

Creative Commons Licensing, In Vitro and In Vivo

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Land acknowledgement

Before we begin, I must acknowledge that I am physically located at this moment within the unceded territory of the Ute Peoples. The earliest documented people in this area also include the Apache, Arapaho, Comanche, and Cheyenne. An extended list of tribes with a legacy of occupation in this area can be found here: [Colorado Tribal Acknowledgement List](#).

Some background

Kris and I were introduced by the wonderful [Paola Corti](#), OE Community Manager for SPARC Europe; see her work on the [European Network of Open Education Librarians \(ENOEL\)](#).

Paola and I have worked together on the [Creative Commons Certificate Course](#). I've taught 220 students in that course from 19 countries, in 9 sections since June of 2019. Among those sections were both "Educator" and "Librarian" versions of the course, even though I'm a faculty member.

For background, Kris pointed me to a page [Publishing NUI Galway Open Educational Resources \(OERs\) for Effective Learning](#) and added (maybe too modestly?) that

"Unlike North America, OER is a pretty new space for Libraries to be contributing in Ireland, particularly in the space of OER creation."

The plan:

- Why we care about Creative Commons (CC) licensing in open education
- Focus on licensing issues that come up fairly often in OER practice.
- Discussion!!

The UNESCO OER Definition

UNESCO unanimously adopted its [OER Recommendation](#) on 25 November 2019.

That Recommendation includes the definitions

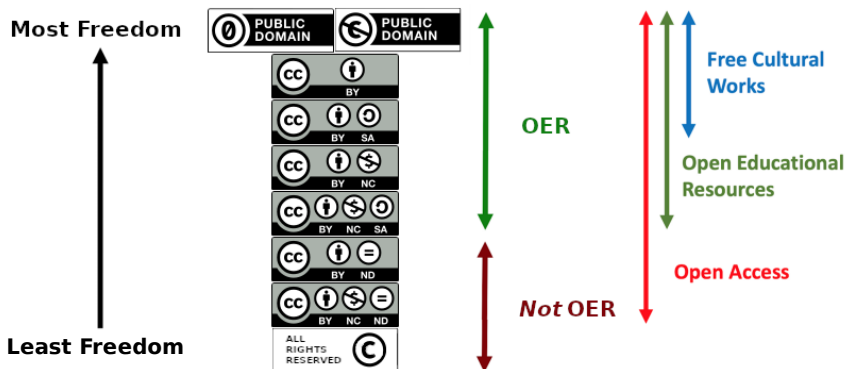
- "1. Open Educational Resources (OER) are learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others.*
- 2. Open license refers to a license that respects the intellectual property rights of the copyright owner and provides permissions granting the public the rights to access, re-use, repurpose, adapt and redistribute educational materials."*

Note the similarity to David Wiley's [5Rs of Open](#).

After a confusion of different definitions due to the [William and Flora Hewlett Foundation](#), [Creative Commons](#), and others, we should take this definition as canonical: 193 countries' diplomats can't be wrong!

The augmented CC license spectrum

Mapping the clauses in that UNESCO OER definition to the CC license suite – augmented by the two CC public domain tools and, because there are still people outside of the open movement, all-rights-reserved copyright – we get:



What about OER to which CC licenses should not be applied?

CC recommends that their licenses not be applied to software. But some OER may incorporate, or even consist almost entirely of, software.

Here are licenses commonly used for FLOSS¹, as collected by the [Open Source Initiative](#):

- [Apache License 2.0](#)
- [BSD 3-Clause "New" or "Revised" license](#)
- [BSD 2-Clause "Simplified" or "FreeBSD" license](#)
- [GNU General Public License \(GPL\)](#)
- [GNU Library or "Lesser" General Public License \(LGPL\)](#)
- [MIT license](#)
- [Mozilla Public License 2.0](#)
- [Common Development and Distribution License](#)
- [Eclipse Public License version 2.0](#)

And there are more!

I have not checked which of these satisfy the UNESCO OER Definition, but I do know that the GPL does: it's quite parallel to CC BY-SA. [I always use the GPL on my code.]

¹FLOSS="Free/Libre/Open-Source Software"

Licensing issues that come up in OER practice

Let's take a tour of some licensing issues that I have seen in OER practice:

- Licensing software
- Who gets to apply a CC license?
- How to do a proper attribution?
- OER and exceptions and limitations to copyright: the TASL habit
- Collections vs adaptations/remixes
- Licenses on collections
- Licenses on adaptations
- Licenses on remixes

We already talked about this, on the slide named
What about OER to which CC licenses should not be applied?

Note those considerations apply

- to OER which are simulation, such as the [PhET Interactive Simulations for Science and Math](#)
- [Jupyter](#), [Mathematica](#), and [Sagemath](#) Notebooks
- problems written in the [WeBWork](#) homework system
- [maybe] [H5P](#) tasks
- more?

Who gets to apply a CC license?

While CC licenses seem to negate or be the opposite of copyright, in fact they get their force from the powers copyright laws give to rightsholders.

So someone who doesn't own the copyright on a work cannot put a CC license on it.

In the US, with a strong **works-for-hire** default in the **Copyright Act**, this can mean that employees cannot put CC licenses on works they create. In academia in the US, this is typically true of non-tenure-line faculty, many staff (sometimes librarians).

There can be a role for good policy to increase equity in this situation.

What is the situation in Ireland?

Even if Ireland does works-for-hire better than the US, what happens when works in one country are used in another? [Remember, by the principle of *territoriality*, the copyright law that applies is the law in the country where the use was made, **not** the law in the country where the work was created!]

How to do a proper attribution?

All CC licenses have the BY clause, meaning that reusers must always give **attribution**.

There are helpful tools, or just remember: **TASL**.

Title: What is the name of the work?

Author: Who owns the work?

Source: Where can it be found? (**Provide link** if possible.)

License: Which license is the work distributed under? (**Provide link to [creativecommons.org](https://creativecommons.org/licenses/by/4.0/) license source.**)

Academics need to get in the habit of always giving good [TASLed] attribution statements whenever they make a copyright-significant use of a CC-licensed work.

Note that attribution is not the same thing as scholarly citation! Attribution is legally required, should follow TASL, and applies when one is using another work's *expression* but not when using only the underlying facts or ideas.

Citation is required by scholarly norms, should follow MLA or APA or whatever citation formatting your context demands, and applies when one is using another works expressions, facts, and/or ideas.

OER and exceptions and limitations to copyright: the TASL habit

Many countries have *exceptions and limitations to copyright*, such as fair use/dealing, specific educational exemptions to copyrights, exceptions to copyright which apply when a person with a physical disability needs access to a copyrighted work, *etc.*

When an exception or limitation applies to a use, it is as if the powers of copyright have taken a vacation for that use. Since CC licenses need the power of copyrights to have any force, this means that all CC license terms are in abeyance for that use.

Nevertheless, because of territoriality and since E&Ls vary a lot from country to country, it is a good idea to do good TASLing even to those uses when not required in your particular jurisdiction, and to warn downstream users and adapters of concerns (like NC or SA) which might apply to their uses, depending upon the laws in their countries.

If we believe in value of sharing our work, we should, *e.g.*, give a good TASL attribution and explain the E&L analysis we might make in some particular situation, even though it is not legally required, because that will help users in other jurisdictions perform their own E&L analysis and, possibly, use a require TASL.

Collections vs adaptations/remixes

There is an odd feature in copyright law, which is in fact called out with respect in the legal code for CC licenses, that gives a *thin* copyright to the creator of a **collection**.

A collection is an arrangement of identical² copies of other works, put in a particular configuration with possible some new material added, such as a title, cover art, and introduction, *etc.*

The copyright in a collection applies only to the arrangement and choice of works, and to any new material added.

A **remix**³ is also a new work which incorporates other, prior works, or parts thereof, within it, but those works have all been changed by the addition of new creativity from the remixer, and are not merely copied.

An anthology of stories is a common example of a collection, whereas a book which brings together stories from several foreign languages and translates each of them into the local language is a remix, since translation is a creative act so each of the stories has been significantly modified. An image which uses clipped fragments from other images in place of parts of the original version of the image is a remix of all of those images, since it has lots of added creativity and yet incorporates prior works.

² well, *identical* in the sense of copyright law, so one may shift formats, such as Word→PDF, and fix small typos

³ also called a **derivative work** or **adaptation**

Licenses on collections

Think of a collection as the plural of a *copy*, with only a thin bit of originality (and copyright) for the selection and arrangement of the collected items. A CC license on a collection, then, would only be licensing that thin part.

E.g., an ND on a collection license would mean that no one could make a collection which was based on but slightly different from the original collection, in terms of the selection and arrangement of the collected pieces.

If your collection contains only CC-licensed items, then everything should be fine, since you are only using the right to copy those works which is a right given to the public in all CC licenses.

It is a good idea to use the NC clause in a collection license if one of the collected items has that clause in its license. Otherwise it would look to a user of the collection like they could sell copies of the collection for a profit, but such a sale would include, implicitly, a sale of the item in the collection which has the NC license on it, and so that sale could not be for profit.

Licenses on adaptations, CC version

The [CC FAQ](#) has a chart which tells adapters of CC-licensed works what licenses they may use on their adaptations:

Adapter's license chart		Adapter's license						
		BY	BY-NC	BY-NC-ND	BY-NC-SA	BY-ND	BY-SA	PD
Status of original work	PD							
	BY							
	BY-NC							
	BY-NC-ND							
	BY-NC-SA							
	BY-ND							
	BY-SA							

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I *hate* this chart – which my OER AACIng⁵ colleagues need all the time.

⁴ “Adapter’s license chart” by Creative Commons was released under a [CC-BY 4.0 license](#).

⁵ I use “AAC,” pronounced like the word “ace,” for the “adopt/adapt/create” we need all the time in the OER world.

Licenses on adaptations, JP version

A web page of mine has a much better version of the chart which helps adapters choose licenses:

Adaptation Status Chart

		Status of Adaptation							
		PD	BY	BY-SA	BY-NC	BY-NC-SA	BY-ND	BY-NC-ND	ARR ©
Status of Original Work	PD	GREAT	GREAT	GREAT	GREAT	GREAT	GREAT	GREAT	GREAT
	BY	OK	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	OK
	BY-SA	NO	NO	GOOD	NO	NO	NO	NO	NO
	BY-NC	CARE	CARE	CARE	GOOD	GOOD	CARE	GOOD	CARE
	BY-NC-SA	NO	NO	NO	NO	GOOD	NO	NO	NO
	BY-ND	NO	NO	NO	NO	NO	NO	NO	NO
	BY-NC-ND	NO	NO	NO	NO	NO	NO	NO	NO
	ARR ©	NO	NO	NO	NO	NO	NO	NO	NO

Licenses on adaptations, JP version, key

Key to Abbreviations	
Abbreviation	Meaning
PD	"Public Domain." This may be indicated on the work by a mention of the CC0 Public Domain Dedication tool and/or with its symbol  , or by the Public Domain Mark  , or the adapter may simply know, <i>e.g.</i> , because of its age, that a work is in the public domain.
BY	Creative Commons Attribution license, often indicated by the symbol  .
BY-SA	Creative Commons Attribution-ShareAlike license, often indicated by the symbol  .
BY-NC	Creative Commons Attribution-NonCommercial license, often indicated by one of these symbols, depending upon region  or  .
BY-NC-SA	Creative Commons Attribution-NonCommercial-ShareAlike license, often indicated by one of these symbols, depending upon region  or  .
BY-ND	Creative Commons Attribution-NoDerivatives license, often indicated by the symbol  .
BY-NC-ND	Creative Commons Attribution-NonCommercial-NoDerivatives license, often indicated by one of the symbols  or  .
ARR ©	"All-rights-reserved copyright." This is the traditional form of copyright outside of open licensing approaches. It may be indicated on a work with the copyright symbol © together with the phrase "all rights reserved," but not always: some works have the symbol © and then go on to add a Creative Commons license statement (since CC licenses <i>are built on top of copyright!</i>), and some works have no copyright statement at all but fall into the domain of all-rights-reserved copyright as a default.
GREAT	This adaptation status is permitted without any additional permissions or conditions.
GOOD	This adaptation status is permitted without any additional permissions under the condition: the adaptation, as well as any downstream adaptations which may be made in the future which have enough shared expression with the original work to be considered as adaptations of that work, must give attribution to the original work and its creator.
OK	This adaptation status is technically identical to the one labeled GOOD immediately above, <i>i.e.</i> : This adaptation status is permitted without any additional permissions under the condition: the adaptation, as well as any downstream adaptations which may be made in the future which have enough shared expression with the original work to be considered as adaptations of that work, must give attribution to the original work and its creator. However, in this case, since the adaptation status is not one with a CC license, <i>this attribution requirement is usually unexpected and therefore should be clearly stated alongside the adaptation.</i>
CARE	This adaptation status is permitted without any additional permissions under the condition: the adaptation, as well as any downstream adaptations which may be made in the future which have enough shared expression with the original work to be considered as adaptations of that work, must give attribution to the original work and its creator and may only be used for non-commercial purposes. <i>If the adaptation status is not one with a CC license, these additional requirements are usually unexpected and therefore should be clearly stated alongside the adaptation.</i>
NO	This adaptation status is not permitted without additional permissions.

Compatibility for remixes, CC version

The same [CC FAQ](#) has a chart which tells remixers of CC-licensed works when their remixes are permitted:

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

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I also hate this chart.

⁶ "Remix Compatibility chart" by Creative Commons was released under a [CC-BY 4.0 license](#).

Compatibility for remixes, the idea

It's quite easy to reason one's way to the remixer's chart: a license on work A is compatible with a license on work B if there is some single license that is both a valid adapter's license for A and a valid adapter's license for B.

In fact, one can repeat that same thought exercise with more than just two works to figure out charts that tell if remixes of more than two CC-licensed works will be possible. [Those charts will be three- or higher-dimensional, though.]

Compatibility for remixes, JP version

A web page of mine has a much better version of the remix compatibility chart:

Remix Compatibility Chart									
		Status of Work A							
		PD	BY	BY-SA	BY-NC	BY-NC-SA	BY-ND	BY-NC-ND	ARR ©
Status of Work B	PD	GREAT	GOOD	GOOD	GOOD	GOOD	NO	NO	NO
	BY	GOOD	GOOD	GOOD	GOOD	GOOD	NO	NO	NO
	BY-SA	GOOD	GOOD	GOOD	CARE	NO	NO	NO	NO
	BY-NC	GOOD	GOOD	CARE	GOOD	GOOD	NO	NO	NO
	BY-NC-SA	GOOD	GOOD	NO	GOOD	GOOD	NO	NO	NO
	BY-ND	NO	NO	NO	NO	NO	NO	NO	NO
	ARR ©	NO	NO	NO	NO	NO	NO	NO	NO

Compatibility for remixes, JP version, key

Key to Abbreviations 1

Abbreviation	Meaning
PD	"Public Domain." This may be indicated on the work by a mention of the CC0 Public Domain Dedication tool and/or with its symbol  , or by the Public Domain Mark  , or the adapter may simply know, <i>e.g.</i> , because of its age, that a work is in the public domain.
BY	Creative Commons Attribution license, often indicated by the symbol  .
BY-SA	Creative Commons Attribution-ShareAlike license, often indicated by the symbol  .
BY-NC	Creative Commons Attribution-NonCommercial license, often indicated by one of these symbols, depending upon region  or  .
BY-NC-SA	Creative Commons Attribution-NonCommercial-ShareAlike license, often indicated by one of these symbols, depending upon region  or  .
BY-ND	Creative Commons Attribution-NoDerivatives license, often indicated by the symbol  .
BY-NC-ND	Creative Commons Attribution-NonCommercial-NoDerivatives license, often indicated by one of the symbols  or  .
ARR ©	©All-rights-reserved copyright. This is the traditional form of copyright outside of open licensing approaches. It may be indicated on a work with the copyright symbol © together with the phrase "all rights reserved," but not always: some works have the symbol © and then go on to add a Creative Commons license statement (since CC licenses <i>are built on top of copyright!</i>), and some works have no copyright statement at all but fall into the domain of all-rights-reserved copyright as a default.
GREAT	This remix is permitted without any additional permissions or conditions.
GOOD	This remix is permitted without any additional permissions under the condition: the remix, as well as any downstream adaptations which may be made in the future which have enough shared expression with whichever of works A and/or B was under a CC license to be considered as adaptations of those works, must give attribution to the original CC-licensed work(s) and creator(s).
CARE	This remix is permitted without any additional permissions under the condition: the remix, as well as any downstream adaptations which may be made in the future which have enough shared expression with whichever of the original works was under NC to be considered as adaptations of that work, may only be used for NonCommercial purposes and must give attribution to both original works and creators.
NO	This remix is not permitted without additional permissions.

Licenses on remixes, JP version

That same [web page of mine](#) tells what licenses may be used on remixes, when there is a possible remix:

Allowed Remix Status Chart

		Status of Work A									
		PD		BY		BY-SA		BY-NC		BY-NC-SA	
Status of Work B	PD	PD: GREAT	BY-NC-SA: GREAT	PD: OK	BY-NC-SA: GOOD	PD: NO	BY-NC-SA: NO	PD: CARE	BY-NC-SA: GOOD	PD: NO	BY-NC-SA: GOOD
		BY: GREAT	BY-ND: GREAT	BY: GOOD	BY-ND: GOOD	BY: NO	BY-ND: NO	BY: CARE	BY-ND: CARE	BY: NO	BY-ND: NO
		BY-SA: GREAT	BY-NC-ND: GREAT	BY-SA: GOOD	BY-NC-ND: GOOD	BY-SA: GOOD	BY-NC-ND: NO	BY-SA: CARE	BY-NC-ND: GOOD	BY-SA: NO	BY-NC-ND: NO
		BY-NC: GREAT	ARR @: GREAT	BY-NC: GOOD	ARR @: OK	BY-NC: NO	ARR @: NO	BY-NC: GOOD	ARR @: CARE	BY-NC: NO	ARR @: NO
	BY	PD: OK	BY-NC-SA: GOOD	PD: OK	BY-NC-SA: GOOD	PD: NO	BY-NC-SA: NO	PD: CARE	BY-NC-SA: GOOD	PD: NO	BY-NC-SA: GOOD
		BY: GOOD	BY-ND: GOOD	BY: GOOD	BY-ND: GOOD	BY: NO	BY-ND: NO	BY: CARE	BY-ND: CARE	BY: NO	BY-ND: NO
		BY-SA: GOOD	BY-NC-ND: GOOD	BY-SA: GOOD	BY-NC-ND: GOOD	BY-SA: GOOD	BY-NC-ND: NO	BY-SA: CARE	BY-NC-ND: GOOD	BY-SA: NO	BY-NC-ND: NO
		BY-NC: GOOD	ARR @: OK	BY-NC: GOOD	ARR @: OK	BY-NC: NO	ARR @: NO	BY-NC: GOOD	ARR @: CARE	BY-NC: NO	ARR @: NO
	BY-SA	PD: NO	BY-NC-SA: NO	PD: NO	BY-NC-SA: NO	PD: NO	BY-NC-SA: NO	PD: NO	BY-NC-SA: NO	PD: NO	BY-NC-SA: NO
		BY: NO	BY-ND: NO	BY: NO	BY-ND: NO	BY: NO	BY-ND: NO	BY: NO	BY-ND: NO	BY: NO	BY-ND: NO
		BY-SA: GOOD	BY-NC-ND: NO	BY-SA: GOOD	BY-NC-ND: NO	BY-SA: GOOD	BY-NC-ND: NO	BY-SA: CARE	BY-NC-ND: NO	BY-SA: NO	BY-NC-ND: NO
		BY-NC: NO	ARR @: NO	BY-NC: NO	ARR @: NO	BY-NC: NO	ARR @: NO	BY-NC: NO	ARR @: NO	BY-NC: NO	ARR @: NO
	BY-NC	PD: CARE	BY-NC-SA: GOOD	PD: CARE	BY-NC-SA: GOOD	PD: NO	BY-NC-SA: NO	PD: CARE	BY-NC-SA: GOOD	PD: NO	BY-NC-SA: GOOD
		BY: CARE	BY-ND: CARE	BY: CARE	BY-ND: CARE	BY: NO	BY-ND: NO	BY: CARE	BY-ND: CARE	BY: NO	BY-ND: NO
		BY-SA: CARE	BY-NC-ND: GOOD	BY-SA: CARE	BY-NC-ND: GOOD	BY-SA: CARE	BY-NC-ND: NO	BY-SA: CARE	BY-NC-ND: GOOD	BY-SA: NO	BY-NC-ND: NO
		BY-NC: GOOD	ARR @: CARE	BY-NC: GOOD	ARR @: CARE	BY-NC: NO	ARR @: CARE	BY-NC: GOOD	ARR @: CARE	BY-NC: NO	ARR @: NO
	BY-NC-SA	PD: NO	BY-NC-SA: GOOD	PD: NO	BY-NC-SA: GOOD	PD: NO	BY-NC-SA: NO	PD: NO	BY-NC-SA: GOOD	PD: NO	BY-NC-SA: GOOD
		BY: NO	BY-ND: NO	BY: NO	BY-ND: NO	BY: NO	BY-ND: NO	BY: NO	BY-ND: NO	BY: NO	BY-ND: NO
		BY-SA: NO	BY-NC-ND: NO	BY-SA: NO	BY-NC-ND: NO	BY-SA: NO	BY-NC-ND: NO	BY-SA: NO	BY-NC-ND: NO	BY-SA: NO	BY-NC-ND: NO
		BY-NC: NO	ARR @: NO	BY-NC: NO	ARR @: NO	BY-NC: NO	ARR @: NO	BY-NC: NO	ARR @: NO	BY-NC: NO	ARR @: NO

Key to Abbreviations 2

Abbreviation	Meaning
GREAT	This remix of the specified status is permitted without any additional permissions or conditions.
GOOD	This remix of the specified status is permitted without any additional permissions under the condition: the remix, as well as any downstream adaptations which may be made in the future which have enough shared expression with whichever of works A and/or B was under a CC license to be considered as adaptations of those works, must give attribution to the original CC-licensed work(s) and creator(s).
OK	This remix status is technically identical to the one labeled GOOD immediately above, <i>i.e.</i>: This remix of the specified status is permitted without any additional permissions under the condition: the remix, as well as any downstream adaptations which may be made in the future which have enough shared expression with whichever of works A and/or B was under a CC license to be considered as adaptations of those works, must give attribution to the original CC-licensed work(s) and creator(s). However, in this case, since the remix status is not one with a CC license, <i>this attribution requirement is usually unexpected and therefore should be clearly stated alongside the adaptation.</i>
CARE	This remix of the specified status is permitted without any additional permissions under the condition: the remix, as well as any downstream adaptations which may be made in the future which have enough shared expression with whichever (possibly both) of the original works was under NC to be considered as adaptations of that work, may only be used for non-commercial purposes and must give attribution to either (or both) original works and creators if CC-licensed. <i>If the remix status is not one with a CC license, these additional requirements are usually unexpected and therefore should be clearly stated alongside the remix.</i>
NO	This remix is not permitted without additional permissions.

Conclusion: “good” scholarship/pedagogy must be open

For all of the reasons outlined in the [UNESCO OER Recommendation](#), *good* pedagogy must be open. For all of the reasons that the Open Access movement has been repeating for years, *good* scholarship must also be open.

It also just seems to work, to do scholarship/pedagogy in the open. I pretty much accept this as an article of faith.⁷

In the world today, where we must fight against the suffocating neoliberal dystopia which tries to make all goods private and to eliminate public goods, we must use the tools of open licensing to support our open pedagogy and scholarship.

To use these tools well requires some hard work with the details. Study of these details⁸ will be amply repaid in your ease of operation in the open realm.

⁷ although there is plenty of historical evidence, such as the great example of the contrasting impact over thousands of years of Pythagoras, a horribly secretive man, with that of Euclid, an early exponent of the way of open scholarship and pedagogy

⁸ such as by taking the [Creative Commons Certificate Course](#)

Discussion!!

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or scan 
[then click **Always SHARE**]



⁹ subject to [CC-BY-SA 4.0](https://creativecommons.org/licenses/by-sa/4.0/)