



open
education
austria

Guideline for the Creation of Open Educational Resources

*Information and Practical Exercises for
Lecturers in Higher Education*





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Chapter 1

Open Educational Resources

What are open educational resources?

Open educational resources (OER) are teaching and learning materials that can be freely accessed, used, modified, and distributed by anyone without charge. The creators of these materials make use of specific licensing models that were designed to regulate the continued use of free resources. A particularly suitable license system for this purpose is provided by the non-profit organization Creative Commons (see Chapter 3).






The OER concept has been around for more than 15 years, following the first official definition specified by UNESCO in

2002. This definition was also included in the 2012 “Paris OER Declaration”:

Open educational resources are *“teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions. Open licensing is built within the existing framework of intellectual property rights as defined by relevant international conventions and respects the authorship of the work”* (UNESCO 2012, 1).

The characteristics of OER

David Wiley (2014) outlined a useful categorization of OER characteristics based on the “5 Rs” of openness. Educational material needs to fulfil these five criteria in order to be recognized as a true OER, which grants any potential user the following liberties:

-  **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)

What materials can be educational resources?

Any material that can be used for the purpose of teaching or learning is an educational resource, whether in printed or digital format. This typically includes various types of texts (essays, handouts, books...) and teaching materials (presentation slides,

worksheets, syllabi...) as well as pictures, music, videos, podcasts, blogs, apps, and websites. Even entire online courses can be provided as OER (see, for example, the Austrian platform [iMooX](#)).



What are the benefits of OER?



Free access to free education

When learning materials are released as OER, a larger group of users can access them for free. This means that a higher number of people can benefit from the educational content, which is a good thing for both learners and teachers – because ultimately everyone profits from the strengthening of an open exchange of educationally relevant resources.



Quality improvement

When users are allowed to not only access but also modify educational resources, it is easy to keep the contents up to date or to improve and enhance them. There is little reason to believe that freely available material indicates a lower standard of quality. In fact, the reverse appears to be true: when someone decides to make their own creations available to the public, they tend to focus even more strongly on aspects of quality.



Expansion of didactic opportunities

The modifiability of OER also implicates that they can be readily adapted to fit the conditions of different learning settings. They also facilitate the inclusion of students in these adaptation processes. Since the overwhelming majority of OER is produced in digital formats and distributed online, their use in higher education often fosters the implementation of open and innovative learning scenarios (based on concepts such as blended learning, flipped classroom, etc.).



More visibility for quality teaching

Teachers who create their own learning materials and distribute them as OER can expect to reach more people with their contents – other lecturers and students as well as anybody who is interested in the subject matter. As a consequence, the efforts and achievements of teaching staff can be seen and appreciated beyond the classroom, which can be a useful development in an age of increasing digitalization in higher education.

What challenges do we face when using and creating OER?



Limited amount of available materials

The OER movement began in the early 2000s, and since then the number of existing resources has increased considerably. However, it may happen that a search for materials covering a specific topic turns up no results, especially in the field of higher education. Hence, there is a great need for the creation of new materials, but not much that can be used in return. Still, if more people contribute their work, more resources will become available, and the situation will soon improve.



Decentralized OER collections

When looking for useful educational resources online, one quickly discovers that there are many collections at different locations (so-called repositories). It is necessary to develop some experience and familiarity with OER websites in order to find the desired contents in a successful and efficient manner, which takes a little time and practice. Keep in mind, though, that the OER landscape is constantly changing, and this guideline includes helpful hints and tricks for online searches (see Chapter 4).



No standardized criteria for quality

Educational materials that are released as OER usually do not undergo any formal kind of quality control. As a consequence, the final assessment of all quality issues is the responsibility of the user. Nevertheless, it is safe to assume that there will be new developments regarding the establishment and assertion of quality standards in the near future (for example the implementation of rating options for OER, facilities for giving and receiving feedback, or the awarding of “badges” to the creators of high quality OER).



Full legal certainty is hardly ever achievable

Even when utmost care is taken to correctly apply and utilize appropriate licenses in the use and creation of OER, copyright infringements might still occur due to one’s own or other people’s (unknowing) misjudgments. Full legal security is not a very likely achievement due to several other reasons: imprecise and inconclusive phrasing in the legal code of licenses, national differences in the application of these legal texts, and unresolved questions with regard to the use of some elements (for example citations) in the production of OER. However, this guideline provides a good overview of the most important aspects that need to be considered in order to work with OER in a safe and responsible manner (see Chapters 2 and 3).

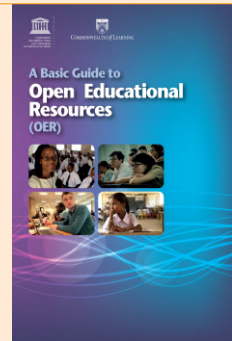




Further Information und References

"A Basic Guide to Open Educational Resources (OER)"

Neil Butcher, edited by Asha Kanwar (COL) and Stamenka Uvalic-Trumbic (UNESCO), published by UNESCO (2015).



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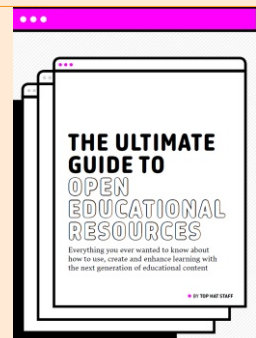
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"Recommendations for OER Integration in Austrian Higher Education"

Martin Ebner et al., Conference Proceedings of the Online, Open and Flexible Higher Education Conference (EADTU 2016).

"The Ultimate Guide to Open Educational Resources. Everything you ever wanted to know about how to use, create and enhance learning with the next generation of educational content"

By Top Hat Staff



"High Impact Practices for Integrating Open Educational Resources (OER) into University Courses"

Lecture by David Wiley, University at Buffalo (NY), 2016 Genteels' Excellence in Teaching Conference.

Links

[The "5 Rs" by Wiley \(2014\)](#)
[Paris OER Declaration by UNESCO \(2012\)](#)
[UNESCO \(on the topic of OER\)](#)



Chapter 2

Austrian Copyright Law

Basic principles of copyright law

If an idea is turned into works of art or (scientific) literature, then these creations are protected by copyright law. The creator holds all associated rights for their works, which are regulated in the legal framework of Austrian copyright law. These rights concern the distribution of the material, its reproduction, modification, and several other aspects. This legal protection for creative works is not dependent on any kind of labeling or the use of copyright signs, since it takes effect automatically.

Austrian copyright law enables creators to transfer some rights affecting the use of their works to others. These so-called exploitation rights (see §§14-18a) can be transferred to other people or entities (so-called collecting societies) who are then able to enforce those rights. However, it is not possible to transfer all authorship rights or to completely renounce them.

When someone wishes to use copyright protected materials in a way that makes said materials public, they need to ask the copyright holders for permission. It can be quite difficult to determine what kind of use qualifies as “publicizing” the creative works of others, so it is advisable to still get the creator’s permission when in doubt. This means that the creator has to be identified and contacted by the potential user, who needs to describe what exactly they are planning to do, and then get the creator’s permission for this particular use (ideally in writing). Any kind of use that has not been explicitly allowed by the copyright holder is off-limits. Hence, the following rule applies to copyright law:

Anything that is not explicitly permitted is forbidden.

Limitations to copyright (§42, §42f)

Austrian copyright law does allow - within certain limits - for copyrighted materials to be used without express permission. This mostly concerns the duplication for private use (for example, it is permitted to copy individual pages from a book, but not to duplicate the book in its entirety). In addition to general rules for the free use of works, there are other more specific regulations with regard to how different types of works may be used. Especially important for academic purposes is the right to quote from literary works, if the citation is justified by the documenting character of the copied text (meaning that one has to make reference to the content of the citation). Furthermore, the source of the citation needs to be stated properly, and the original text must already be published.

Teaching in schools and universities (§42g)

Special provisions regulate the use of copyright protected material in educational institutions such as schools and universities. The last copyright law amending statute of 2015 made it possible for lecturers to reproduce published works for educational purposes and distribute them to a closed circle of class participants, as long as there are no commercial interests involved. Again, this is only permitted when the reproduced material bears a clear reference to the contents of the lecture.

However, this rule does not apply to works that were created specifically for the use in a teaching setting (like schoolbooks, university textbooks or educational films). These materials may not be copied or made available to students.

Pictures

Many lecturers like to use pictures or graphics in their teaching materials, either to illustrate the content or just for decorative purposes. Pictures and photos, however, are also protected by copyright law, so the same rules apply. Even when someone decides to use their own photos, there are some things to keep in mind. Here is a selection of relevant legal aspects:



Freedom of panorama

You are allowed to take photos in public spaces and to publish them, but this applies primarily to open spaces. If you wish to take pictures within public buildings, there are other regulations to consider, which are usually stated in the householder's rights.



Householder's rights

If you take pictures in a public building, for example a museum, then you cannot publish these images without consulting the householder's rights of this specific institution. The householder's rights might include certain provisions regarding the use of photos, often depending on what they depict.



Right to one's own picture

Pictures taken in public spaces often portray other people, either intentionally or unintentionally. The use of these photos is allowed, as long as no legitimate interests of any depicted person are harmed. This means that you cannot use pictures which put someone else in a bad light (for example, when they are shown picking their nose). The same applies to photos taken in a more private context or during a closed event, when there might be more opportunities for photos that harm others' interests. Therefore, it is always a good idea to ask a portrayed person for permission before using the images.

If you wish to use images or graphics from existing published works for your teaching material, you can do this with a pictorial quotation, which is also covered by the free use provision (§42f). However, some conditions apply: the picture can only be used in its entirety and without any modifications, the source material must be properly stated and the use has to be justified, meaning that there has to be a direct reference to the educational content. Hence, pictures used for decorative purposes do not fulfil this criterion.

Ancillary copyright

Austrian copyright law also contains regulations regarding the protection of other rights in the context of intellectual property, the so-called ancillary or neighboring rights. They apply to creative works that would not have come into existence without the contributions of people other than the creator(s). Typical examples include cinematographic works and audio media, but also press products. Ancillary rights are less extensive than ordinary copyright protection, but both can be in place at the same time. One important thing to consider is that there can be no free usage of any material when ancillary rights are present, so you cannot quote films or music. There is an exception for press releases that are older than 12 hours, which you can publish as long as you only use the text (because in this case protected contributions such as layout and setting are not affected). However, this only applies to simple press reports, and not to other journalistic texts like commentaries or feature articles.

Challenges of copyright law

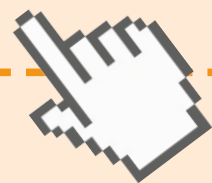
Even with a good understanding of Austrian copyright law, it can be challenging to navigate this legal framework correctly. Sometimes it might be difficult to decide whether a particular usage of protected material is legally permissible, even after studying the exact wording of the law. Legal practitioners may disagree among themselves, and full legal certainty can only be achieved when a case is brought before the Supreme Court and issued a verdict. Consequently, it is advisable to treat copyright protected materials with caution and to stay on the safe side when using them, because even unintended violations can result in considerable penalties. Other challenges may arise when trying to get permission directly from the creator for any specific use of their works. It can be quite tricky to actually establish the authorship of some materials, especially when they are distributed on the Internet, and to get the necessary contact details. Additionally, it is very rare that creators grant the right to modify their works upon request, but this particular freedom is often the most useful when it comes to educational resources.



Further Information

Links

[Austrian Copyright Law \(up to date, German\)](#)
[Austrian Copyright Law \(as amended up to 1998, English\)](#)
[EU Intellectual Property Office - FAQ](#)



Quiz: Copyright Law

Find the right answer for each question!
Only one option is correct (solutions on page 29).



Question 1: What is regulated by Austrian copyright law?

- A. Copyright law states all authorship rights for creators of artistic works, which do not include scientific writings.
- B. This law protects all rights relating to the authorship of creative works (such as the rights of reproduction, distribution and modification).
- C. In addition to stating all authorship rights, this law also lists all penalties and punishments for possible infringements.
- D. Copyright law only applies when protected materials are used for commercial purposes.

Question 2: Copyright law and teaching: what is allowed?

- A. As long as there are no commercial interests involved, it is legal to reproduce and distribute any copyright protected materials for educational purposes.
- B. Textbooks can be reproduced for a closed circle of students.
- C. Ever since the copyright law amending statute of 2015 there are no more specific regulations for teaching at schools and universities.
- D. If there is a direct reference to the contents of the lecture, it is allowed to reproduce published works (except materials like textbooks) for a closed circle of students.

Question 3: What is the "right to one's own picture"?

- A. It means that you cannot publish any photos that show other people's faces.
- B. This right implies that a person depicted on a photograph automatically holds all authorship rights to this picture.
- C. This regulation states that photographs of other people cannot be published if they portray them in a way that would hurt those people's interests.
- D. It means that you can freely publish photos of people if they were taken in public spaces, but that you are not allowed to do so if the pictures were taken in closed, private quarters.

Question 4: Which of these statements is correct?

- A. Exploitation rights are the same as ancillary rights, but more extensive.
- B. Free use regulations make it legal to copy individual book chapters for private use as well as to use text and cinematographic citations.
- C. Austrian copyright law allows the author to transfer exploitation rights, but not all rights associated with authorship.
- D. A creative work is only protected by copyright law if it has been labeled correctly (for example with a copyright sign).

Chapter 3

Creative Commons Licenses

What are Creative Commons licenses?

Creative Commons is the most widely used licensing system for the facilitation of a less restricted use of copyright protected works. To achieve this, the non-profit organization Creative Commons provides a selection of licenses in plain language that stipulate various simple conditions for the free use of materials. This makes it a lot easier to use other people's resources – anyone can use materials that are available under a Creative Commons license, and there are fewer aspects to consider (more on this in Chapter 4) in comparison to the complex rules and far more restricted use under copyright law.

The approach of the Creative Commons licensing system thus follows a completely opposite rule:

Anything is allowed except that which is expressly forbidden.

The Creative Commons licenses are valid internationally and without any geographical limitation. If, say, a teacher decides to make their educational materials available to the public, all they have to do is select an appropriate license and apply it to their own work (more on this in Chapter 5).

Background information on Creative Commons

The non-profit organization called Creative Commons was founded in 2001 and released the first edition of the Creative Commons licenses in 2002 (CC 1.0). This original edition was amended and improved in the following years, resulting in new license suites. The current version (CC 4.0) was released in 2013. It should be noted that there are both international and national license suites, although they basically cover the same things. The international version is translated into various languages, and in some cases the translation is phrased in a way that addresses the particularities of national copyright law. These so-called "ported" versions are available for many countries, including Austria (currently for license suite 3.0).

All Creative Commons licenses can be displayed in three different ways:



Summary for laypeople: The text is translated into different languages, but always has the same content.



License deed for jurists: This legal code is more complex and can be ported (translated with reference to the national legal framework).



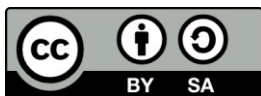
Machine-readable code in RDF format: This method of representing information is necessary in order to find materials with specific licenses online by using search engines, and is the same all around the world.

What Creative Commons licenses are available?



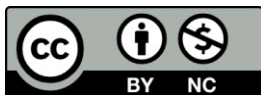
CC BY

This license permits the use and modification of material (even for commercial purposes) and leaves it up to the user to choose a different license for modified versions of the CC BY licensed material. The only condition is the correct attribution of the work to the creator.



CC BY SA

This license also permits the use and modification of material, even for commercial purposes. However, there are two conditions to consider: the creator needs to be attributed correctly and all subsequent modified versions of the material have to be similarly licensed (with CC BY SA). This ensures that the contents of the original material continue to be freely accessible (SA = "share alike").



CC BY NC

This license permits the use and modification of material, again based on two conditions: the creator needs to be attributed correctly and the material cannot be used for any commercial purposes (NC = "non-commercial").



CC BY ND

This license permits the use of the material, but only in its original form, meaning that it is not allowed to modify it (ND = "no derivatives"). Additionally, the usual condition to attribute the creator correctly applies here as well.



CC BY NC SA

This license permits the use and modification of the material based on the following three conditions: the creator needs to be attributed correctly, the material cannot be used for any commercial purposes, and any modified versions of the material have to be similarly licensed (with CC BY NC SA).



CC BY NC ND

This license permits the use of the material based on the following three conditions: the creator needs to be attributed correctly, the material cannot be used for any commercial purposes, and it can only be used in its original form without any modifications.

By choosing to license their own work with one of these six options, the authors of creative works get to decide how freely others can use their materials. Creative Commons also provides two additional “Public Domain” tools that serve a slightly different purpose: these instruments are not actual licenses, but they enable the transfer of materials into the public domain. This means that the materials can then be used by anyone without any restrictions.



CC0 („Zero“)

All Creative Commons licenses are based on copyright law, whereas CC0 is a waiver of all copyrights, as well as related and neighboring rights. Authors of creative works can use it to renounce all authorship rights for their materials. The applicability of CC0 is sometimes slightly compromised by national copyright laws that prohibit the waiving of all rights associated with authorship (which is the case in Austria).



Public Domain Mark

This identification mark signifies that something is part of the Public Domain. It should not be applied to one’s own works, because it signifies that there are no existing authorship rights whatsoever. Hence, there has to be a careful examination to make sure that there are no more legal restrictions to the use of this material in any country worldwide, which proves to be a difficult task in most cases.

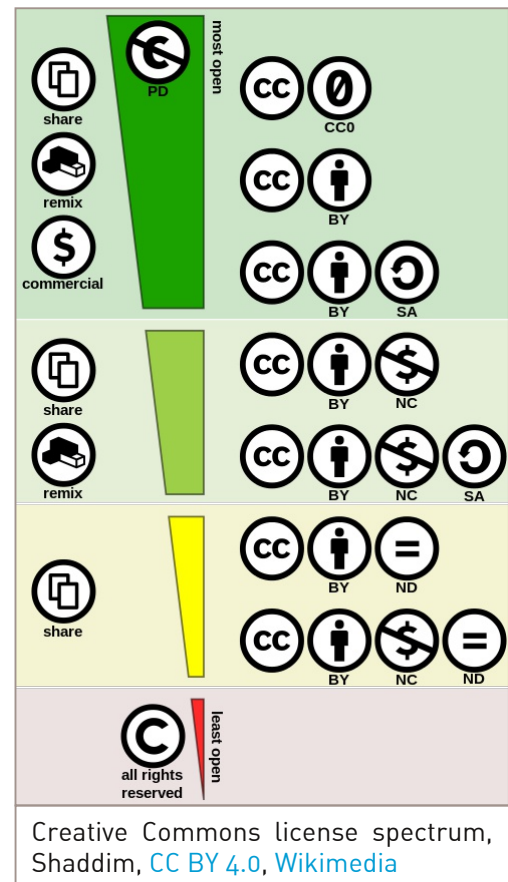
Public Domain

As the two Creative Commons tools indicate, there are two main ways in which creative works can enter the public domain: either by lack of copyright protection (for example after those rights have expired) or by deliberate release (when the author renounces their rights). Both options are shaped by national copyright laws, which are based on slightly different concepts of public domain. The continental European concept (“Gemeinfreiheit” in German) is not fully congruent with the Anglo-Saxon notion. Among other aspects, this affects the legal ways in which creative works can enter the public domain.

As a result, the applicability of CC0 is also dependent on national copyright law. Compared to the continental European context, American copyright law does not protect the same extent of moral rights relating to authorship. This means, for example, that authors in the USA can waive all their authorship rights, but Austrian authors can only renounce most of their authorship rights, because Austrian copyright law includes a legal clause establishing the indispensability of some moral rights associated with authorship. However, the use of CC0 is still recommended – doing so means that a maximum of rights is renounced, which is enough to make one’s own works available to the public without any restrictions.

Creative Commons licenses and their openness

A look at the different conditions of the six Creative Commons licenses already shows that some licenses are more open than others, which implies that they are offering more freedom to potential users. The illustration to the right depicts a ranking of the various licenses on a spectrum of openness, starting with public domain (highest degree of openness) and going down to full copyright protection (symbolized by the American copyright sign). When looking at the criteria for open educational resources that were discussed in Chapter 1, it is easy to see that not all CC-licenses are equally suited to create an OER. The “ND” condition prohibits any kind of modification or combination (violating the revise and remix criteria), so any material with this license cannot be considered an OER. The “NC” condition also restricts the reuse, because materials with this license cannot be used for commercial purposes. Consequently, one should stick to the dark green area of the license spectrum when creating truly “open” educational resources.



Further Information

"Open Content – A Practical Guide to Using Creative Commons Licences"

Till Kreutzer, published by the German Commission for UNESCO, HBZ and Wikimedia Deutschland (2014).



Links

[Creative Commons Website](#)
[Creative Commons 101](#)



Quiz: Creative Commons Licenses

Find the right license for each case!
[Solutions on page 29]









Task 1

Quiz: Which license is the right one for me?

"I want to make my work available to the public without charge, but..."

1. ☐ I want to be named as author.
2. ☐ I do not want others to make changes to my work.
3. ☐ not for commercial purposes, and I want this to apply to all future derivatives of my work.

<div style="border: 1px solid black; padding: 5px; width: 50px; text-align: center; margin: 5px;">A</div>		<div style="border: 1px solid black; padding: 5px; width: 50px; text-align: center; margin: 5px;">D</div>	
<div style="border: 1px solid black; padding: 5px; width: 50px; text-align: center; margin: 5px;">B</div>		<div style="border: 1px solid black; padding: 5px; width: 50px; text-align: center; margin: 5px;">E</div>	
<div style="border: 1px solid black; padding: 5px; width: 50px; text-align: center; margin: 5px;">C</div>		<div style="border: 1px solid black; padding: 5px; width: 50px; text-align: center; margin: 5px;">F</div>	

Task 2

Quiz: Choose the license that provides more openness!

1. ☐ CC BY or CC BY ND?
2. ☐ CC BY NC ND or CC BY NC SA?
3. ☐ CC BY NC or CC BY SA or maybe CC BY ND?

Chapter 4

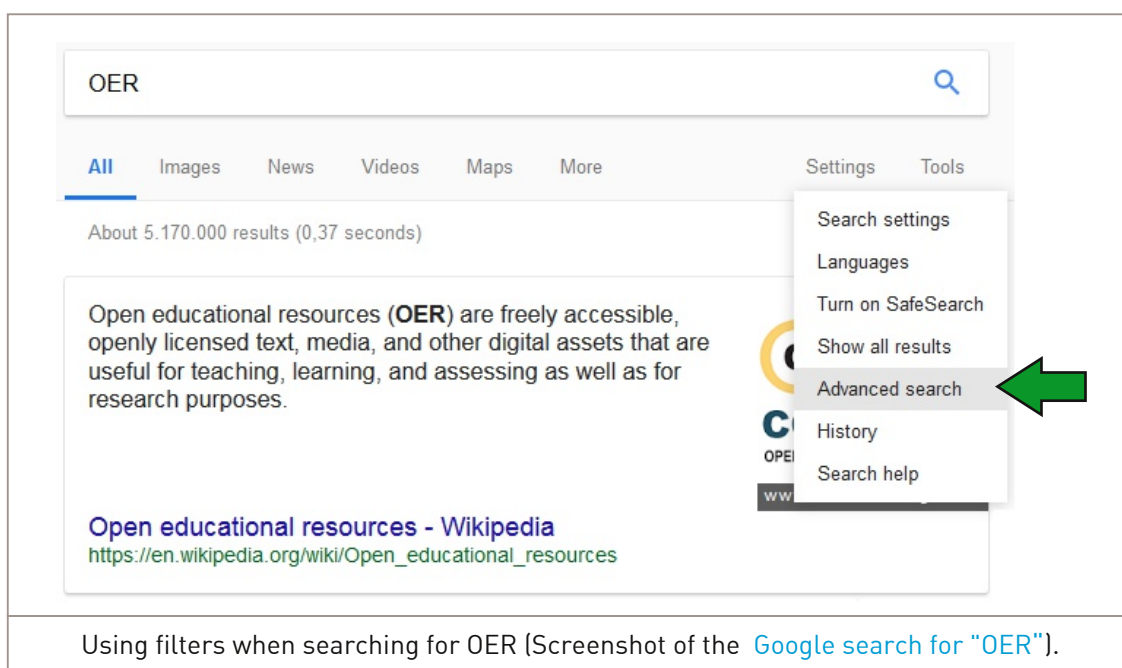
How to Find and Use OER

General information on the use of OER

A good understanding of the OER concept and the various Creative Commons licenses is a solid foundation when you start working with OER. However, even when you are familiar with the different kinds of uses that these licenses permit, there are still some practical aspects to consider in order to find and use OER as efficiently as possible. There is much to explore and discover on the internet, especially when you know where to start looking. Unfortunately, there is no single website that offers access to all contents with an open license, but there are several repositories containing different kinds of OER.

How to search for OER

A fairly simple way to search for free resources is the use of a specific filter for a Google search. Under “Settings” and “Advanced Search” you will find the section “Narrow your results by...” where you can use the filter “usage rights”, which limits the search results according to license type. Think about using search terms in different languages if possible, since that will enlarge the pool of potentially relevant materials.



Starter kit for OER links

Of course you can also search for resources directly on websites that contain OER materials (sometimes in vast numbers). This approach works best when you have obtained some knowledge on where to look for which materials (pictures, texts, etc.). The selection of links provided here is a good starting point to get acquainted with the current OER landscape on the internet:



Wikipedia (www.wikipedia.org)
 Open Course Ware (www.ocw.mit.edu)
 OpenLearn (www.open.edu/openlearn)
 Khan Academy (www.khanacademy.org)
 Europeana (www.europeana.eu)
 Wikiversity (www.wikiversity.org)
 The Orange Grove (www.theorangegrove.org)
 OE Consortium (www.oecconsortium.org/courses)
 Wikibooks (www.wikibooks.org)
 Open Stax Connexions (www.cnx.org)
 Teaching Commons (www.teachingcommons.us)
 Open Textbook Library (www.open.umn.edu/opentextbooks)
 Jamendo (www.jamendo.com)
 PLOS (www.plos.org)
 Safer Internet (www.saferinternet.at)
 OER Commons (www.oercommons.org)
 WikiEducator (www.wikieducator.org)
 CC-Search von Creative Commons (<http://search.creativecommons.org>)
 Open Clipart (www.openclipart.org)
 Flickr Creative Commons (www.flickr.com/creativecommons)
 Pixabay (www.pixabay.com)
 Pexels (www.pexels.com)
 Slideshare (www.slideshare.net)
 Open Education Europa (www.openeducationeuropa.eu)

The contents available on these platforms are steadily increasing in number, so it is a good idea to revisit them from time to time. If you search more frequently for free materials, you will certainly find other websites that might provide contents which are even more suited to your personal needs.

Using CC-licensed works

Once you have found a useful OER that was published under a Creative Commons license on the internet, you will obviously want to use it (for the time being we are only concerned with wanting to use it in its existing form without modifying it). To this end, you need to make sure that you state all the necessary information for this OER, otherwise the Creative Commons license deed does not take effect. Similar to literary citations in scientific texts, you need to document the individual resource being used, its author(s), and where it can be found. Additionally, you need to provide information on the Creative Commons license that was chosen to regulate its use.

The TALLO rule (based on the German TULLU rule by J. Muuß-Merholz & S. Borski for OERinfo – Informationsstelle OER ([CC BY 4.0](https://creativecommons.org/licenses/by/4.0/), www.open-educational-resources.de/oer-tullu-regel) can help you to remember all the necessary components that need to be included:

T	Title:	What is the name of the material?
A	Author:	Who created the material?
L	License:	Under which CC-license has it been published?
L	Link to License:	Where is the text of the license deed?
O	Origin:	Where can the material be found?

Here is an example of how it works:

“Squirrel” is the title chosen by the author “likeaduck”, who published this photo on a website. They selected the CC BY 2.0 license, which means that “likeaduck” wishes to be attributed as the creator of this work, but has not set any other restrictions for the use of this picture. It is important to note that merely stating the type of license is not enough – you also need to provide the link to the right license deed (in this case, the CC BY license of the 2.0 license suite). The place of origin for this photo is the website “Flickr”. This information on its



Squirrel, likeaduck, CC BY 2.0,
[www.creativecommons.org/licenses/by/2.0/legalcode](https://creativecommons.org/licenses/by/2.0/legalcode),
www.flickr.com/photos/thartz00/4800708754

own is not very helpful, so again you also have to link to the exact web location where the photo can be found. If you want to use a resource that you found on the internet in an offline setting (for example when you need to print it on a worksheet for your students), then you have to include the same information. Since you cannot set up actual links, it is best to print the URL of the web addresses as seen in the example on the left.

Things to know about attribution requirements

The Creative Commons license deeds specify that users of licensed materials have to give attribution “in any reasonable manner”. Among other things, this means that the information needs to be presented in a way that makes it clear which OER object is described by it. Hence, it is recommended to place it in close proximity to the OER (which can be done in smaller font size than the main text), or to put it into foot- or endnotes. The latter option is especially suited to OER objects that cannot be properly displayed together with all the necessary information, for example when more than one picture has been embedded in a collage or in a fast-paced video.

It should also be noted that there are small differences between the individual Creative Commons license suites (1.0 to 4.0) when it comes to attribution requirements. For example, in accordance with CC 4.0 it is not necessary to state the title of a work (but it definitely does no harm), whereas this is mandatory in earlier versions. Still, as long as you follow the TALLO rule, all demands should be met.

Modifying CC-licensed works

Most resources that are published under a CC license cannot only be used in their original form, but can also be edited and modified (except when the license includes the “ND” condition). This provides the users with a lot of possibilities, because they can augment the contents, combine them with other materials, and generally adapt them to suit their individual needs. Some aspects need to be considered in order to do this properly:



If you want to modify materials or combine them with other resources (provided that the license allows it), you still need to adhere to the same attribution standards as specified in the TALLO rule.

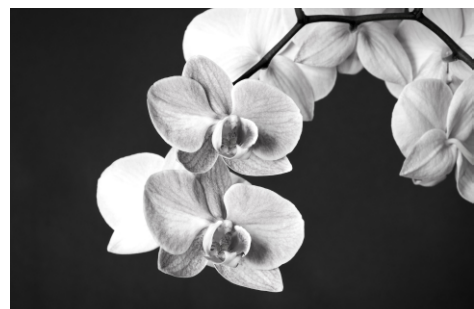


Additionally, you need to consider specific requirements when modifying materials under a CC 3.0 or CC 4.0 license. These editions state that any modifications have to be mentioned explicitly along with the other information concerning the OER. You also have to indicate previous alterations and their authors if they have been disclosed.

Here is an example:



Phalaenopsis cultivar, Julian Herzog,
CC BY 4.0, [Wikimedia](#)



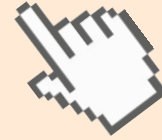
Phalaenopsis cultivar, Julian Herzog,
CC BY 4.0, [Wikimedia](#); modified by
Claudia Zimmermann



Further Information

Links

[Best practices for attribution](#)
[How to correctly use CC works](#)



Exercises for the use of OER

[Solutions on page 29]



Task 1

Practice: Finding OER

- Try a Google search with the license filter “free to use, share or modify – even commercially”. Use your own discipline as the search term (for example, “sociology”).
- Look through the starter kit of OER links in this chapter and make a note of all websites that might be useful for your own needs.

Task 2

Picture puzzle

The attribution for this picture contains three errors.
Can you spot them?



Kitty, tohico, CC BY, Flickr

Task 3

Practice: Using OER

Search online for a random picture of your choice that was published under a Creative Commons license. Download it and copy it into a word processing program, then write down the correct attribution for the picture.

Chapter 5

How to Create and Share OER

General hints for the creation of OER

Creating your very own OER materials is not particularly complicated. However, there are a few things that should be given some consideration:



Make sure that your OER does not include someone else's copyright protected contents, and remember that even unknowing or unintended copyright infringements can have unpleasant consequences. You may of course include other OER, existing material of which you are the copyright holder, and new, original material that you have created yourself.



If more than one person has contributed to the creation of an OER, you need to make a joint decision on how you wish to be attributed (for example, by choosing a team name or by listing all names separately).



Select the license carefully: not all Creative Commons licenses turn your material into a real OER (the licensing process is described on the following pages). It is also worth considering that you cannot withdraw from the CC license agreement once you have published your contents.



Think about how you would like to distribute your OER. In order to maximize the number of people who are able to benefit from it, it is advisable to publish it online. You could, for example, use your own homepage or a suitable repository for the type of resource you are providing.



OER Global Logo, Jonathas Mello, [CC BY 3.0](#), [UNESCO](#); modified by Claudia Zimmermann

Combining Creative Commons licenses

When creating educational resources, it is only reasonable to incorporate one or more existing OER into the new material. If you then wish to publish your newly created content under a Creative Commons license, you need to make sure that the individual licenses of all included materials are compatible with each other. This means that you need to check whether you are allowed to combine the specific materials you selected to create something new. Additionally, the (different) licenses of any incorporated materials may impose some restrictions on the type of CC license that you can apply to your new materials. The following illustration shows which license combinations are acceptable when creating new resources:

kind of modification, and the combination with other materials counts as modifying the original resource. Likewise, the CC BY SA license cannot be combined with one of the more restrictive licenses, because this would violate the “share alike” condition (which ensures that edited versions of the material will be available under a similarly open license).

Once you have examined the license compatibility of the materials you used in the creation of your own OER, you now have to decide which license you want to use for the release of your new OER. The following basic principle should always be observed: if you incorporated other (compatible) OER elements in your work, you would have to

choose the most restrictive of all occurring licenses (at the very minimum). Let us assume that you wrote a handout for your students, which includes a picture with a CC BY license and some text with a CC BY NC license. When you now select a license for your handout, it can only be a CC BY NC license or a more restrictive license (in this case that would mean either CC BY NC SA or CC BY NC ND). This example shows that the use of restrictive licenses also limits the openness of any potential adapted works. It is therefore highly recommended to always use licenses that are as open as possible!

	PUBLIC DOMAIN	PUBLIC DOMAIN	CC BY	CC BY SA	CC BY NC SA	CC BY NC	CC BY NC ND	CC BY ND
PUBLIC DOMAIN	✓	✓	✓	✓	✓	✗		
CC BY	✓	✓	✓	✓	✓	✗		
CC BY SA	✓	✓	✓	✓	✗	✗		
CC BY NC	✓	✓	✗	✓	✓	✗		
CC BY NC ND	✗	✗	✗	✗	✗	✗	✗	





Vectorized CC License Compatibility Chart compact,
[CC0 1.0](#), [Wikimedia](#)

As you can see, it is not allowed to combine materials if their license includes the “ND” (no derivatives) condition. This is due to the fact that this license condition prohibits any

You can playfully practice the combination of CC licenses with this [online card game](#).

How to license your own works with Creative Commons

The next important stage in creating your own OER is of course the licensing process. This includes several simple steps:

-  Choose a suitable Creative Commons license that you wish to apply to your material, as well as a license suite – Creative Commons recommends the use of the most up-to-date version (currently CC 4.0).
-  If your work incorporates other OER, make sure that their licenses are compatible and that your own choice of license is permissible.
-  Review your material and check whether it includes all the information that potential future users will need for a correct attribution (your name, the work's title, information on the license...).
-  Depending on the kind of material that you have created and how you plan on distributing it, there are two main ways for licensing: offline and online.


Offline licensing

If, for example, you want to turn a worksheet into an OER and distribute it in printed form among your students, there are two ways of indicating a Creative Commons license:

You insert the correct license icon and a written remark about the license suite:

Worksheet

by a great teacher



4.0

www.creativecommons.org/licenses/by/4.0/legalcode

You put both license and license suite down in writing:

Worksheet

by a great teacher

CC BY 4.0

www.creativecommons.org/licenses/by/4.0/legalcode

Please note that in both cases you have to print the URL for the selected license deed.

Online licensing

If you want to license your educational resource on the internet, you can do so directly on the Creative Commons website. [Here](#) you will find a user-friendly input screen that not only helps you choose the right license, but also enables you to enter additional metadata about your contents.

License Features

Your choices on this panel will update the other panels on this page.

Allow adaptations of your work to be shared?

?

☒ Yes
 ☐ No
 ☐ Yes, as long as others share alike

Allow commercial uses of your work?



?

☒ Yes
 ☐ No

?

Selected License

Attribution 4.0 International

Input screen for the licensing process, using the example of a CC BY license (screenshot of [Creative Commons](#)).

The Creative Commons website has a [Downloads](#) section where you can find the corresponding license icon for your chosen license. Your material should display either the license icon (in this example, the icon for “CC BY”) together with the written specification of the license suite (“CC 4.0”) or the license and license suite in writing (“CC BY 4.0”). Either way, you need to set up a link to the license text. The easiest way to find the right license text is through a Google search of the license type (“CC BY 4.0”). Make sure that you link to the license deed (the long version of the license text). All this information might be placed differently depending on the kind of material that you want to license – it is generally easy to include it in written contents (like handouts or slide sets), whereas other formats (such as photos or videos) are often displayed online with the license information right next to it. Some websites provide input fields where you can specify the type of license or rights of use when you upload material (which is the case for most OER repositories).

The correct licensing of an OER is important for several reasons: potential users should be able to easily and quickly determine that your resource is an OER and what conditions apply for its free use. This enables them to use the material correctly and with a high degree of legal security. Additionally, the licensing of educational resources plays an important role when it comes to the retrievability of contents on the internet – which is why it is helpful to get familiar with the concept of metadata.

OER and metadata (by Karin Lach, University of Vienna)

Metadata are familiar even though the term itself might not be. Are you looking for scientific literature? The common elements of a bibliographic reference (author, title, year of publication, etc.) are publication metadata. If you want to know what a book or an article is about, you will look at the keywords that authors or libraries chose to describe their content, and those are metadata as well. Simply put, metadata are additional data or “data about data”.

When creating an OER, it is important to state all the necessary information, which enables others to use the material correctly and also ensures that the resource can easily be found online. The components of a correct attribution (title, author, license, source of origin) form the most basic metadata. In addition, other items like the format of the resource and certain didactical information (for example, the specification of the learner group that is addressed by the resource) can be helpful.

There are several metadata schemes that can be used for educational resources, like the Learning Object Metadata Schema (LOM) or ISO/IEC 19788. Schemes like these provide standardized elements for the description of learning resources. They come into effect when you upload an OER to a digital archive and you are given the opportunity to select various descriptions (for example, on didactics) for your resource. Thus, one of the advantages of international efforts to develop and provide metadata standards is that they greatly improve the retrievability and reusability of educational resources in many contexts.

Depending on where and how you intend to publish your OER, you will have different facilities to enter metadata. In order to enhance the subsequent use of your resource, you should state as much information about it as possible, and make use of standardized metadata options if they are available.

Help others attribute you!

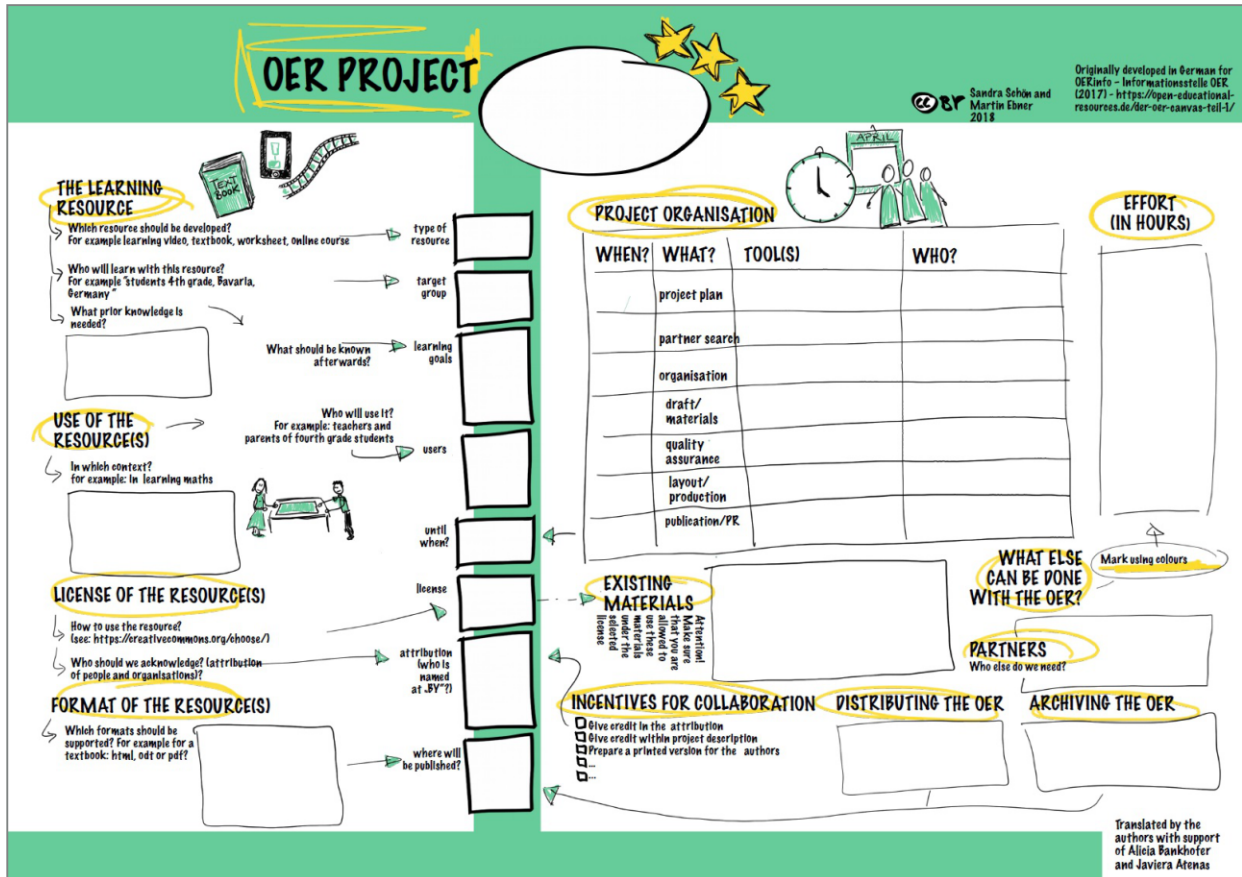
This part is optional, but filling it out will add machine-readable metadata to the suggested HTML!

Title of work	<input type="text" value="Worksheet"/>	?
Attribute work to name	<input type="text" value="A great teacher"/>	?
Attribute work to URL	<input type="text"/>	?
Source work URL	<input type="text"/>	?
More permissions URL	<input type="text"/>	?
Format of work	<input type="text" value="Text"/>	?
License mark	<input type="text" value="HTML+RDFa"/>	?

Example for entering metadata as part of the CC licensing process (screenshot of [Creative Commons](#)).

Help with planing and creation: the OER Canvas

The whole process of creating your own OER can seem a little intimidating in the beginning – but it gets easier with some practice. A useful tool to get started with the production of OER can be found on the Open Education Austria website in the section “materials”. This template called the OER Canvas can help you to keep track of the essential aspects of your OER project. On the left side, there is room for descriptions of your resource (type, usage, license, and format). On the right side, you can plan the practical issues concerning the creation and distribution of your resource. Try it!



OER PROJECT

Originally developed in German for OEKInfo - Informationsstelle OER (2017) - <https://open-educational-resources.de/oer-canvas-tell-1/>
Sandra Schön and Martin Ebner 2018

THE LEARNING RESOURCE

- Which resource should be developed? For example learning video, textbook, worksheet, online course
- Who will learn with this resource? For example 'students 4th grade, Bavaria, Germany'
- What prior knowledge is needed?
- What should be known afterwards?
- Who will use it? For example: teachers and parents of fourth grade students
- In which context? for example: in learning maths
- How to use the resource? (see: <https://creativecommons.org/choose/>)
- Who should we acknowledge? (attribution of people and organisations?)
- Which formats should be supported? For example for a textbook: html, odt or pdf?

USE OF THE RESOURCE(S)

LICENSE OF THE RESOURCE(S)

FORMAT OF THE RESOURCE(S)

PROJECT ORGANISATION

WHEN?	WHAT?	TOOL(S)	WHO?
	project plan		
	partner search		
	organisation		
	draft/ materials		
	quality assurance		
	layout/ production		
	publication/PR		

EXISTING MATERIALS

INCENTIVES FOR COLLABORATION

- ☐ Give credit in the attribution
- ☐ Give credit within project description
- ☐ Prepare a printed version for the authors

DISTRIBUTING THE OER

ARCHIVING THE OER

WHAT ELSE CAN BE DONE WITH THE OER?

PARTNERS
Who else do we need?

EFFORT (IN HOURS)

Mark using colours

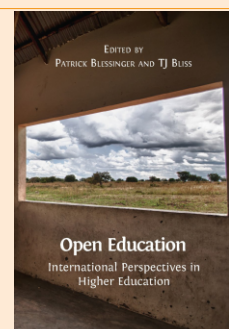
Translated by the authors with support of Alicia Pankhofer and Javiera Atenas



Further Information

"Technology Strategies for Open Educational Resource Dissemination"
by Phil Barker & Lorna M. Campbell. In:

"Open Education. International Perspectives in Higher Education" Ed. Patrick Blessinger & T.J. Bliss, Open Book Publishers.





Further Information

Links

[Why create OER?](#)

[Metadata - optimising your OER](#)



Exercises for the creation of OER



Task 1

Practice: Create your first simple OER

1. Combine at least two pictures from different online sources (use the OER links in Chapter 4). Make sure that you state all the required information for these pictures.
2. Check whether the combination of the (different?) licenses of your chosen pictures are acceptable.
3. Choose a Creative Commons license for your work! Does the resource include all the information that future users will need for a correct attribution?

Task 2

Practice: OER for advanced creators

Select an item from your existing teaching materials (such as slides, worksheets, syllabi...) and revise the content so that it can be published as an OER. Which Creative Commons license would you choose?

Task 3

Practice: Working with the OER Canvas

Think about a new OER project that could be useful for your lectures and fill in the template of the OER Canvas. Which aspects do you find easy, which are more difficult?

Chapter 6

Open Education Austria – the Project

What is Open Education Austria?

Open Education Austria is a project funded by a University Structural Funds Ordinance of the Austrian Federal Ministry of Education, Science and Research. Several Austrian universities take part in this cooperation with the aim of developing and strengthening the national infrastructure for the use and production of OER in institutions of higher education. The project partners (the Universities of Graz and Innsbruck as well as Graz University of Technology under the leadership of the University of Vienna) work together to create a network of services provided by individual e-learning centers, central IT services, and university libraries. These objectives are pursued in three different sections:

1. OER portal

This section is dedicated to the concentration of services and resources that are available to help lecturers with the creation of their own OER materials. This includes assistance in media didactics or legal matters as well as with technical support and library services.



Questions? Contact: Sylvia Lingo, University of Vienna (sylvia.lingo@univie.ac.at)

2. Information and qualification

This section is focused on the development and implementation of further education concerning OER. These training measures are not only designed to help higher education teachers get acquainted with the use and creation of OER, but also to connect them with like-minded individuals in order to exchange ideas and experiences.



Questions? Contact: Michael Kopp, University of Graz (michael.kopp@uni-graz.at)

3. OER infrastructure

The primary task of this section is the conception of necessary technical requirements for archiving and publishing educational material. The goal is to construct a repository for OER contents produced by Austrian lecturers in higher education, which involves current learning management systems (especially Moodle).



Questions? Contact: Raman Ganguly, University of Vienna (raman.ganguly@univie.ac.at)

Closely associated with these efforts is the central infrastructure of library services, which are primarily focused on topics like metadata and the general retrievability of OER through the use of online search tools.



Questions? Contact: Paolo Budroni, University of Vienna (paolo.budroni@univie.ac.at)
Karin Lach, University of Vienna (karin.lach@univie.ac.at)

Other learning opportunities in the field of OER

In addition to this guideline that you are reading right now, Open Education Austria has launched several other initiatives for the promotion of OER in Austrian higher education, many of which are ongoing efforts:



Workshop program

All three project locations (Vienna, Graz, and Innsbruck) hosted introductory workshops called “Using and Creating OER” in 2017, which were offered to university lecturers free of charge. Similar workshops will likely be held in the future – if you are interested in attending one, please contact:

Michael Kopp, University of Graz (michael.kopp@uni-graz.at).



OER festival

The first Austrian OER festival took place in Graz on 31st May 2017. The event offered two inspiring lectures and a range of advanced workshops in which the participants could expand on various aspects regarding OER in higher education. You can watch the video of a German lecture held by Dr. Dominic Orr (titled “OER – many questions, clear responses?”) [here](#).



Online course on OER („COER18“)

“COER18” is the title of a German Massive Open Online Course (MOOC) on the topic of OER, which was released on the platform [iMooX](#) and can be accessed by anyone free of charge. The four lessons in this course consist of short videos and many helpful links and resources, which help you gain a good sense of how to work with OER. A new and updated version has become available in April 2018, come have a look!



Further Information

Links

[Open Education Austria](#)
[iMooX Platform](#)



Solutions for the Practical Exercises



Chapter 2 - Quiz: Copyright Law

Answers: 1B, 2D, 3C, 4C

Chapter 3 - Quiz: Creative Commons Licenses

Answers for Task 1: 1A, 2D, 3E

Answers for Task 2: 1A, 2E, 3B

Chapter 4 - Picture Puzzle



Kitty, tohico, CC BY, Flickr

Solution:

Mistake 1: Even though the license type is included, the license suite is missing.

Mistake 2: There is no link (or printed URL) to the full license text.

Mistake 3: The platform where the photo can be found is named, but there is no link (or printed URL) to the exact web location.

The correct attribution should look like this:

For online use:

Kitty, tohico, [CC BY 2.0](#), [Flickr](#)

For offline use:

Kitty, tohico, CC BY 2.0, www.creativecommons.org/licenses/by/2.0/legalcode,
www.flickr.com/photos/jvacek/5161975102/in/album-72157624935416772/.

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Open educational resources (OER) have become an increasingly important element of quality teaching in higher education. This booklet provides all the necessary information to dive right into this topic: you will get an overview of Austrian copyright law and the open licensing model of Creative Commons, as well as many practice-oriented instructions that will guide you towards the creation of your very own OER.

Enjoy!

