Lesson 11: - What is free content

	Activity

In your view, what does the "*free*" mean in the concept "free content"?

- Go to Dictionary.com and search for the meaning of "free"
- Do the same search at AskOxford

When thinking about the *free* in free content, many people associate this with the idea of content without cost. However, the alternative meaning of free refers to personal liberty -- the ability to act without restriction.

The Wikieducator community believe that education is a common good, and that all educators should have the freedom to teach with the technologies and contents of their choice.

Consequently, for Wikieducators - free refers to the liberty to adapt, modify and use content without restriction. The fact that no royalties or licensing costs are associated with use of Wikieducator materials, is an incidental advantage and not the reason for our existence.

Distinguishing between free and non-free content is riddled with complexity and often leads to passionate and emotive debate. In this tutorial we will unpack what free content means for this community.

Freedom as concept

In the free software community *Gratis* is associated with Free Beer, photo courtesy of H. Moltke
The English language does not have an adjective that singularly describes the state of freedom associated with personal liberty. As you would have discovered in your dictionary search on the previous page, the concept *free* in the English Language is used as an adjective to refer both to **no price** (gratis) and **freedom** (libre - see below).

The essential freedoms

Richard Stallman stresses the importance of knowing what freedom means in the context of free software. In the absence of this knowledge you will have difficulty defending freedom and freedom is easily lost. There are four essential freedoms for free software users:

- **Freedom to use**, that is the freedom to run the program, for any purpose (freedom 0).
- **Help yourself** which is the freedom to study how the program works, and adapt it to your needs (freedom 1). Access to the source code is a precondition for this.
- **Help your neighbour** that is, the freedom to redistribute copies without restriction (freedom 2).
- **Help your community** referring to the freedom to improve the program, and release your improvements to the public, so that the whole community benefits (freedom 3). Access to the source code is a precondition for this.

If any of these freedoms is substantially missing, then it is not free software. So for example, so called freeware, which is copyright software that you can download without cost but without access to the source code is **not** free software.

Activity
Consider for example a handout used for a professional development workshop that is licensed under a free cultural works license and stored as a pdf document for download. Using the four freedoms described above, would this handout meet the requirements of the freedoms specified in the free software definition? We should recognise that free works are different from free software, however it is useful to think about these essential freedoms when talking about free works, especially when they are stored in digital formats. In the Activity above, a pdf file which is distributed under a free cultural works license would meet the requirements of Freedom 0 and Freedom 2. However it is more difficult to adapt and modify a pdf file because it is distributed in a "compiled" format which makes it difficult to edit and modify the document.

Free content defined

Creators of free content are encouraged to use this reference to the definition. What constitutes free content can become confusing, especially when digital content is concerned, therefore we recommend that you study this resource carefully.

The sharing of knowledge is not a new phenomenon. We share knowledge freely every time:

- a parent intervenes in the upbringing of child; or
- a teacher presents a lesson.

Knowledge is infinitely scalable because its grows with reuse. Fortunately, when we share knowledge, we still have it for ourselves to use.

Sadly, much of the world's knowledge is locked behind copyright and consequently access to this knowledge is restricted, especially for the majority of citizens in the developing world.

Advances in digital technology and collaborative authoring software used by Wikieducator, enables those of us, who believe that education is a common good to work together, in the creation of free content for education. Building on the experiences of the free software movement and a few smart licensing options designed to protect the freedom of content resources we are able to make progress in working towards a free version of the education curriculum by 2015. These tutorials are designed to support you in acquiring the skills to helping us achieve this strategic objective.

Free Cultural Works

The definition of Free Cultural works is based on the premise that the easier it is to re-use and derive works, the richer our cultures become.

The Definition of Free Cultural Works is a project, not unlike the Free Software Definition, which set out to resolve the ambiguity associated with the concept of "free content".

There is growing international interest in the concept of **"Open Educational Resources"** (OERs) [1], which was first adopted at UNESCO's 2002 Forum on the Impact of Open Courseware for Higher Education in Developing Countries. However, not all resources that carry the label of OERs meet the requirements of the Free Cultural Works (Free Content) definition. Therefore it is necessary to clarify what we mean by free content.

The WikiEducator community subscribes to the Free Cultural Works Definition and it is important for contributers of this community to know what we mean by free content.

Requirements of the free content definition

In order for a resource to meet the requirements of the free content definition, it must:

1. Meet all the requirements specified below, that is the essential freedoms, permissible restrictions and additional technical requirements; and
2. It must carry a free content license, which is a legal instrument whereby the legal owner of the resource grants specific freedoms in accordance with the requirements of the free content definition below. We will cover selected examples of acceptable free content licenses in the next subsection of the tutorial.

These are the requirements of the Free Cultural Works Definition:

Essential freedoms

	Key points
Essential freedoms In order to be recognized as "free" under this definition, a license must grant the following freedoms without limitation: • **The freedom to use and perform the work:** The licensee must be allowed to make any use, private or public, of the work. For kinds of works where it is relevant, this freedom should include all derived uses ("related rights") such as performing or interpreting the work. There must be no exception regarding, for example, political or religious considerations. • **The freedom to study the work and apply the information:** The licensee must be allowed to examine the work and to use the knowledge gained from the work in any way. The license may not, for example, restrict "reverse engineering". • **The freedom to redistribute copies:** Copies may be sold, swapped or given away for free,	

as part of a larger work, a collection, or independently. There must be no limit on the amount of information that can be copied. There must also not be any limit on who can copy the information or on where the information can be copied.

The freedom to distribute derivative works: In order to give everyone the ability to improve upon a work, the license must not limit the freedom to distribute a modified version (or, for physical works, a work somehow derived from the original), regardless of the intent and purpose of such modifications. However, some restrictions may be applied to protect these essential freedoms or the attribution of authors

	Key points

Permissible Restrictions

Apart from these allowed restrictions, the license *must not* include clauses that limit essential freedoms. Especially, *it must not specify any usage restrictions* (such as prohibiting commercial use of the work, restricting use depending on political context, etc.).

- **Attribution of authors**: Attribution protects the integrity of an original work, and provides credit and recognition for authors. A license may therefore require attribution of the author or authors, provided such attribution does not impede normal use of the work. For example, it would not be acceptable for the license to require a significantly more cumbersome method of attribution when a modified version of the licensed text is distributed.
- **Transmission of freedoms**: The license may include a clause, often called *copyleft* or *share-alike*, which ensures that derivative works themselves remain free works. To this effect, it can for example require that all derivative works are made available under the same free license as the original.

Protection of freedoms: The license may include clauses that strive to further ensure that the work is a free work, notably by enforcing some of the conditions specified in the paragraphs below: for example, access to *source code*, or prohibition of *technical measures* restricting essential freedoms.

Additional conditions

	Key points

Additional conditions

While adhering to the essential freedoms, a specific work may be non-free in other ways that restrict the essential freedoms. These are the additional conditions in order for a work to be considered free:

- **Availability of source data:** Where a final work has been obtained through the compilation or processing of a source file or multiple source files, all underlying source data should be

available alongside the work itself under the same conditions. This can be the score of a musical composition, the models used in a 3D scene, the data of a scientific publication, the source code of a computer application, or any other such information.

- **Use of a free format:** For digital files, the format in which the work is made available should not be protected by patents, unless a world-wide, unlimited and irrevocable royalty-free grant is given to make use of the patented technology. While non-free formats may sometimes be used for practical reasons, a free format copy *must* be available for the work to be considered free.
- **No technical restrictions:** The work must be available in a form where no technical measures are used to limit the freedoms enumerated above.

No other restrictions or limitations: The work itself must not be covered by legal restrictions (patents, contracts, etc.) or limitations (such as privacy rights) which would impede the freedoms enumerated above. A work may make use of existing legal exemptions to copyright (in order to cite copyrighted works), though only the portions of it which are unambiguously free constitute a free work

	Activity

A few Open Education Resource (OER) projects are listed below. Visit their respective websites and assess whether the projects meet the requirements of the free content definition:
 	
    • Massachusetts Institute of Technology's (MIT's) OpenCourseWare initiative;
    • Connexions hosted by Rice University;
    • OER Commons
 	
MIT's OpenCourseWare project does not meet the requirements of the free content definition because it uses a non-commercial restriction in its license. Furthermore, there are closed format files included in many of the resources which do not meet the additional conditions listed above. Connexions content does meet the requirements of the definition. The OER Commons is a portal which directs users to resources on the web. The portal contains numerous resources that do not meet the requirements of the free content definition.
 	
This brings us to the important topic of licensing which will be covered in the next subsection	

Licenses

The problem

In most jurisdictions of the world, the default regulations pertaining to copyright and intellectual property rights are becoming increasingly restrictive.

This is a complex topic because property rights of creative works are typically regulated by national laws. So for example:

- a work that would be in the public domain in one country would not necessarily be in the public domain in another country; also
- works that were created before the existence of national copyright law would be in the public domain, for example the Bible.

However, copyright may exist in certain translations or forms of the publication of the Bible. Furthermore, there is the complicated topic of expiration which refers to the default duration of a copyrighted work before it can legally become part of the public domain.

Historically, that is before the inception of copyright law, a creative work would typically form part of the public domain unless licensed otherwise. This is no longer true because today copyright law, for most jurisdictions, is automatically assigned to the creator of the work resulting in a serious depletion of works being generated for the public domain or intellectual commons. Public domain is not a license, but under modern copyright law normally requires a declaration or dedication that the work is in the public domain. However, as indicated above this may be different in your own country.

In the creation of new free content, or modifications of existing free content, the WikiEducator community is not overly concerned with the intricacies of national copyright law. We are however interested in protecting our free choice to produce, modify and adapt free content.

The WikiEducator community **does not** incorporate copyright material into the wiki. Every time you make an edit on WikiEducator, you confirm that you are submitting original work under a free license, alternatively sourcing materials from the public domain or similar free resource.

Free content licenses

	Self Assessment
Assuming you want to create a free content work - based on your existing knowledge: - What license would you choose? - Why did you choose this license? In this tutorial, we do not have the scope to cover all free licenses. We will, however, look at two of the most widely used free content licenses, namely the GNU Free Documentation License (FDL) and the Creative Commons licenses	

GNU Free documentation license

The GNU Free Documentation License was orginally developed by the GNU Free Software project as a license for documentation accompanying free software programs. The FDL is a copyleft license, as described in the previous subsection because it contains a share-alike provision.

This is an important license because a large number of free content projects use this license, for example most of the Wikimedia projects. These projects represent a vast collection of content resources which you may want to adapt and modify for your own purposes, so its important to be aware of this license.

The Creative Commons

The Creative Commons is a charitable US-based corporation that has developed a range of licensing options between two sides of a continuum. On the one side, total control associated with all "rights reserved" and on the other, total freedom. Choosing a license **does not** mean that you give away copyright, it refers to the rights you may give members of the public and the conditions of use of your creative works.

The creative commons is a no "hassle" approach to assigning a license to your work, because all the legal work has been done for you. You simply need to select one of the creative commons licenses. Furthermore, the Creative Commons license has the additional benefit that it is expressed in three forms:

- A **Commons Deed**. A simple, plain-language summary of the license (intended for humans), complete with the relevant icons.
- The **Legal Code**. This is the fine print that you need to be sure the license will stand up in court (intended for legal professionals).
- The **Digital Code**. A machine-readable translation of the license that helps search engines and other applications identify your work by its terms of use. For example, this can be embedded in the markup of a web page.

	Activity

Choosing a Creative Commons License
 	
The purpose of this activity is to provide you with an authentic experience in choosing a license.
 	
1. Go to the relevant section on the Creative Commons site for choosing a license
2. Select the options that you feel are a "good fit" for Open Education Resources
3. Click on the "Select a license" button
4. You should be presented with a license under the text: "*Here is the license you've chosen*". Note which of the following restrictions have been included in your license:
    o Attribution (BY)
    o No Derivative works (ND)	

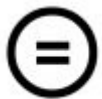- o Non Commerical (NC)
- o Share-alike (SA)

Assess whether the license you have selected meets the requirements of the free content definition discussed on the previous page of this tutorial

If you are new to the question of the licensing of free content for education, you may have found the variety of choice for a Creative Commons license confusing. Were you certain about the legal and practical implications of your choices?

Creative Commons describe the license options as follows:

Attribution: Required for all CC licenses - this is not an option. By attribution you let others copy, distribute, display, and perform your copyrighted work — and derivative works based upon it — but only if they give credit the way you request.

No derivative works: You let others copy, distribute, display, and perform only verbatim copies of your work, not derivative works based upon it

Noncommercial: You let others copy, distribute, display, and perform your work — and derivative works based upon it — but for noncommercial purposes only

Share-alike: You allow others to distribute derivative works only under a license identical to the license that governs your work.

- Note: A license cannot feature both the Share Alike and No Derivative Works options. The Share Alike requirement applies only to derivative works.

Note that the logo's above are official trademarks of the Creative Commons and are used here for illustrative purposes.

Creative Commons has made a significant contribution to unraveling the quagmire of widening rights and use of resources. Nonetheless it is still a daunting task for many educators in taking an informed decision about the "right" license. These issues are the foundation of a healthy debate in the Open Education Resource community.

Free software and free content

Software refers to the programs we load to perform specific tasks on a computer. The average user never sees the code which is used to develop a piece of software, because end users typically use compiled versions of the program. (Compiling is the technical process of converting a programming language which software developers use for coding into machine language which computers can execute).

Content on the other hand is produced in many formats, for example a printed book, the spoken word, works of art, images, radio or television broadcast, web site etc. These are produced in formats which humans can process and interpret.

In the digital world, the distinctions between software and content are conflated, for example:

- A computer program is content for a software developer
- We use computer programs to produce, store and display content

The experience of the free software movement has provided an alternative to the dominant narrative of copyright. This is leading to alternative models of content production and distribution that will not rely on closed copyright to achieve economies of scale and sustainable business models.

It is certainly plausible for free content developers to achieve the vision of a free version of the education curriculum by 2015. It took approximately 22 years for the free software movement to develop a free alternative for the majority of proprietary software applications we use today. Certainly, all the applications we need for educational purposes are available as free software. With regards to free content, we are still a long way from having a free content version of the education curriculum. However, it should be easier to achieve when compared to the free software movement, because you do not need to be a skilled programmer to participate. Every teacher, lecturer or trainer can easily participate in helping us develop high quality learning resources which we can share, adapt and modify for different contexts.

![?]	***Self Assessment***
In your view, how many teachers would we need, for example, to develop a Maths course for Grade 8? This illustrates the scalability of free content - relatively small numbers of committed educators can have a huge impact on the rate at which free content is developed. All it requires is a personal commitment, every content contribution adds to the intellectual commons, and will be available for use and modification indefinitely	

The challenge of open formats

The additional requirements of the free content definition specifies that:

- the source data must be available; and
- files should be saved in a free format.

When working on WikiEducator, this is not a problem because the source data of each wiki page is available for editing using the Mediawiki software which is free software. However, this requirement can be challenging in a number of situations. Here are a few guidelines to consider when authoring free content:

- **Uploading of pdf files**. Fortunately the Portable Document Format (pdf), while being a proprietary format is an openly documented format. As a openly documented format, the free software community has been able to develop free pdf readers and application software that can generate a pdf files, for example Open Office. Unfortunately, pdf files are compiled and are therefore difficult to edit and modify. When uploading a pdf document, we recommend that you also upload the source file in an open format, for example as an Open Office file. This way users will not be restricted in the event that they would like to modify the pdf file.
- **Document formats**. Similarly, when uploading documents these should ideally be saved in an open document format. The Microsoft Word format (.doc) is a closed document standard. Fortunately, Open Office can import the Microsoft (.doc) format and it's a simple process to convert these files into the Open Office (.odt) format. We recommend that if you upload a Microsoft document, that you also take the trouble to convert the file into .odt format. When working on free content projects, it is unacceptable to state a requirement for participants to submit documents in .doc format.
- **Labeled images**. In educational settings we frequently use labeled diagrams. Again, where possible try to save your diagrams in formats that can be edited with free software where possible. This is especially helpful when free content is being translated into different languages, because it is easier to change the labels using the source files.

The Wikieducator community respects freedom of choice. This means that users are free to use both free and non-free software when authoring content. However, there are many free software users who do not have access to non-free software, either as a matter of personal choice or because they cannot afford to purchase expensive packages. Therefore we ask users to be considerate and to respect the choices individuals have made.

The purpose of the next activity is to demonstrate an easy way for non-free software users to convert closed formats into open file formats.

	Activity

Converting closed formats into open formats

1. For office productivity software (documents, slide show presentations and spreadsheet files) you should download a copy of [Open Office](#) on your machine. This is available for GNU/Linux, Microsoft and Mac OS X operating systems.

- Open one of your closed document files in Open Office by clicking on: File > Open
- Then click on File > Save As and select the file type, in this case the OpenDocument Text format (.odt)
- Try creating a pdf from this file by clicking on File > Export as pdf

Open Office should cover most of your needs regarding open file formats. If you are looking for a more comprehensive listing, UNESCO's Free and Open Source Software Portal is a good place to start.