Accessible and Inclusive Resource Publishing

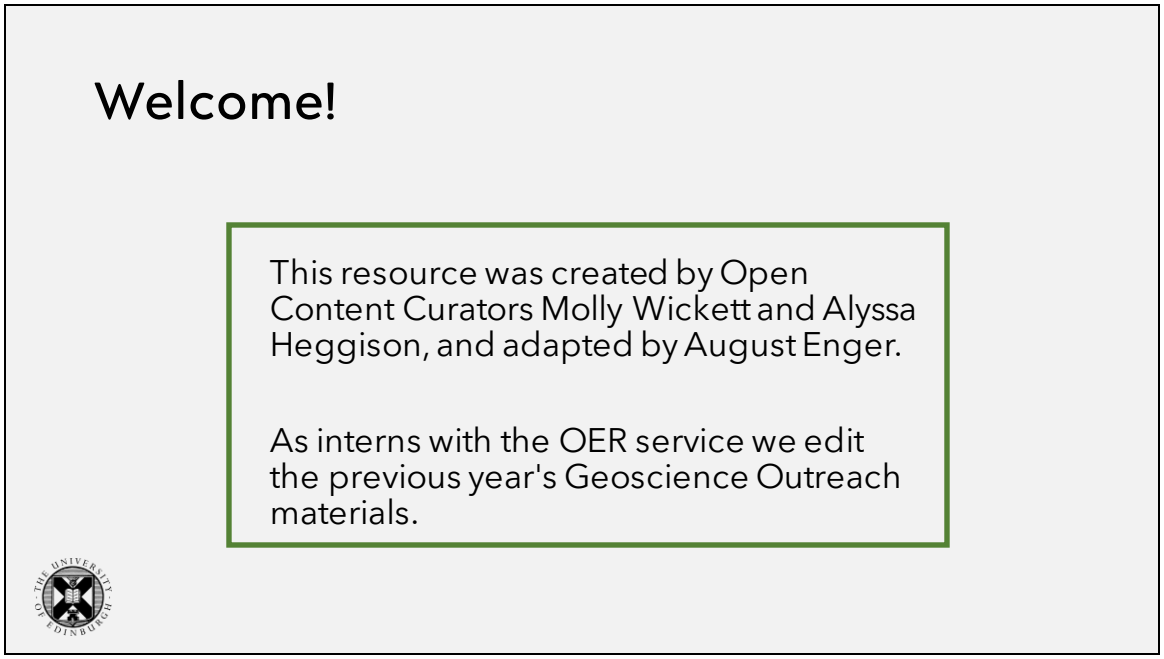
A Geoscience Outreach Course Resource, August 2023











Hello. My name is August Enger and I am an Open Content Curator Intern with the OER Service at the University of Edinburgh's Information Services Group. I work with the OER service to create, publish, and distribute Open Educational Resources. This resource is created for Geoscience Outreach Course students to help them create accessible and inclusive Open Educational Resources as part of their course. This video is based on a workshop run by former interns Molly Wickett and Alyssa Heggison in 2022, and has been made into a video and accompanying transcript for sustainability purposes.

What are OER?

"Open Educational Resources (OER) are learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others."

- UNESCO on Open Educational Resources



Many of you, I'm sure, will have seen this quote by now, but UNESCO defines Open Educational Resources as "learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others." Part of the five international actions on OER recommended and supported by UNESCO is to encourage inclusive and equitable quality OER. This will be our main focus today.

UNESCO link: https://www.unesco.org/en/open-educational-resources#:~:text=Open%20Educational%20Resources%20(OER)%20are,adaptation%20and%20redistribution%20by%20others.

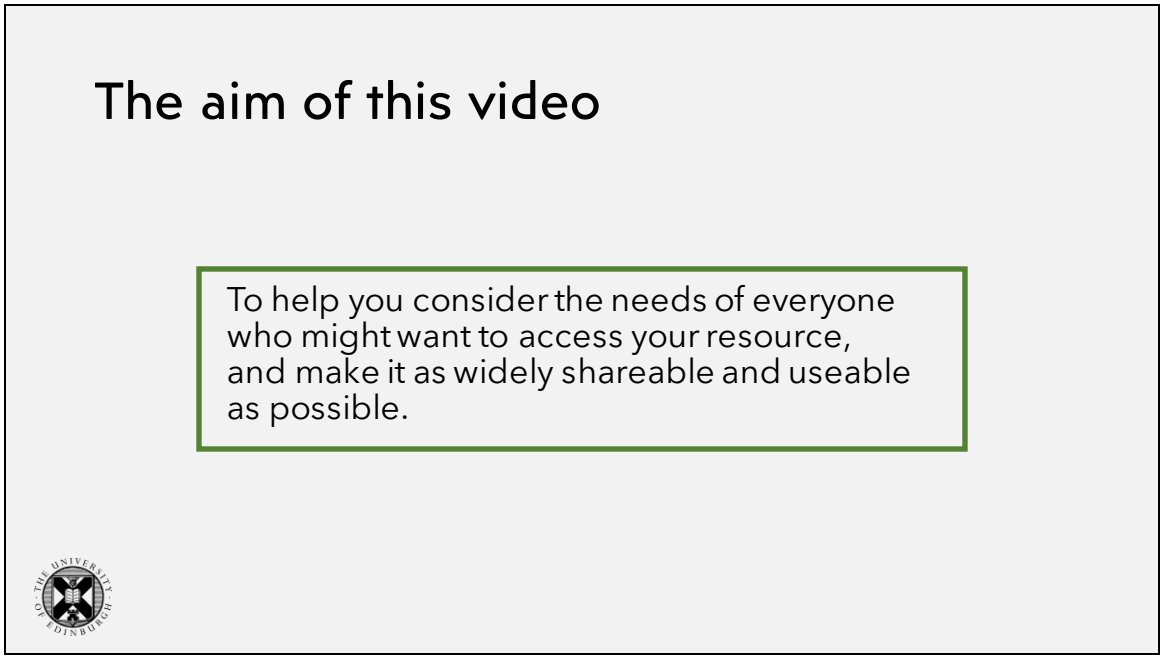
Overview:

We will look at three example resources and investigate how well they meet certain criteria.

Following this, we will see how you can apply this to your own resources.



We will look at three example resources and investigate how well they meet certain criteria. Following this, we will have a look at how you can apply this to your own resources.



Our aim today will be to help you consider the needs of everyone who might want to access your resource, and make it as widely shareable and useable as possible. You want the resource you create to include and be useable to everyone who might want to access it, even if you don't publish it. This is a process we want to encourage you to keep in mind from the very beginning of the resource creation, not only right before publishing.

We will do this by:

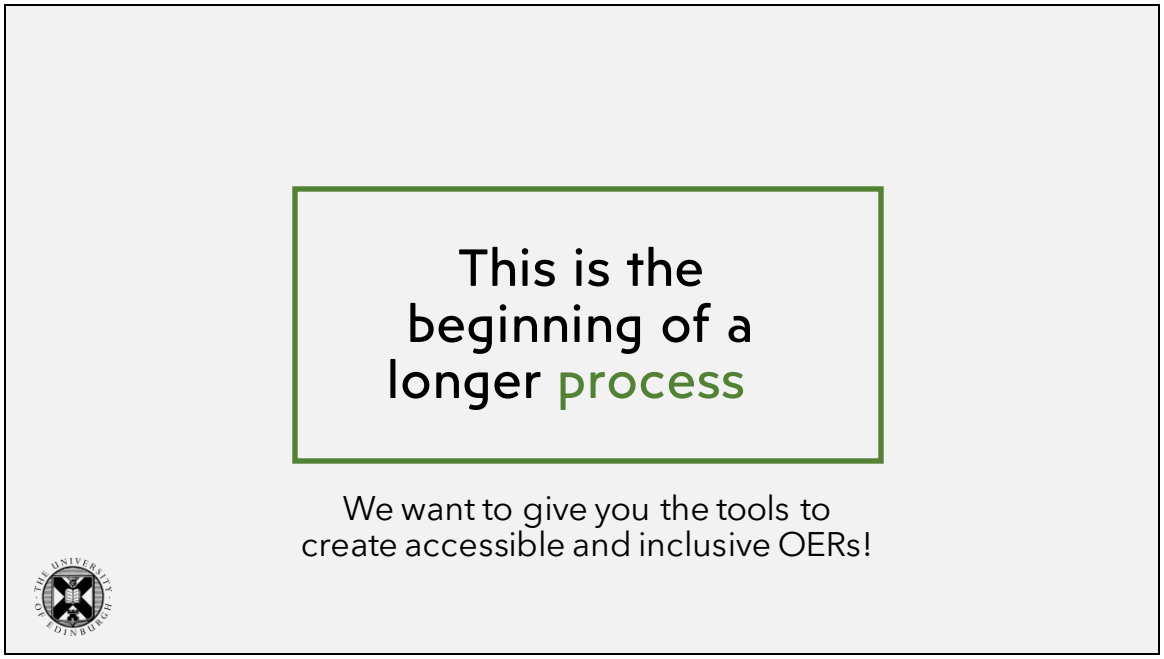
Practicing the process of evaluating and improving the following three qualities of a resource:

- Accessibility
- Inclusivity
- OER Suitability

These qualities all intersect!



We will do this by practicing the process of evaluating and improving the following three qualities of a resource: accessibility, inclusivity, and OER suitability. These qualities all intersect, and we encourage you to take a holistic approach when assessing your own resource as well as others'.



Originally being a workshop, this resource is meant to be interactive, and we want to preserve this as much as possible despite the new video format. To help you along the way, I want you to pause the video and follow the links in the video description or below to have a look at the resources we will be analysing today. Write down your thoughts: What does the resource do well? How can it be better?
Then, we'll take a closer look together, and I'll point you to some further resources that can help you add to your OER toolkit.

Links:
https://open.ed.ac.uk/how-to-create-video-for-online-courses/
https://open.ed.ac.uk/ai-and-assistive-technologies-for-the-visually-impaired/
https://open.ed.ac.uk/learning-ecology-through-art/

What do we mean by Accessibility?

Accessibility means that disabled users are not excluded from the resource in any way. Disabled users can use whatever they need with the same ease as someone who is not disabled.

Accessibility is defined relative to the specific ability of a person and context of the situation.

Example: A resource can be made more accessible to a user with hearing impairments by adding subtitles to video content.



Now, welcome back. So, what do we mean by Accessibility? Accessibility means the resource is considerate of different abilities, and that disabled users are not excluded from the resource in any way. Disabled users can use whatever they need with the same ease as someone who is not disabled. There are few definite guidelines, as accessibility is defined relative to the specific ability of a person and context of the situation. Example: A resource can be made more accessible to a user with hearing impairments by adding subtitles to video content. However, we will look at some good places to start later on in the video.

What do we mean by Inclusivity?

Inclusivity is the practice of ensuring equal access to opportunities and resources for those who might otherwise be excluded, marginalised or experience socio-economic barriers.

This encompasses people with physical or intellectual disabilities and those belonging to other minority groups.

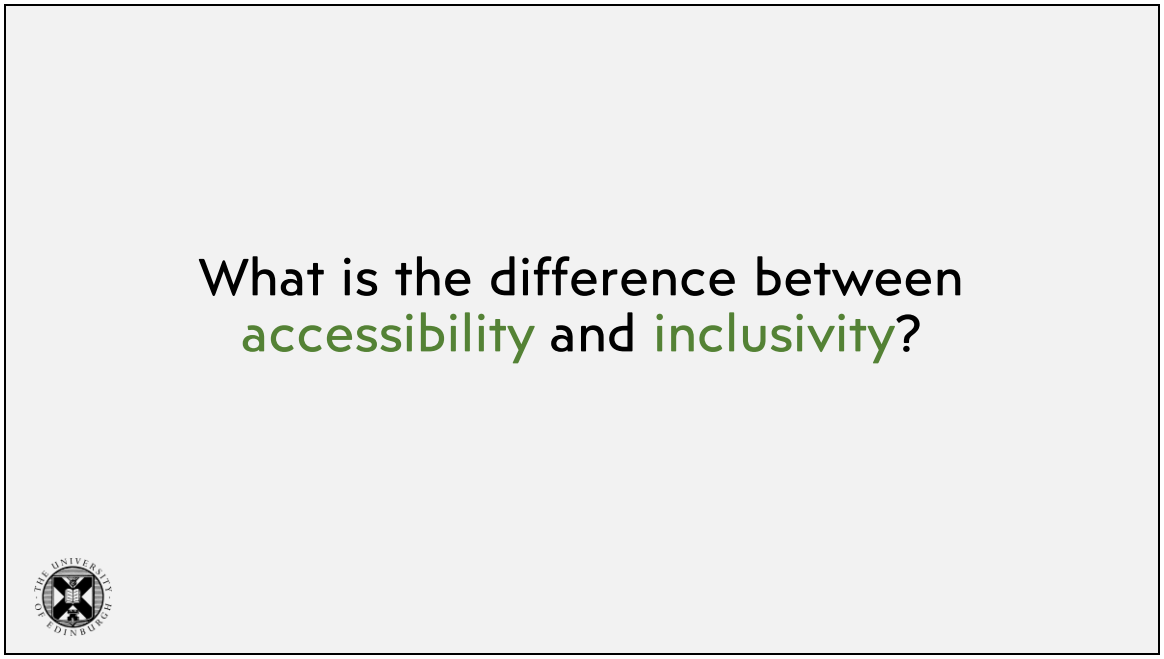
- Edited from Oxford Languages definition.

Example: A resource can be made more inclusive by ensuring that it doesn't cost money to participate in the activities.



Inclusivity, on the other hand, refers to the practice of ensuring equal access to opportunities and resources for those who might otherwise be excluded, marginalised or experience socio-economic barriers. This is a much broader effort, and encompasses people with physical or intellectual disabilities, and those belonging to other minority groups. Improving inclusivity can involve considering:

1. Learning background and modes of learning (by providing adaptable activities – some students might prefer variety and others might find a consistent structure of the activities better)
2. Economic circumstances (by avoiding activities with financial barriers)
3. Representation (for example of race/ethnicity, gender, age)
4. Technological resources/ability (Don't assume that all classrooms will have reliable wifi for example)
5. Past experience (by being mindful about the terminology and scenarios you choose to use)



You should now have some idea of the differences between and the intersections of accessibility and inclusivity. Accessibility focuses specifically on how people of different abilities are able to use your resource, whereas inclusivity is a much broader question, looking at accessibility but also factoring in other circumstances that might affect the user's experience of the resource.

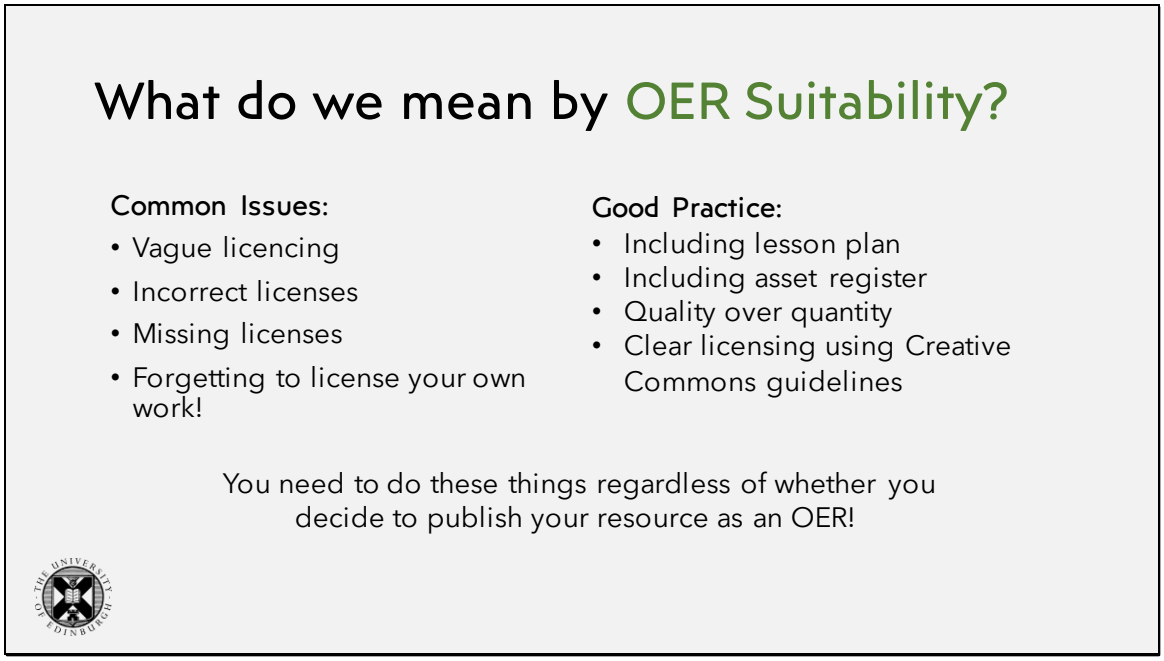
What do we mean by Open Educational Resources?

"digital resources used in the context of teaching and learning that have been released by the copyright holder under an open licence permitting their use and re-purposing by others."

- https://open.ed.ac.uk The University of Edinburgh OER Service Webpage



Just to revisit this, in addition to the UNESCO definition from slide 3, the University of Edinburgh has its own page with definitions of and writings about OER. The resources you've looked at are Open Educational Resources, and this means they are "digital resources used in the context of teaching and learning that have been released by the copyright holder under an open licence permitting their use and re-purposing by others."



Let's look closer at what a resource must do to be suitable to be used as an OER. Some common issues are:

1. Vague licensing: If you don't give a clear license, then any work produced will immediately fall under the IPR act due to the nature of protection. This effectively prevents anyone from re-using or adapting your work, because it isn't able to be produced within the OER. Also a barrier to your resource getting published.

2. Incorrect licenses: Incorrectly citing a license which has been misread as CC BY and edited or adapted, but is actually CC BY-NA and the image cannot be edited. Creative-commons licence descriptions provide clear information on whether or not modification is permitted. Or assuming that everything within an Open Image Bank is open for use, but for example, some images on Canva or Adobe Spark are either copyrighted or protected under other licenses and aren't open – always check the small print.

3. Missing licenses: Even if you take something from a free image bank, you still need to say where it's from, because again this will fall under IPR and copyright law.

4. Forgetting to license your own work: Even if something is made entirely by you, you still need to add a CC license so that it can be published and re-used. The interns will have to email you later if you forget!

Some tips for Good practice, on the other hand, might be

1. Lesson Plan: It's really helpful if you can clearly organise your resource and include a lesson plan which stated what the contents are and how they are intended to be used. This helps the interns who are editing and publishing it, and also helps to ensure that your vision for the resource is preserved.

2. Quality: Submitting one really well made useable resource is preferrable to a larger but unfinished resource. It's great if we can have something to publish that doesn't need major editing.

3. Clear licensing: Make sure you've been specific in where you've found your resource from – not just putting the bare minumum of the webpage, but citing the creator, hyperlinking and dating under an up to date license. Differentiating other's work from your own is good academic practice as well as good copyright practice.

4. License your work! If something is yours, say so, and license it according to your own preferences.

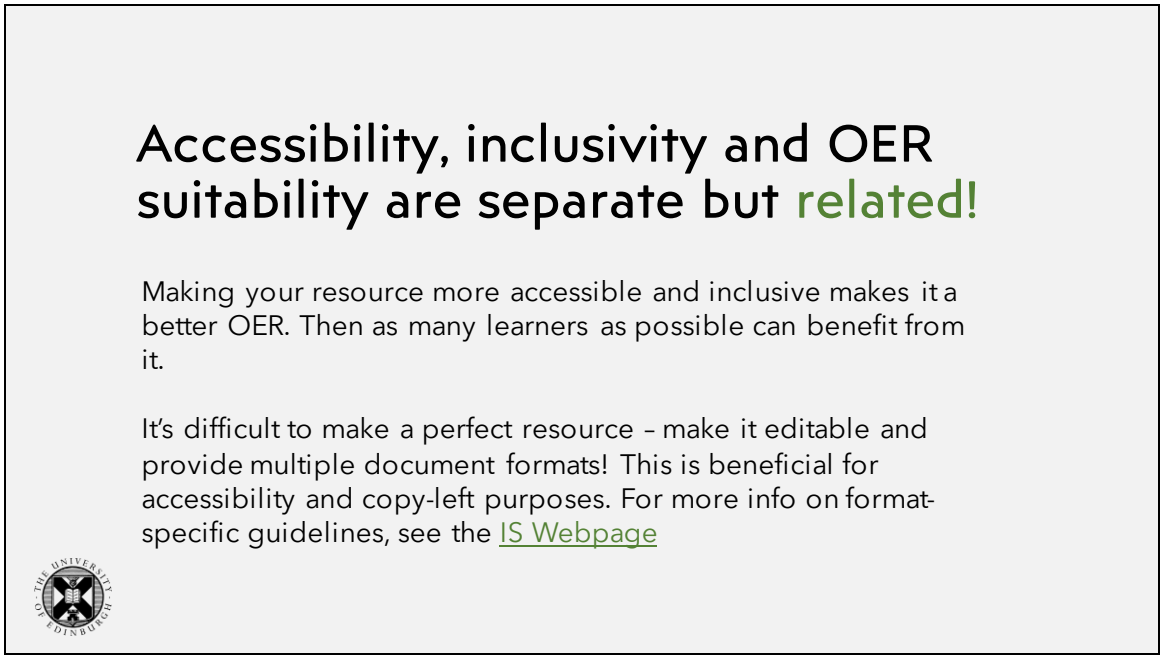
Attributing resources

CC heart cupcakes by David Kindler, CC BY 2.0, on flickr https://flic.kr/p/dzSp17

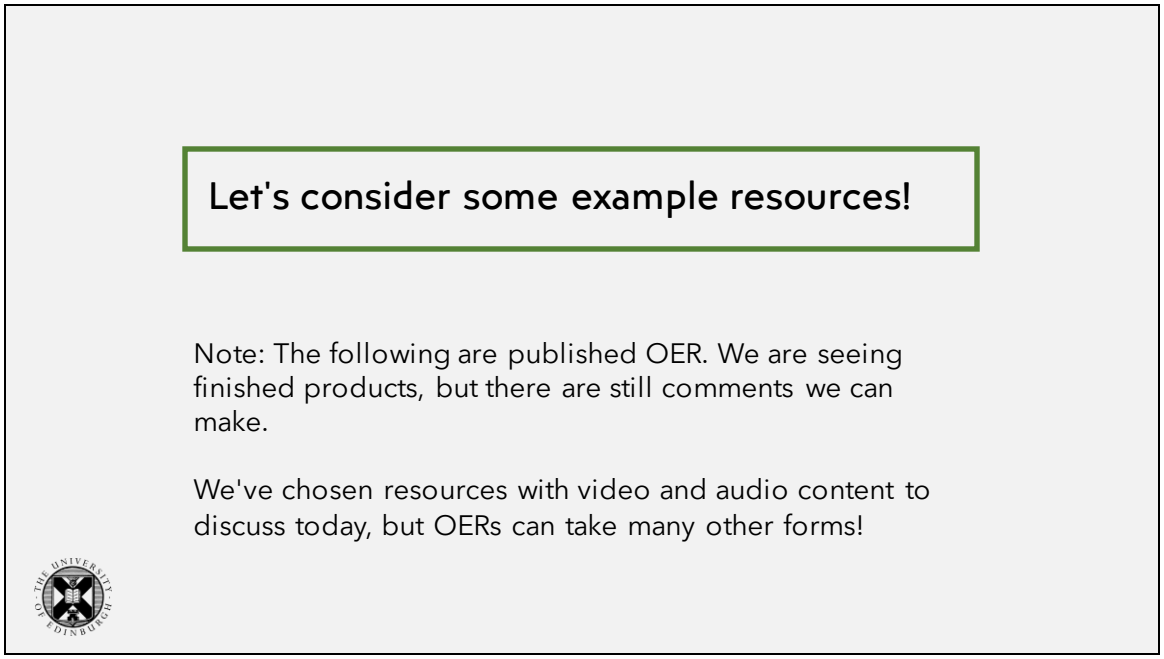
Title: CC heart cupcakes
Creator: David Kindler
Licence: CC BY 2.0
Source: url



Let's look at attributions. In order to use a CC licensed resource, you must always attribute the creator. A good attribution is composed of the title of the work, the name of the creator (this is the attribution part), the licence the resouce was released under, and the source url.



As we have seen, accessibility, inclusivity and OER suitability are separate but related! Making your resource more accessible and inclusive makes it a better OER. Then as many learners as possible can benefit from it. It's difficult to make a perfect resource – make it editable and provide multiple document formats! This is beneficial for accessibility and copy-left purposes, which refers to the loop of open content created by continued use of CC licencing, especially when using ShareAlike. For more info on format-specific guidelines, see the Information Services Webpage linked here.



Now, let's consider the example resources. These are linked in the video description as in their slides, hopefully you should all have had a look at them by now. If not, please make sure to have a look and take note of your thoughts on the resource before proceeding. Before we head into our deep-dive, please keep in mind that:

1. The following resources are published OER. We are seeing finished products, but there are still comments we can make.
2. We've chosen resources with video and audio content to discuss today, but OERs can take many other forms!

Case Study: How to Create Video for Online Courses



Image from Open.Ed web-page, Educational Design and Engagement, University of Edinburgh, CC BY-SA

Firstly, there's How To Create Video for Online Courses. This is a course aimed at beginners wanting to learn how to make video content. It is available as both a course on Future Learn with multiple hours worth of content or a short highlights reel on media hopper.

Link to View Resource: https://open.ed.ac.uk/how-to-create-video-for-online-courses/

Case Study: How to Create Video for Online Courses

Accessibility - what the resource does well:

- Adaptable to different modes of learning.
- Accurate subtitling.
- No background music while people are speaking.

However:

- No alternative format - no transcript is provided on Media Hopper.



Let's consider its accessibility. It's adaptable to different modes of learning: The video content is split into small chunks which could be viewed all together or separately, it can be followed along interactively if that is helpful to the learner. The subtitling is accurate, and there is no background music or other distracting audio. However, there is no alternative format such as a transcript provided.

Case Study: How to Create Video for Online Courses

Inclusivity - what the resource does well:

- The videos can be downloaded from media hopper and can be accessed offline.
- Content is bridging the technology skills gap.
- Considers different budgets and levels of equipment.



In regards to inclusivity, the resource does some really good things. The videos can be downloaded from media hopper and can be accessed offline. The content helps to bridge a technology skills gap with the increasing use of video content, especially by younger generations. The resource considers the learner's budget and gives advice on using mobile phone camera/mic up to professional kit. Options are given for working with the tech you have.

Case Study: How to Create Video for Online Courses

OER Suitability - what the resource does well:

- Clear, detailed and correct attributions at the end of each video.
- High quality clearly structured content.
- Created mostly their own content and applied CC Licences.
- Clear structure both in video playlist and in larger FutureLearn course.



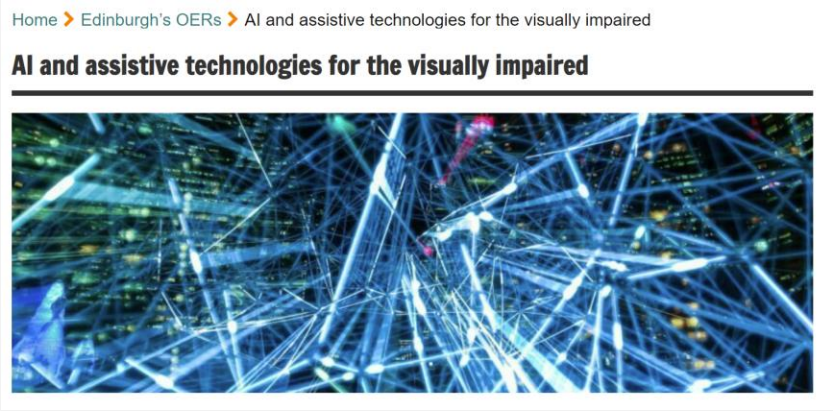
Looking at its OER Suitability, the resource meets multiple criteria: There are clear, detailed and correct attributions at the end of each video. The content is high quality and clearly structured, both in video playlist and in larger FutureLearn course, and the team have created most of the content themselves and applied CC Licences.

Keep in mind that we are seeing the published version of this resource, created by the Educational Design and Engagement team at The University of Edinburgh. Your resource doesn't need to be perfect but every step you take to improve it makes it more publishable.

The resource's strong suits are that

1. It is a very good example of a high-quality OER with a lot of content.
2. It is clear that inclusivity has really been considered.

Case Study: AI and Assistive Tech for the Visually Impaired



Header Image: "Blue Bright Lights" via Pixabay on Pexels, CC0, https://www.pexels.com/photo/blue-bright-lights-373543/

Our second resource is "AI and Assistive Tech for the Visually Impaired," a podcast episode talking about the different AI technologies available to aid visually impaired people.

https://open.ed.ac.uk/ai-and-assistive-technologies-for-the-visually-impaired/

Case Study: AI and Assistive Tech for the Visually Impaired

Accessibility - what the resource does well:

- Audio-only format.

However:

- Resource excludes those who are deaf or hearing impaired. No transcript is provided.



In terms of accessibility, the audio-only format means that visually impaired people are not missing out on any of the content. The absence of filler-video also makes the examples of descriptions from assistive technology that are played more immersive for sighted learners. On the other hand, the resource excludes those who are deaf or hearing impaired from being able to access it. It would be good if there was a transcript or captions to accompany the audio file. While writing and editing captions are time consuming, they really do add immensely to the accessibility of your resource.

Case Study: AI and Assistive Tech for the Visually Impaired

Inclusivity - what the resource does well:

- Centres a marginalised group
- Presents a range of opinions on assistive technologies



This resource takes a specific approach to inclusivity. By centring a marginalised group, the resource acknowledges the nuance within a collective group. Moreover, it recognises that individual needs exist on a spectrum in its presentation of assistive technologies.

Case Study: AI and Assistive Tech for the Visually Impaired

OER Suitability – what the resource does well

- Clear licencing of the work
- Description stating the intent and content of the resource

However, it can do better:

- Transcript inclusion
- Clearer spoken attributions



Looking at OER suitability, the resource has very clear licencing, both on Open.Ed and Media Hopper. It comes with a helpful description of the intent and content of the podcast. However, we again want to highlight that transcripts not only help learners, but also the people wanting to use your resource for teaching and other purposes. It helps uses reference and cite someone else's ideas as a hard copy. This makes it much easier to recover information and for someone to create adaptations of the work. Additionally, the isolated audio file (and any potential transcript) lacks the clear licencing and descriptions provided in the resource description. We want to make sure resources remain as useable as possible, even if they get split up or redistributed in different manners.

Case Study: Learning Ecology Through Art



Header Image by Mitchell Luo on Unsplash is licensed under the Unsplash License, https://unsplash.com/photos/Bb-zbZCpwJ4

This resource, "Learning Ecology through Art" is a pack of materials for a set of lessons for Primary school children.

Link to view the resource: Learning Ecology Through Art – Open.Ed

Case Study: Learning Ecology Through Art

Accessibility - what this resource does well:

- The resource is well structured and it's clear for teachers how to use it.

However:

- There are subtitles but they need corrections.
- No transcript is available.

These materials are well structured and the creators have prioritised making it clear and easy for teachers to use. However, the subtitles need correcting and there is no transcript available.

Case Study: Learning Ecology Through Art

Inclusivity – what this resource does well:

- Very visual resource.
- Brings together Art and STEM.
- Provides access to art from prestigious galleries without leaving the classroom.

- However:
- The resource references painters who have a history of racist and misogynistic behaviour.
- Featured artist's works of art are not representative of the people who may make up a classroom.



In terms of inclusivity, the resource's strong points are its visual nature, its intersectionality between art subjects and STEM. Additionally, it brings art from prestigious galleries into the classroom. However, the resource references painters whose behaviour and attitudes were both racist and misogynistic. Henri Rosseau has been criticised for producing paintings which not only exoticise the habitats they depict, but also reproduce racist stereotypes. This use of this material in a resource for children might be worth reconsidering, as it very early on introduces them to outdated stereotypes and works of art that are not representative of the people who may make up their classroom.

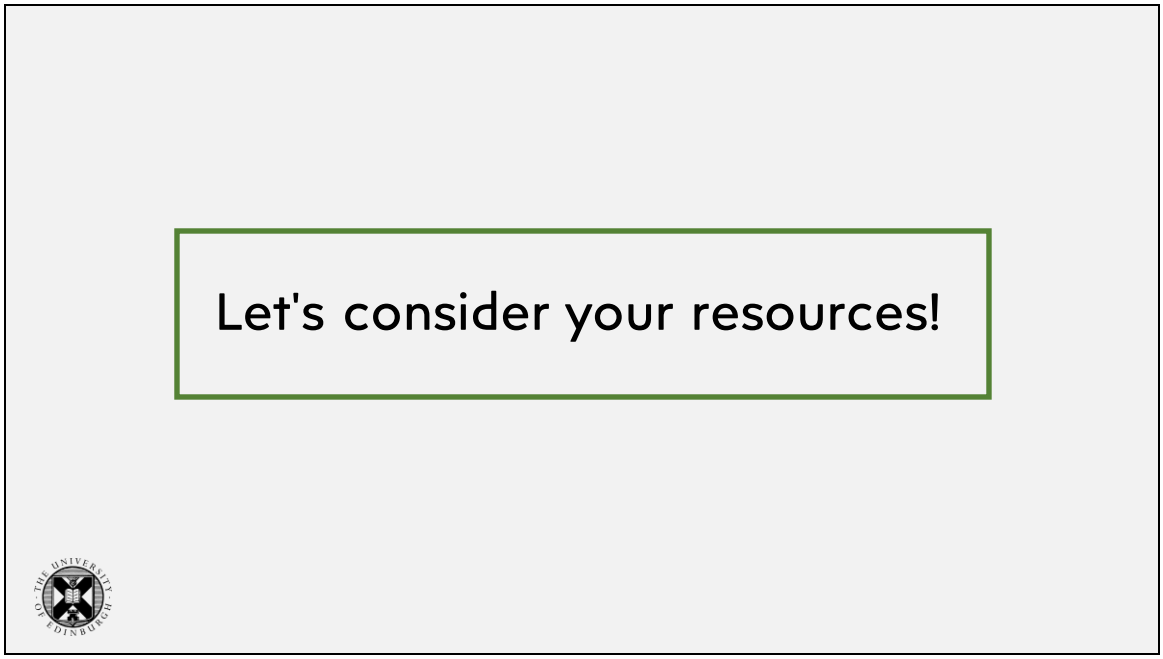
Case Study: Learning Ecology Through Art

OER Suitability:

- States the resources Es &Os as outlined in the Curriculum for Excellence.
- A detailed teacher's guide is provided.
- Over-all a very organised resource, split into sections.
- Clear licensing information is given on each individual document.



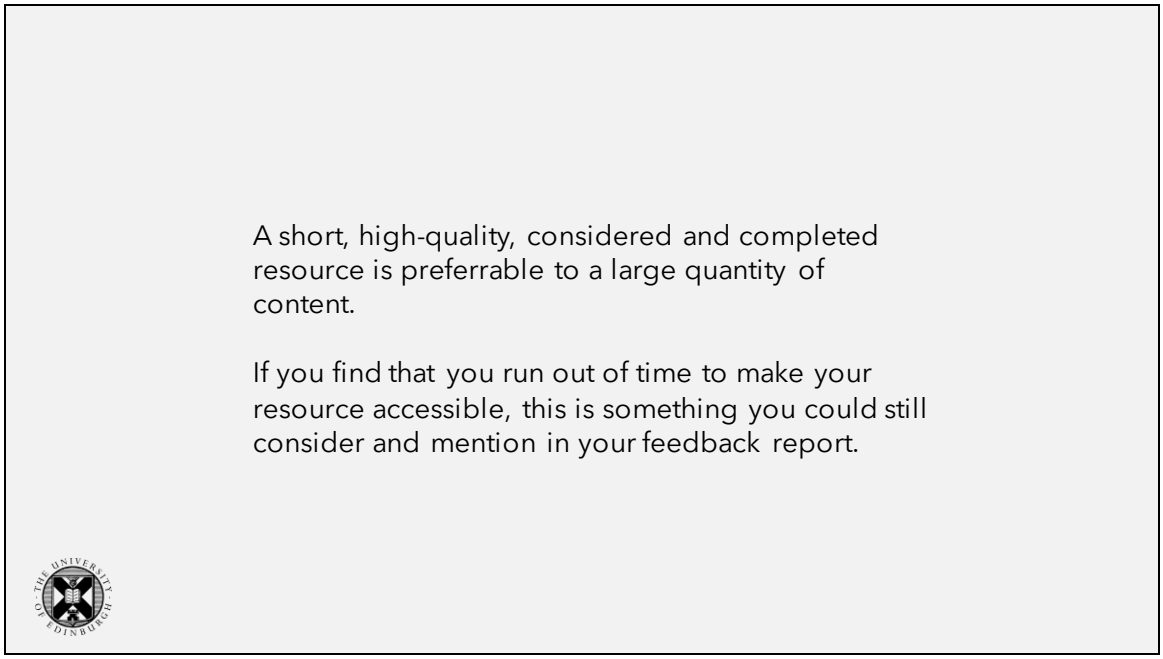
This author has clearly thought about OER suitability; It clearly references the Experiences and Outcomes of the resource as listed in the Scottish Curriculum for Excellence, making the resource easy for teachers to find and pick up. This also makes it more likely for the resource to be widely used in schools. The resource very organised, split into adaptable sections each with their own materials and clear licencing. In conclusion, there are some significant issues with inclusivity which should be considered further, but it is a brilliant example of a student-made OER-suitable outreach project.



Now, let's consider how all these point can be applied to your own resources.



Few resources are perfect. There will always be ways to improve – we've barely scratched the surface in this video. People will have different perspectives and needs that we haven't considered today. But if you can dedicate some time to question the accessibility, inclusivity and OER suitability of your resource you can make it better and more useable! Even basic improvements will make a difference.



A short, high-quality, considered and completed resource is preferrable to a large quantity of content. However, if you find that you run out of time to make your resource accessible, this is something you could still consider and mention in your feedback report.

Summary:

Key ideas: Accessibility, Inclusivity and OER Suitability

These are separate but related qualities. Improving in these areas will help towards the goal of your educational resource.

This video should have provided you with a good starting point for thinking about accessibility, inclusivity and OER suitability. These are separate but related qualities. Improving in these areas will help towards the goal of your educational resource.

Further resources:

Format-specific accessibility guidelines:

Information Services webpage

(https://www.ed.ac.uk/information-services/help-consultancy/accessibility/creating-materials)

For any questions, contact:

Kay Douglas (kay.douglas@ed.ac.uk), GeoSciences Participation and Outreach Officer

Lorna Campbell (lorna.m.campbell@ed.ac.uk), Learning Technology Team Manager

As a final note, I once again want to refer you to the Information Services' format-specific accessibility guidelines. For any further questions, feel free to get in touch with my colleagues Kay Douglas with the GeoSciences Outreach Course and Lorna Campbell with the OER Team. Thank you for your time, and have a good rest of your day.