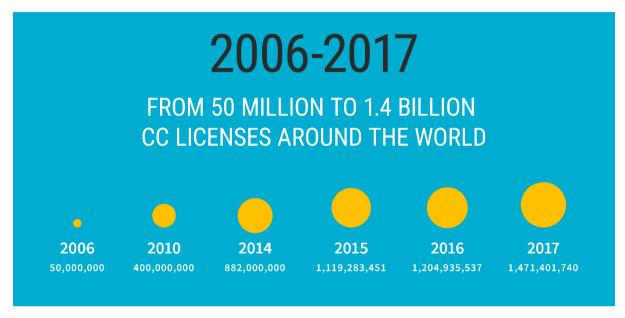
Self-Reflection Activity

- (i) If you are from a non-African institution, what topic or theme linked to Africa would be of interest to you, your colleagues, and/or your students?
- (ii) If you are from an African institution, can you think of a topic/subject/course that has a distinctively African perspective and would be of interest to a global audience?
- (iii) Does it contain unique materials that could be shared under an open licence?
- (iv) What would need to happen to do this?



B] OER Growth

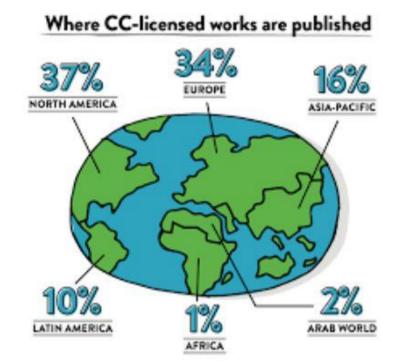
There has been an explosion of OER in recent years. One way to gauge growth is to keep an eye on the number of Creative Commons licences that are being issued. According to the Creative Commons website, there were 1.4 billion resources at the end of 2017.



Access their website for the latest figures at https://stateof.creativecommons.org/.

The latest State of the Commons report does not give statistics by region as was done previously, but, in the 2015 report, Africa trailed significantly behind the rest of the world and it is unlikely that this has changed much.





In the 2016 report, a few quality African open initiatives were highlighted, such as Saide's African Storybook Initiative.



- (i) Are there any potential authors at your institution who would consider releasing teaching materials with a Creative Commons Licence?
- (ii) Is there a way your institution might share some its more generic courses, or perhaps even a signature course to garner exposure for the quality work being developed at the institution?





C] OER in the Context of Openness

It can be argued that OER is a subset of a wider concept, open learning. If used correctly, OER can make a significant contribution to advancing the principles of open learning (although many people in the OER community make the mistake of assuming that OER and open learning or 'open education' are similar concepts). Open learning is an approach to all education that enables as many people as possible to take advantage of affordable and meaningful educational opportunities throughout their lives through: sharing expertise, knowledge, and resources; reducing barriers and increasing access; and acknowledging diversity of context.

To better understand OER's relationship with 'openness', watch this video.



Why Open Education Matters (2.49 min)

Key open learning principles include:

- Learners are provided with opportunities and capacity for lifelong learning.
- Learning processes centre on the learners and the contexts of learning, build on their experience and encourage active engagement leading to independent and critical thinking.
- Learning provision is flexible, allowing learners to increasingly determine where, when, what and how they learn, as well as the pace at which they will learn.
- Prior learning and experience is recognized wherever possible; arrangements for credit transfer and articulation between qualifications facilitate further learning.
- Providers create the conditions for a fair chance of learner success through learner support, contextually appropriate resources and sound pedagogical practices.

These principles should be applied to develop meaningful educational opportunities, regardless of the 'mode of delivery' used. Sometimes learners do not enjoy proximity to conventional learning centres, or if they do have access to classes and courses near to the place whether they live, they may be working, or have family responsibilities which render them unable to attend fixed face-to-face classes at a centralised venue. Or, they may simply prefer to study in their own environment, at their own pace. To provide access for these learners, education programmes should be designed



using open learning principles. The transformative educational potential of OER revolves around three linked possibilities:

- Increased availability of high quality, relevant learning materials can contribute to more productive students and educators. Because OER removes restrictions around copying resources, it can reduce the cost of accessing educational materials. In many systems, royalty payments for text books and other educational materials constitute a significant proportion of the overall cost, while processes of procuring permission to use copyrighted material can also be very timeconsuming and expensive.
- 2) The principle of allowing adaptation of materials provides one mechanism amongst many for constructing roles for students as active participants in educational processes, who learn best by doing and creating, not by passively reading and absorbing. Content licences that encourage activity and creation by students through re-use and adaptation of that content can make a significant contribution to creating more effective learning environments.
- 3) OER has potential to build capacity by providing institutions and educators access, at low or no cost, to the means of production to develop their competence in producing educational materials and carrying out the necessary instructional design to integrate such materials into high quality programmes of learning.

Deliberate openness thus acknowledges that:

- Investment in designing effective educational environments is critically important to good education.
- A key to productive systems is to build on common intellectual capital, rather than duplicating similar efforts.
- All things being equal, collaboration will improve quality.
- As education is a contextualized practice, it is important to make it easy to adapt materials imported from different settings where this is required, and this should be encouraged rather than restricted.



- (i) How 'open' is your institution? It's interesting to note that even some 'open' universities are not so. Consider these questions:
 - Are the courses at your institution free or at least subsidised?
 - Do students have to come to campus to learn?
 - Can students learn anytime or are there restrictions as to when courses are available?
 - Can students construct their own programmes from modules across faculties?
 - Can student take as long as they like to complete their studies?
 - Are the units transferable to other institutions?
 - Is your course content released with an open licence?



D] OER Policies

Creative Commons hosts an OER Policy Registry, 'a database of current and proposed OER policies from around the world. Here, anyone can easily share, update, and browse policies and legislation. In addition, they host supporting policy resources such as case studies and guides.' They believe that 'Sharing our collective knowledge of existing OER policies, in the same way we believe in sharing educational resources, will help advocates and policymakers further open policies worldwide.'

An institutional or country's policy on OER does not have to be a standalone policy. Quite often, the OER items are added to existing policies on Intellectual Property, ICT, eLearning, Human Resources, Quality Assurance, or Learning Materials Development. In addition, the policy may provide for open access to an institutional open repository containing licensed learning resources and open courses (internal and external), and research resources such as dissertations, thesis, and open access journals.

Many institutions prefer to have policy statements on OER worked into existing policies rather than develop a separate OER policy. Ideally, issues around intellectual property and openness should be worked into other policies where appropriate. This is true at both institutional and national levels.

OER Africa's website also includes an extensive collection of policies related to open licensing and OER that you can browse and download. These can be found here.



 With respect to policy, what would work at your institution? Would you develop a dedicated OER or open learning policy or, alternatively, integrate statements about OER into your Intellectual Property policy, ICT policy and other related policies?



E] Evolving Uses

The field of OER is a dynamic one and new uses for the resources are developing all the time. Some of these evolving uses become mainstream while others do not gain popularity. The reading list below provides access to some latest examples of how the field is evolving and includes highlights of some of these resource experiments:

- Cengage (N.D) Open Educational Resources (OER) and the Evolving Higher Education Landscape: White Paper.
- Commonwealth of Learning (2016) *Regional Consultations for the 2nd World OER Congress:* Background Paper.
- EDUCAUSE (2018). Seven Things You Should Know About Open Education: Content.
- EDUCAUSE (2018). Seven Things You Should Know About Open Education: Practices.
- ICDE (2018). Open Praxis. Selected Papers from the Open Education Consortium Global 2018 Conference. Vol. 10, no.2.
- ICDE (2017) Open Praxis. Selected Papers from the Open Education Consortium Global 2017 Conference. Vol. 9, no. 2.
- William and Flora Hewlett Foundation (2017). *Q* & *A* with *TJ* Bliss: It's an Exciting Time for Open Educational Resources.

Some interesting uses include:

- Collecting courseware from around the world and combining the courses into programmes and ultimately a university OERu (https://oeru.org/)
- The development of an online platform that encourages teachers to find and customise curriculum open content Gooru Platform (http://www.gooru.org/welcome/)
- Creating free and adaptable textbooks examples include Siyavula (https://www.siyavula.com/read) in Africa aimed at primary and secondary schooling and OpenStax aimed at College/undergraduate levels (https://openstax.org/)
- African Storybook Initiative translation tool on the website enables children's stories to be translated into other African languages

Useful websites to find a wealth of information on the theory and evolution of the OER movement include:

- OER Africa Collection of key resources since 2008 and saved them in the website database.
- OER Knowledge Cloud The UNESCO/COL Knowledge Cloud aims to enhance research opportunities on Open Educational Resources and related information by removing barriers, opening up scholarship and making research universally available.
- Examples of individuals who frequently comment on OER trends include Stephen Downes, David Wiley, Tony Bates and George Siemens.





(i) Can you identify one or more resource issues that your institution might solve by the innovative use of OER? Keep in mind that they are generally free, digital and adaptable.





This guide has been developed as a result of workshops held in collaboration with OER Africa higher education institutions over the last eight years. Thanks, particularly to Andrew Moore and Brenda Mallinson for the identification of useful tools and their insightful compilation of this resource.

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