# 2: Find OER for Teaching & Learning

We investigated Open Educational Resources (OER) and Creative Commons licensing in the first tutorial. Now, in this second tutorial (of four), let's put that knowledge to work. We will investigate how to search for and find OER, decipher the licence and ensure that there is an alignment with the MoPSE curriculum.

## INTRODUCTION

- Welcome and objectives
- Select search terms from syllabi

## GET PRACTICAL

- How to search for OER using Google
- Using Creative Commons search
- Search for open content on YouTube
- Search for content in open repositories

SUMMARY

# Welcome and objectives

## Welcome

We investigated Open Educational Resources (OER) and Creative Commons (CC) licensing in the first tutorial. Now let's put that knowledge to work. We will investigate how to search for and find OER, decipher the licences and then ensure that there is an alignment with the MoPSE curriculum.

## Objectives

On completion of this tutorial you will be able to:

### Outcome 1 - Refer to the official curriculm

Ensure OER search criteria align with the requirements of the **MoPSE curriculum**.

### Outcome 2 - Use different search tools to find open content

Search for open content using common tools and filters (such as on **Google Advanced Search** and the **YouTube Creative Commons** filter) as well as specialized services (such as **Creative Commons Search** to find open media).

### Outcome 3 - Peruse open repositories

Investigate well-known open **content repositories** that contain open resources (both institutional and global).

# Select search terms from syllabi

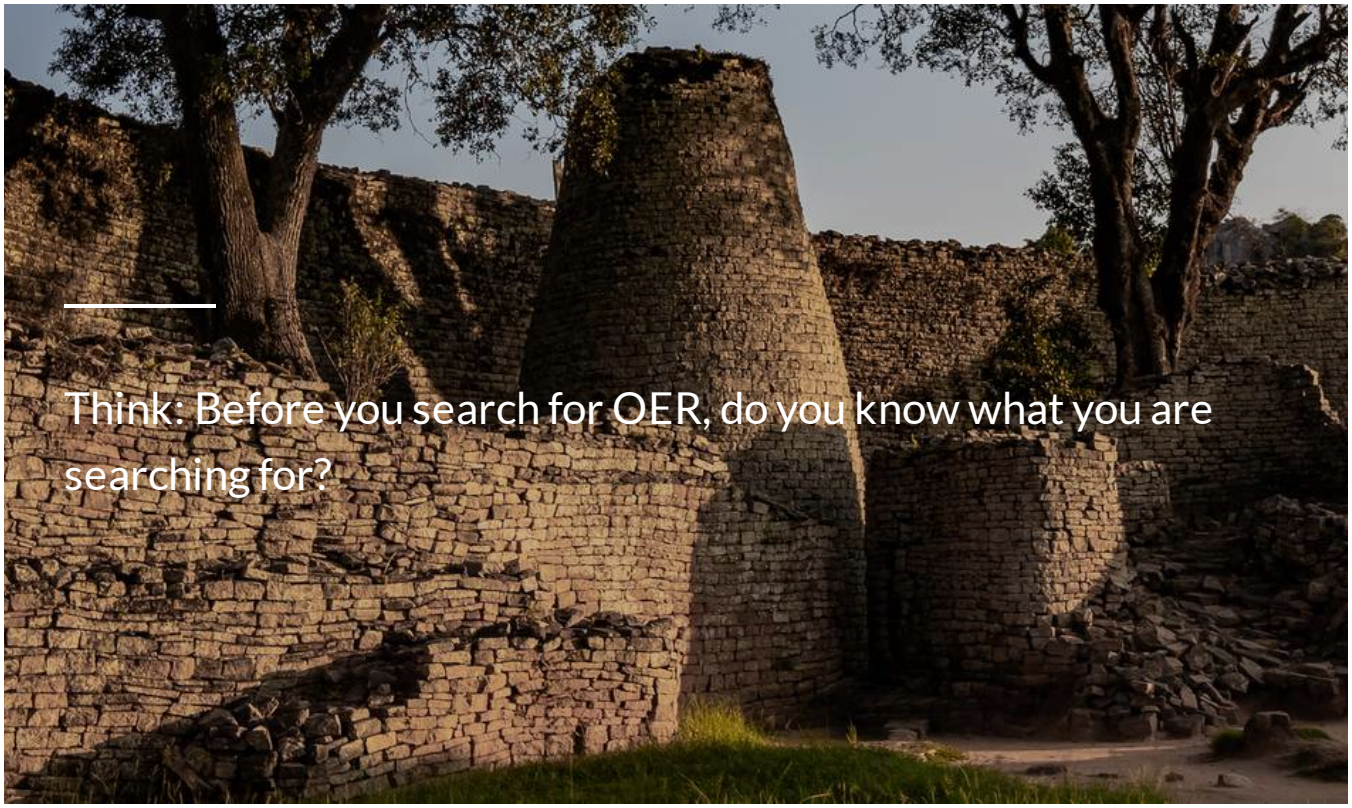
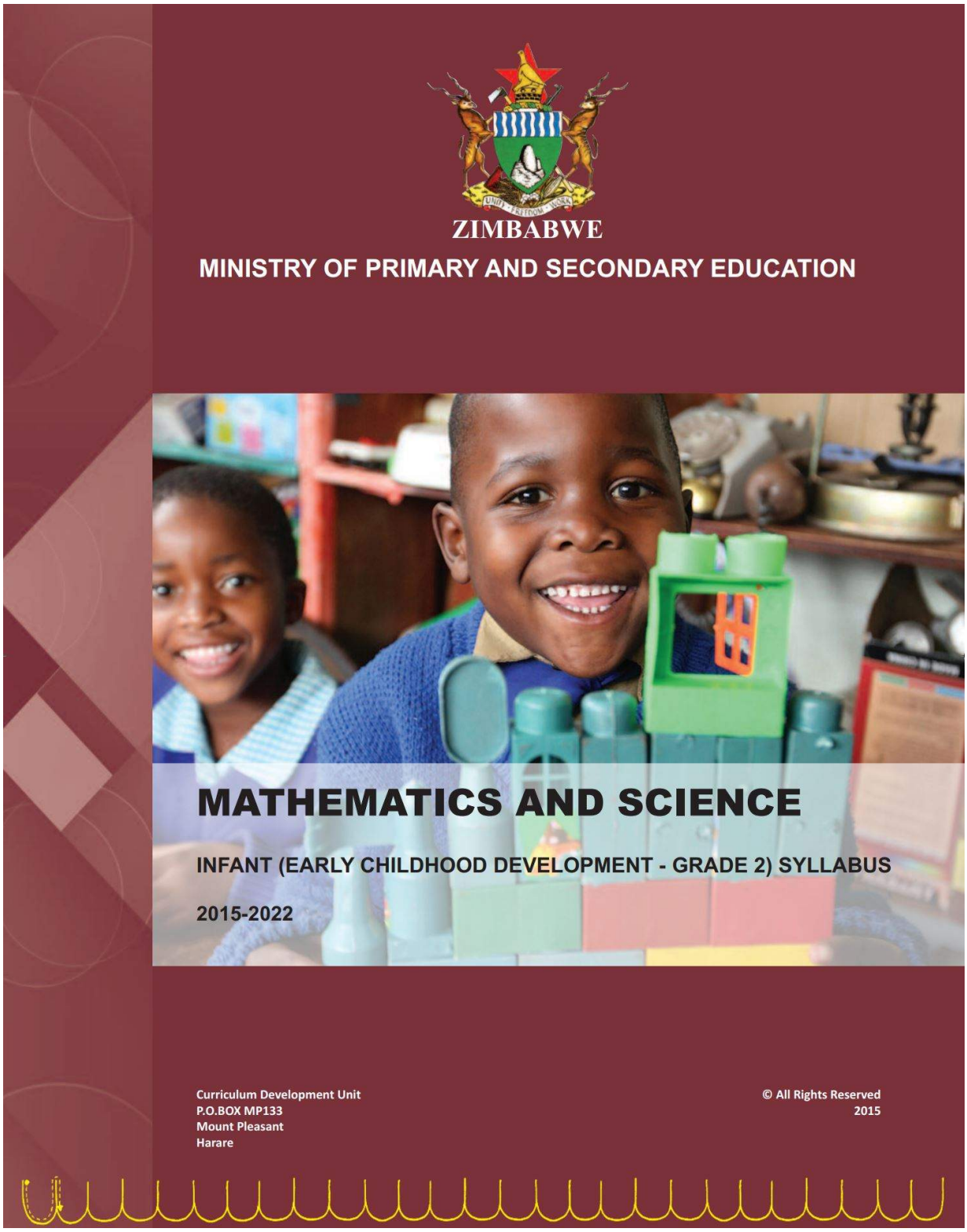



Image: andryn2006 on Flickr (CC BY-SA)

You will waste precious time searching blindly for OER to support your lessons. You need a specific focus to ensure you find useful resources, quickly and accurately. While you may have years of experience, it is still good practice to refer directly to the subject/learning area curriculum documents. What, for example, does the syllabus specifically require students to learn and do? Tailor your search according to the curriculum specific objectives.




The Ministry of Primary and Secondary Education (MoPSE) has developed an online portal where you can quickly and easily download the correct syllabus document. Visit:

https://mopse.online/

# Register and source the correct syllabus document

Here are a few steps to access, register and download the relevant documents on the MoPSE's EduConnect portal.

## Register on the portal

1. In your internet browser type in the following URL - https://mopse.online/ (or click the link) and navigate to the portal
2. Register on the site using the 'sign-up' link
3. Confirm your registration by clicking on the appropriate link sent to your email.

Video tutorial

## Download digital syllabi

1. Navigate to either the EduConnect site at https://mopse.online/ or the regular Ministry of Primary and Secondary Education site at http://mopse.co.zw/
2. Look for, and select, the 'Curriculum and syllabi' or 'Curriculum Framework' menu items on each site
3. Search for the syllabi you require and download the relevant digital copy.


Video tutorial

## Identify suitable search terms

After locating relevant syllabi documents, search and identify specific terms that can be used for a focused search for open resources to support your lessons. Consider the example below: this table appears on page 18 of the Geography Form 1-4 syllabus. Can you identify suitable search terms?

### Topic 5: Energy and Power

| Topic | Objectives - Learners should be able to: | Content | Activities | Resources |
|---|---|---|---|---|
| **Types and sources of energy** | • List types of energy<br>• Identify sources of energy<br>• describe uses of energy | • Energy<br>• Renewables - solar, biogas, water, wood fuel and wind<br>• Non renewables - coal, petroleum, natural gas, nuclear energy | • Identify fuel types<br>• Describe sources of renewable and non-renewable energy | • Use the local environment<br>• photographs<br>• videos |

| Topic | Objectives - Learners should be able to: | Content | Activities | Resources |
|---|---|---|---|---|
| **Sittings of power plants** | • State factors affecting siting of power plants | • Siting of power plants<br>• Location of hydro electric power | • Identifying which local sites could qualify for the siting of a a specific type of powerplant | • Use the local environment<br>• photographs<br>• videos |

| Topic | Objectives - Learners should be able to: | Content | Activities | Resources |
|---|---|---|---|---|
| **Power generation** | • Describe types of power generation<br>• Explain the process of power generation | • Nuclear and thermal plants (including geothermal) | • Discussion of what specific needs are required for each type of power to be viable options for the national generation of power | • Use the local environment<br>• photographs<br>• videos<br>• Jaws software<br>• Talking books |

There are a number of good terms in the above table that could be used as OER search terms. Note, you are looking for specific, focused, narrow terms. So rather than searching for, 'Geography' or even 'Energy' or 'Power' you would want to rather use terms like, 'Power generation', or even better, 'Nuclear power' or 'Geothermal power'. You could even search using a phrase linked to one of the objectives e.g. 'How is geothermal energy generated?' Searching for resources linked to an objective or competency would be especially useful in teaching the syllabus.

Spend some time looking at your own subject/learning area syllabus and identify some specific, narrow search terms. We will be using these terms in the next section.

CONTINUE

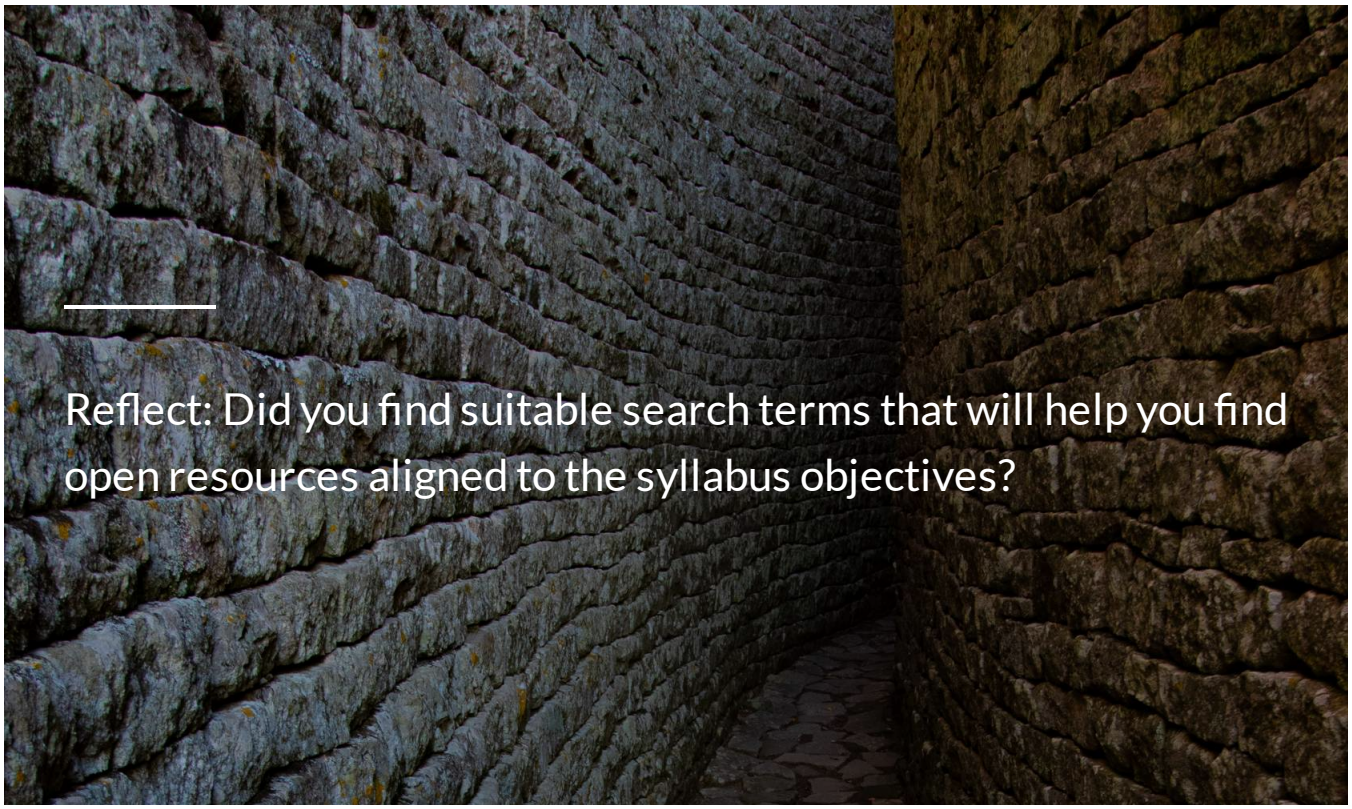



Image: andryn2006 on Flickr (CC BY-SA)

**Reflect: Feedback**

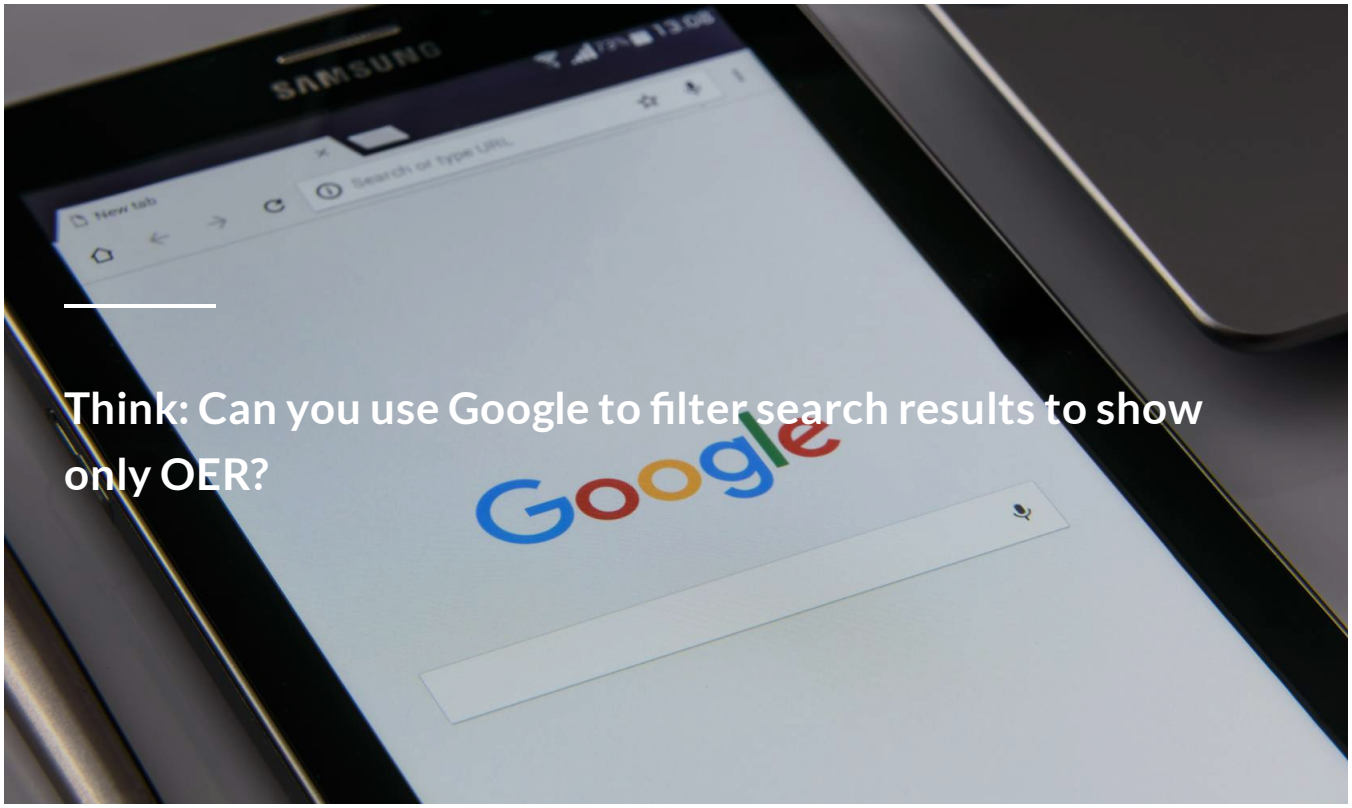
Ensure that the search terms you have selected from the syllabus document are **focused** and **specific**. This will assist you in finding resources that are useful and appropriate to what the curriculum wants students to achieve. Don't be afraid to search for the topic objective itself.

**GRADE 1 :TOPIC: NUMBER OPERATIONS**

| TOPIC | LEARNING OBJECTIVES Learners should be able to: | CONTENT | NOTES & SUGGESTED ACTIVITIES | SUGGESTED RESOURCES |
|---|---|---|---|---|
| **ADDITION** | • add whole numbers<br>• demonstrate addition using signs and addition terms<br>• add whole numbers using calculators | • Addition of whole numbers to a sum not exceeding 50 using concrete objects | • Combining/putting together of two given sets of objects<br>• Finding the sum using the number line<br>• Using and writing + and = signs and addition terms such as count on, plus, add, sum, altogether, make and total<br>• **Consolidating addition using calculators to enhance understanding of modern technology**<br>• Playing games involving addition | • Counters, charts, number lines, smart phones and calculators |
| **SUBTRACTION** | • subtract whole numbers within the range<br>• using concrete objects without equal addition<br>• demonstrate subtraction using signs and subtraction terms | • Subtraction of whole numbers within the range 0 to 50 | • Using objects to demonstrate subtraction by taking away<br>• Finding the difference between two numbers by matching the objects and using the number line<br>• Using the minus – and = signs as well as terms like minus, count back, take away, from<br>• **Consolidating subtraction using calculators**<br>• Playing games involving subtraction | • Counters, charts, number line, smart phones and calculators |

In the next section we will use the terms you identified here, so keep them handy!

# How to search for OER using Google

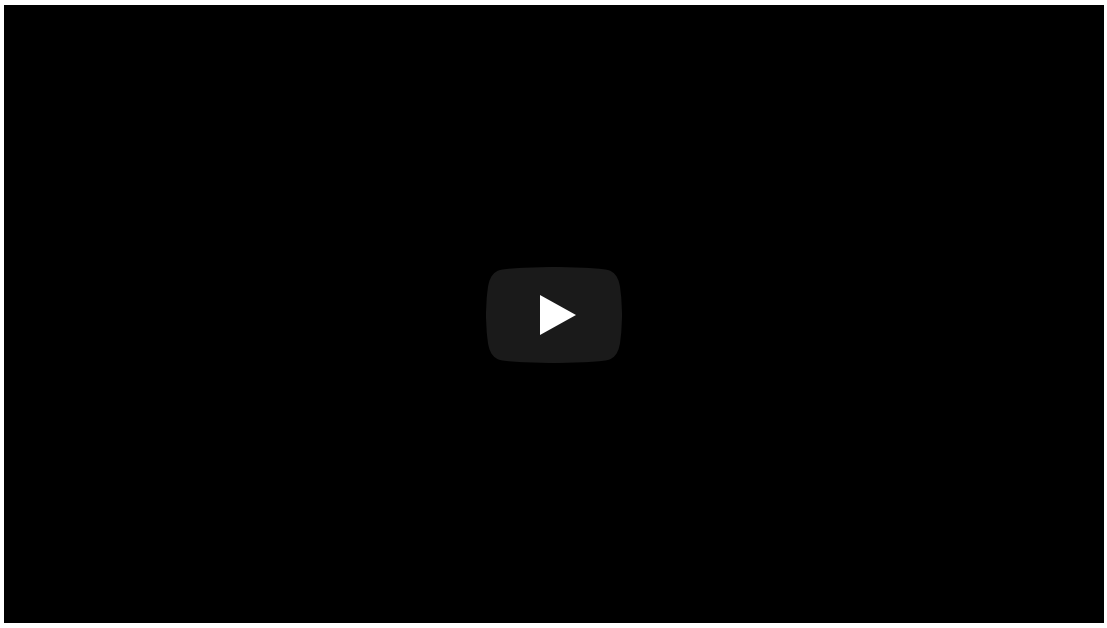



## Think: Can you use Google to filter search results to show only OER?

Image: Pikrepo (CC Zero)

Sadly, there is no one-stop shop to search for and collect your open content. We need to use various search techniques. Google is a popular search engine and is familiar to many in the educational space. However, most of us rarely use its customizable functions offered in **Google Advanced Search**. Watch the video explaining how to adjust the usage rights filter to find openly licensed resources.

YOUTUBE



## Using Google Advanced Search to find Open Content

Video demonstrating how to use the usage rights filter on Google Advanced search in order to identify open content

VIEW ON YOUTUBE >

**Google Advanced Search**

Customise your search with Google's Advanced Search criteria. In our case we will use the 'Usage Rights' fields to identify open content.

GO TO WEBSITE

When searching for open content on Google, you need to use the usage rights filter offered at the bottom of the advanced search screen and understand what Creative Commons (CC) licences are implied by permissions such as:

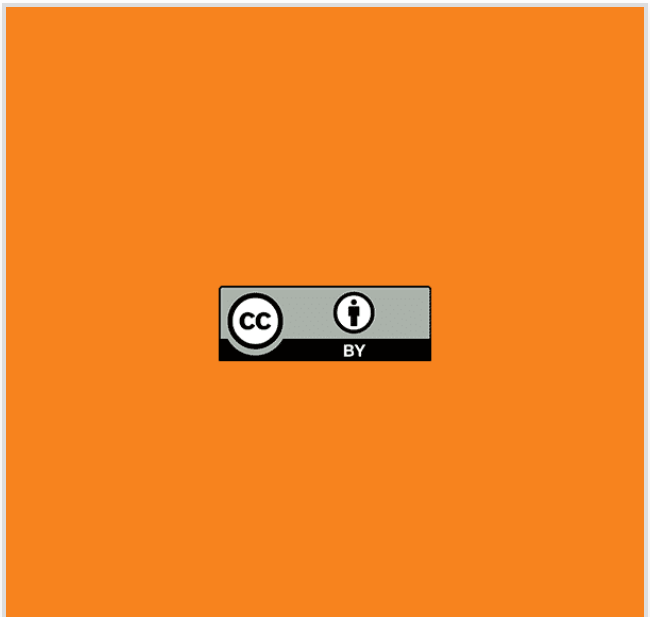
- **Not filtered by licence**
- **Free to use or share**

- **Free to use or share, even commercially**
- **Free to use share or modify**
- **Free to use, share or modify, even commercially**

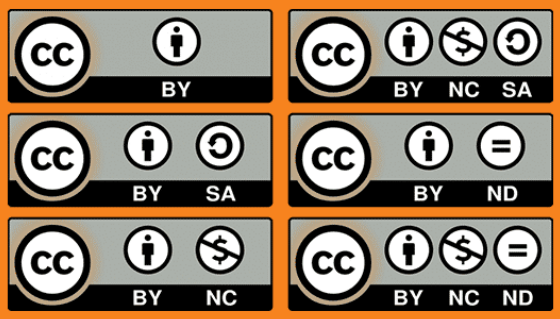
Before clicking the squares below, create a mental image of a licence outlined in the earlier section on Creative Commons licensing that matches Google's usage rights descriptions above. How many did you get right?

Not filtered by licence

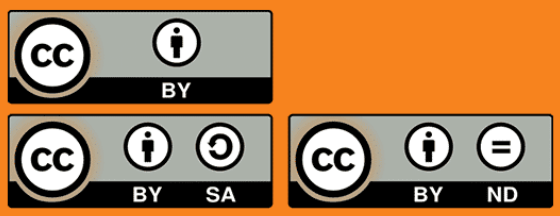

Free to use, share or modify,
even commercially



Free to use or share




Free to use or share, even commercially




CONTINUE

## Google image search

Google image search works differently, although it does have a usage rights filter that uses similar permissions to those listed above. Watch the video to see the usage rights filter which can be applied to sort image results.


**Google Image Search**

Customise your search with Google's image search 'Usage Rights' criteria, in order to identify images that can be used without asking for permission or incurring costs.

GO TO WEBSITE

CONTINUE

## Search activity

Now that you have seen others do it in the videos, can **you** use Google advanced search and Google image search to find open content?

1. Access **Google Advanced Search** (https://www.google.com/advanced_search or **Google Images** (https://images.google.com/)
2. Insert search terms into the top field to see if you can find resources about **Street Art** that incorporates motifs of **Nelson Mandela**
3. Then click the 'Tools' button and adjust the 'Usage Rights' field to limit the results to resources licensed as 'Creative Commons Licences'
4. Perform your search with the 'Usage Rights' filter activated
5. Did you find this image below? If not, perhaps add the search term 'Graffiti street art on hoardings'.

**Reflect: Consider yourself successful if you found this image by Elliot Brown: 'Graffiti street art on hoardings - Kings Square'**


Photo: Elliot Brown (CC BY-SA)

# Using Creative Commons search


Image: opensource.com on Flickr (CC BY-SA)

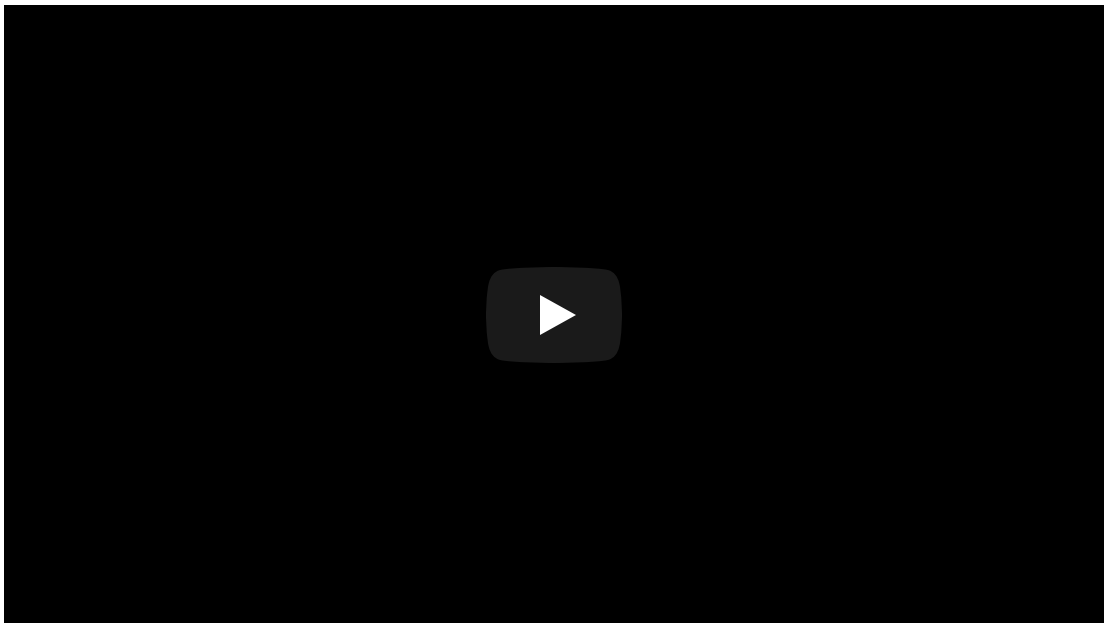
Another popular tool used to find open content is **Creative Commons Search**. This tool is favoured by teachers looking for free, quality media they can adapt.

Watch the video below illustrating the search process using this tool.

[NB. The URL used in the video is: https://oldsearch.creativecommons.org/
The latest URL for Creative Commons Search is https://search.creativecommons.org/

However, the same search principles apply]

YOUTUBE



## Search for Creative Commons content

Uploaded by Stephanie Martinez on 2015-10-22.

VIEW ON YOUTUBE >

CONTINUE

## Search activity

Use the Creative Commons search to find a piece of music that can be used as part of your presentation, blog, website or video.

1. To try out this search tool: type the following URL in your browser: https://search.creativecommons.org/

2. See if you can find a piece of music called 'Work' by 3VOL Soundsystem on SoundCloud

3. Note this piece of music should have a CC BY-SA licence.

Album cover: 3VOL Soundsystem

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04:03

Did you find this piece of music? - 'Work' by 3VOL Soundsystem - CC BY-SA

Did you find their song? Was it something you related to?
They might be an acquired taste!

CONTINUE

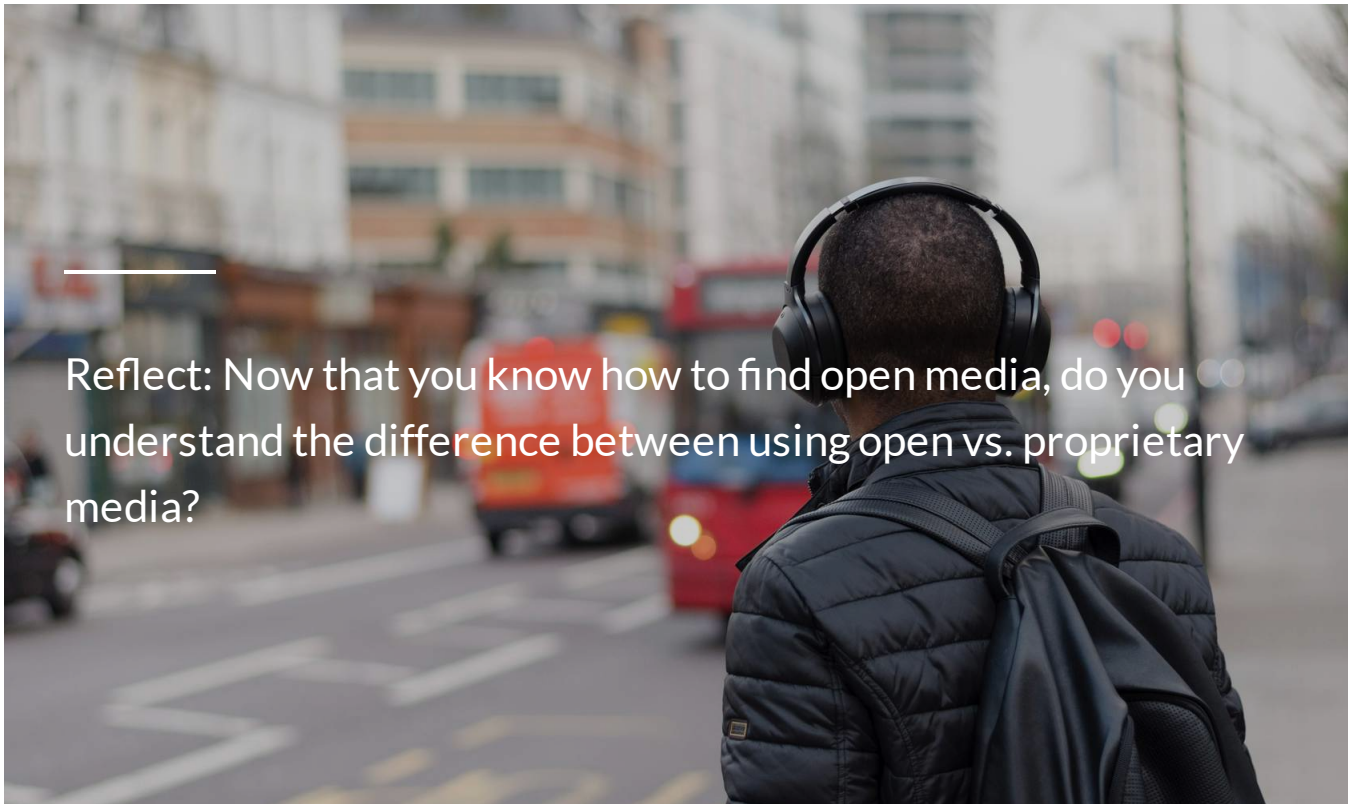



Photo: Pixabay (Pixabay License / CC Zero)

**Reflect: Feedback**

Proprietary media, means fully copyrighted. It means we cannot distribute or use as a resource in our teaching, or in student learning, without explicit permission from the copyright holder. Failure to ask could result in a law suite. Open media means we can use without asking for permission, distribute and in many instances adapt for our own purposes.

It is important that we model best practice and use **legal** teaching resources. It is essential that you are aware of how to locate and use open content as lesson resources.
Knowledge about copyright is also essential. It is always advisable to attribute any resource being used in a course.

# Search for open content on YouTube

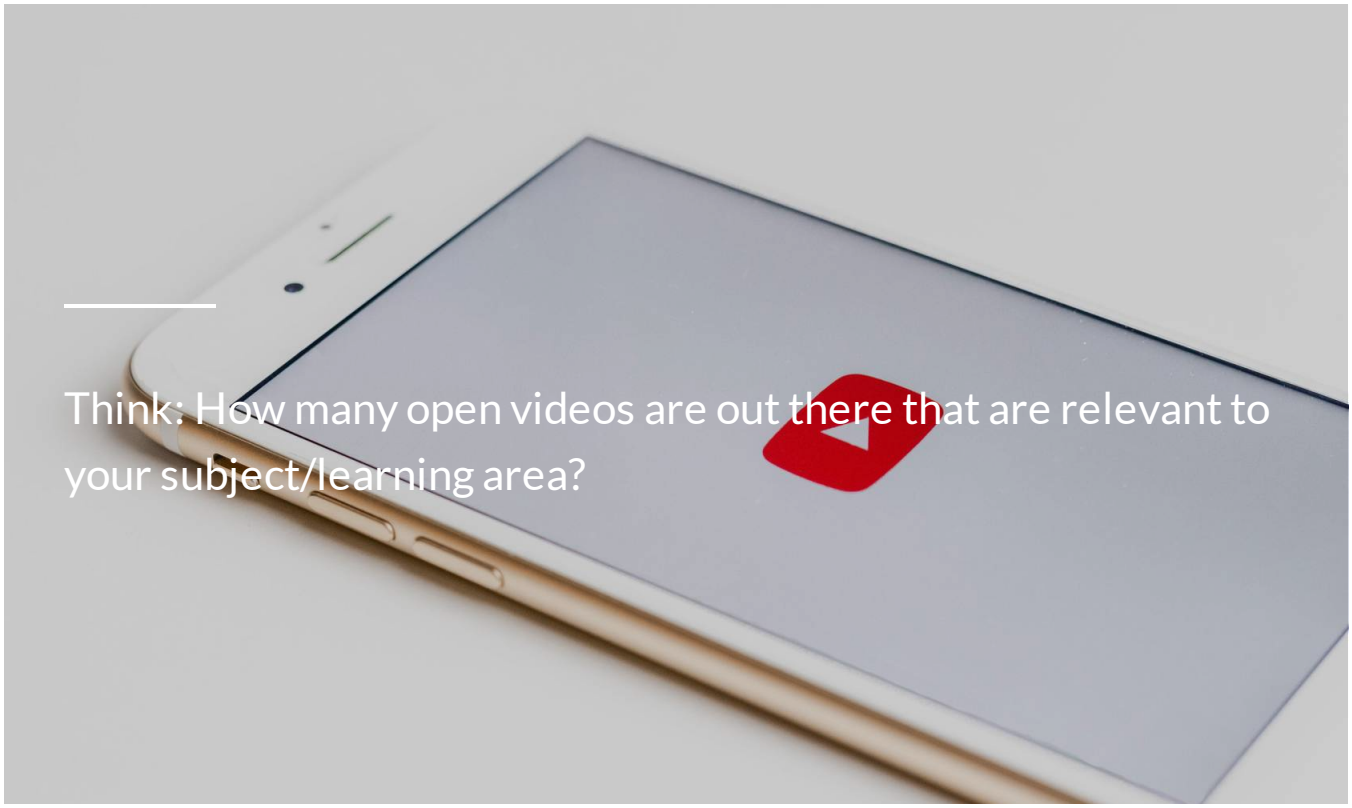
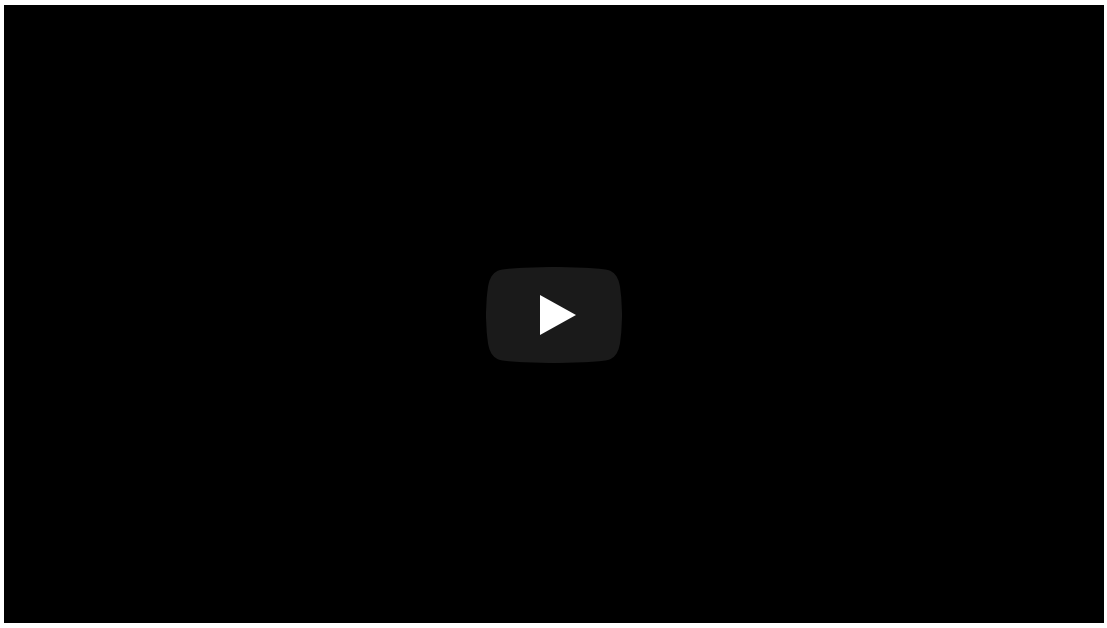



Photo: Wallpaper Flare (Free to use and share)

Sometimes you know where to look on the Internet and you don't need to use a search tool. The issue though is how to identify what is open and what is not. **YouTube** (http://www.youtube.com) is an obvious repository for video content and **Flickr** is a photo repository (http://www.flickr.com). These platforms do offer a filter that allows users to identify videos and photos licensed with a **Creative Commons** licence.

YOUTUBE



## Using Creative Commons Filters on Popular Platforms

Using Creative Commons Filters on Popular Platforms such as YouTube Flickr and Open Clipart

VIEW ON YOUTUBE >

OER Africa. (2017). Using Creative Commons Filters on Popular Platforms. YouTube. (CC BY).

Note: if the lesson resources such as a worksheet or presentation link directly to YouTube videos, accessible via an internet connection, you don't need to worry about copyright as, technically, you are not taking a 'copy'. All the YouTube videos can be used, there is no need to use the CC filter.

However, if the lesson you are designing is going to be offered to students **offline**, with content loaded onto, for example, a USB stick, then you should copy only openly licensed videos. Should you wish to adapt or re-purpose a video, then you will need to work with **only** openly licensed videos.

Note: YouTube only allows the use of one Creative Commons licence: **CC BY**. According to YouTube, a video is either open or it is not!

CONTINUE

## Search activity

Can you use CC filters on YouTube? See if you can find the a video on the African Union (AU) anthem on YouTube.

1. Navigate to YouTube: https://www.youtube.com/
2. Do a search for the AU anthem
3. Apply the CC filter to the results to see only openly licensed videos
4. Did you find the AU anthem?

Image: Wikipedia (CC Zero)

**Reflect: Feedback**

Let us all unite and celebrate together
The victories won for our liberation
Let us dedicate ourselves to rise together
To defend our liberty and unity
O Sons and Daughters of Africa
Flesh of the Sun and Flesh of the Sky
Let us make Africa the Tree of Life
Let us all unite and sing together
To uphold the bonds that frame our destiny
Let us dedicate ourselves to fight together
For lasting peace and justice on earth

O Sons and Daughters of Africa
Flesh of the Sun and Flesh of the Sky
Let us make Africa the Tree of Life
Let us all unite and toil together
To give the best we have to Africa
The cradle of mankind and fount of culture
Our pride and hope at break of dawn.
O Sons and Daughters of Africa
Flesh of the Sun and Flesh of the Sky
Let us make Africa the Tree of Life

# Search for content in open repositories

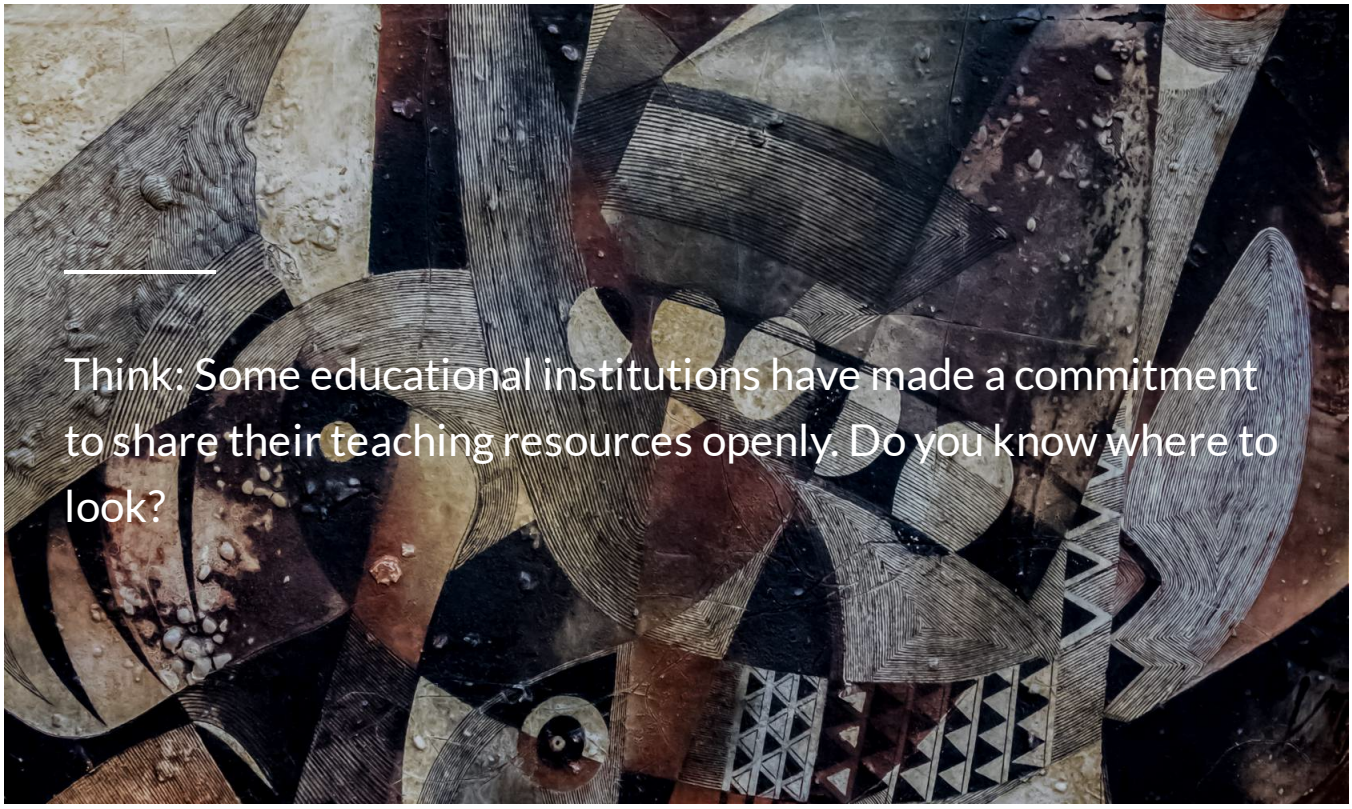



Image: andryn2006 on Flickr (CC BY-SA)

If you are looking for an open course or a specific open resource, it might be worth looking through institutional repositories that specialise in open primary and secondary education resources. It is possible they have resources that have not been indexed by search engines. Below are links to some well-known open content repositories.

**OER Commons**

OER Commons is a public digital library of open educational resources. Explore, create and collaborate with educators around the world to improve the curriculum.

GO TO OER COMMONS

**MoPSE's EduConnect Portal**

Search for resources curated for use as part of the Zimbabwean curriculum

GO TO EDUCONNECT

**Khan Academy**

A great archive of free and open math, science, life skills, economics and computing video lessons.

GO TO KHAN ACADEMY

**MERLOT**

MERLOT is an international community of educators, learners and researchers. The site contains an extensive database of OER for numerous disciplines.

GO TO MERLOT

**Open University (UK)**

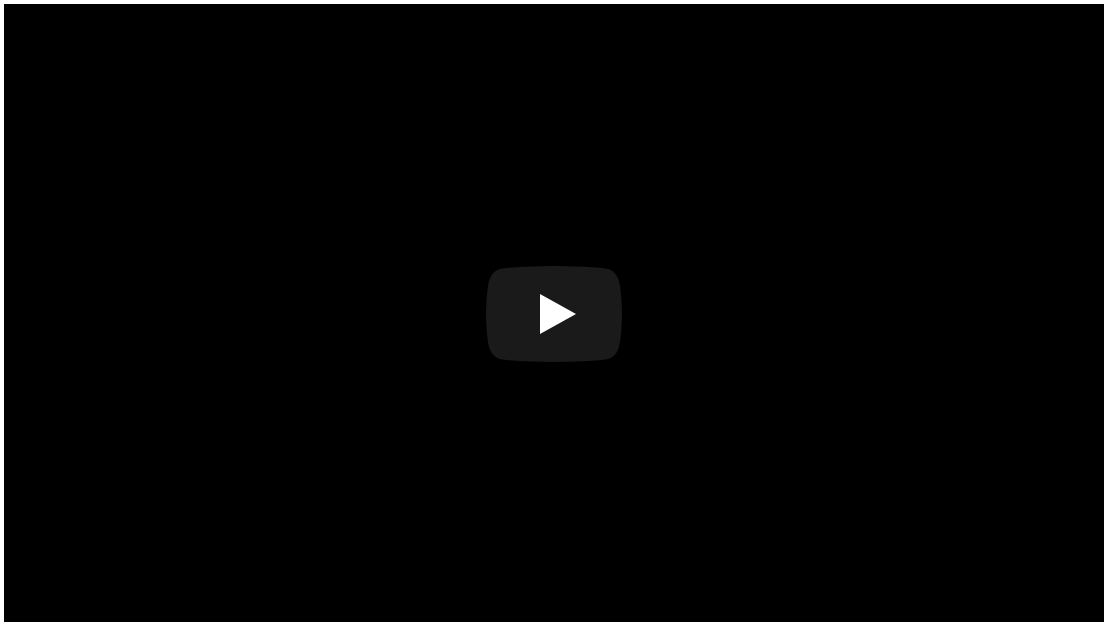
The Open University (UK) offers a number of short and foundation courses for free. There are also teacher education courses.

GO TO OPENLEARN

**OER Africa**

This repository offers access to articles and resources on OER by Africans about Africa.

OER Commons has supplied a video on how best to search their repository. See below.



CONTINUE

## Search activity

Work through each of the repositories and see if you can find resources on any of the following:

- Introduction to complex numbers
- Cultural anthropology
- Computer fundamentals

- Literacy and numeracy for basic trades

CONTINUE

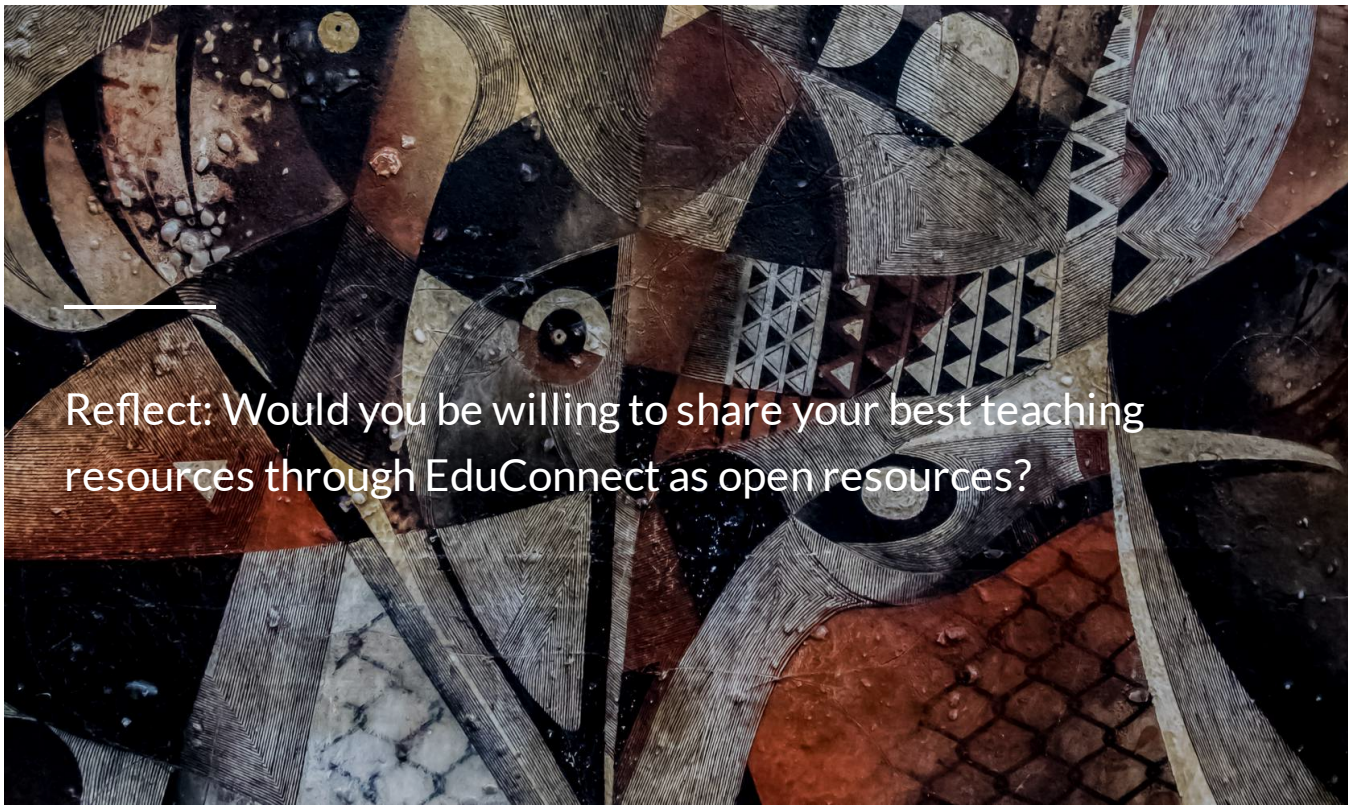



Image: andryn2006 on Flickr (CC BY)

**Reflect: Feedback**

It is an interesting question... Most open content users start off being 'consumers', that is they search for and use/adapt other peoples' open content, then in time they become 'producers', developers and sharers of resources.

Some universities and schools see this sharing of open educational resources as a way to generate positive exposure. Open repositories showcase quality work being developed by staff. By inference, the public and other educations assume the teaching and learning being done at the school must also be of high quality. However, traditionally, African educators have not been encouraged to share their resources. A mindset change is required to convince teachers to do otherwise.

Prof. Peter Donkor, former Pro Vice Chancellor at **Kwame Nkrumah University of Science and Technology**, Ghana, is on record[1] as saying,

> 'We struggle to have access to information. If we have information, why do we not also share it as part of a pool of universities? Using OER, our institutions are able to exchange information for the purpose of improved learning.'

A similar, more urgent case can be made for school teachers, particularly in the COVID 19 pandemic which has shown African education has a lot of ground to make up, particularly in the provision of quality resources to support remote teaching.

Would you share?

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[1] Glennie, J (ed). (2012). **OER and Change in Higher Education: Reflections from Practice**. Commonwealth of Learning. Available online at https://www.oerknowledgecloud.org/archive/pub_PS_OER_web.pdf (CC BY).

# Summary

## Summary

You have reached the end of this tutorial! Ideally by now you should be able to:

1. Search for open content using common tools and filters (such as on Google and YouTube) as well as specialized services (such as Creative Commons Search)
2. Investigate well-known open content repositories

Remember: to ensure that your searches are effective you should:

1. Have a clear idea of what you are looking for. Use focused terminology drawn directly from the MoPSE syllabi. Ideally search for specific objectives
2. Use Google Advanced Search Usage Rights to identify potential open content aligned to a subject or topic
3. Use Creative Commons Search to identify specific media types
4. Use the filters on popular platforms, like YouTube, to identify open content
5. Be familiar with those open repositories that regularly publish open content in your subject area/s.

That’s it! We hope that this tutorial proved useful.

# Attribution and licence

## Attribution

The following OER were adapted to create this learning pathway:

1. Clark, S. (2016). **Online Research: Tips for Effective Search Strategies**. Available on YouTube at https://youtu.be/LTJygQwYV84. (CC BY)
2. Commonwealth of Learning. (2015). **OER Search Techniques**. Available on YouTube at https://youtu.be/EV4K-V2cHYk. (CC BY-SA)
3. Department of Higher Education - South Africa. (2018). **Using Google Advanced Search to find Open Content**. Available on YouTube at https://youtu.be/UuSOuyzP1wM. (CC BY)
4. Hendricks, S. (2015). **Search for Creative Commons Content**. Available on YouTube at https://youtu.be/1fkr_ApFPyk. (CC BY)
5. OER Africa. (2017). **Using Creative Commons Filters on Popular Platforms**. Available on YouTube at https://youtu.be/jlqKmvDZtTI. (CC BY)
6. Torres, NPM. (2013). **Open Educational Resources**. Available on Vimeo at https://vimeo.com/51075488 (CC BY 3.0)
7. OER Africa. (nd). **Open content types** video (CC BY)

8 OER Africa. (2021). **Google Image Search**. Available on YouTube at https://www.youtube.com/watch?v=vYn3DQg5_jE (CC BY)

9 Openauthor. (2012). **How to search OER Commons**. Available on YouTube at https://youtu.be/JXFUOVxv0gY. (Std. YouTube Licence)

## Licence



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Educational, Scientific and
Cultural Organization

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