O pen
E ducational
R esources

4

D igital
G reen
E ntrepreneurial
SKILLS

ENCORE

ME AND THE DGE SKILLS...

Image: Freepik.com

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My DGE approach to training

Our Goals

- Discuss about the relevance of Digital Green Entrepreneurial skills
- Learn how to effectively integrate OER in professional learning activities to promote DGE skills
- Enrich our Training Sessions to develop DGE from an open educational perspective.

Luca Lodovisi, https://www.lucalodovisi.it/blog/obiettivi-di-marketing-esempi/
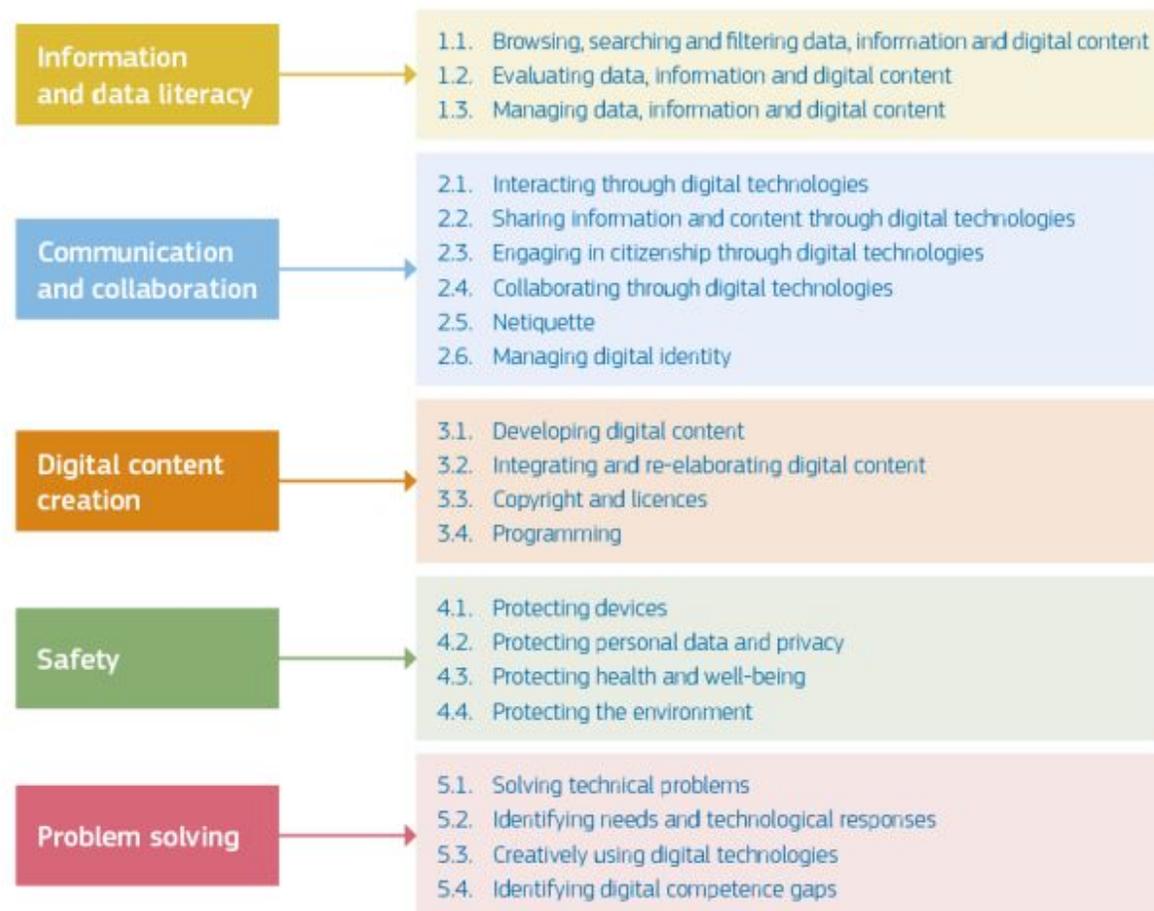
On DGE skills

Digital Competence, a long way gone (2013...)

The [DigComp framework](#) identifies the key components of digital competence in 5 areas. It was elaborated in 2013, and has gone through several changes.

It provides a common language to identify and describe the key areas of digital competence.
It is an EU-wide tool to improve citizens' digital competence, help policy-makers formulate policies that support digital competence building, and plan education and training initiatives to improve the digital competence of specific target groups.

The latest version (2.2.) includes definitions with examples based on Knowledge, Skills and Attitudes. It also brings to the fore the need of interacting with AI systems.

Information and data literacy
1.1. Browsing, searching and filtering data, information and digital content
1.2. Evaluating data, information and digital content
1.3. Managing data, information and digital content

Communication and collaboration
2.1. Interacting through DigItal technologies
2.2. Sharing information and content through digital technologies
2.3. Engaging in citizenship through digital technologies
2.4. Collaborating through digital technologies
2.5. Netiquette
2.6. Managing digital identity

Digital content creation
3.1. Developing digital content
3.2. Integrating and re-elaborating digital content
3.3. Copyright and licences
3.4. Programming

Safety
4.1. Protecting devices
4.2. Protecting personal data and privacy
4.3. Protecting health and well-being
4.4. Protecting the environment

Problem solving
5.1. Solving technical problems
5.2. Identifying needs and technological responses
5.3. Creatively using digital technologies
5.4. Identifying digital competence gaps

Let's take a closer look at the DigComp 2.2.

- Which area is better connected with your training activities?
- Which areas should be implemented or most needed in your sector of activity?
- Which are the opportunities to develop this area of Digital competence? Which are the factors blocking such development?

# Entrepreneurial Competence, much needed (2019)!

The [EntreComp framework](#) is a reference framework to explain what is meant by an entrepreneurial mindset.

EntreComp offers a comprehensive description of the knowledge, skills and attitudes that people need to be entrepreneurial and create financial, cultural or social value for others.

EntreComp is a common reference framework that identifies 15 competences in three key areas that describe what it means to be entrepreneurial.

EntreComp has the potential to be used in a variety of ways including:

- supporting policy and practice to develop entrepreneurial skills

- assessing entrepreneurial skills

- supporting training of educators, trainers and teachers to deliver entrepreneurial skills

- to design programmes and learning opportunities

- to recognise and certify skills
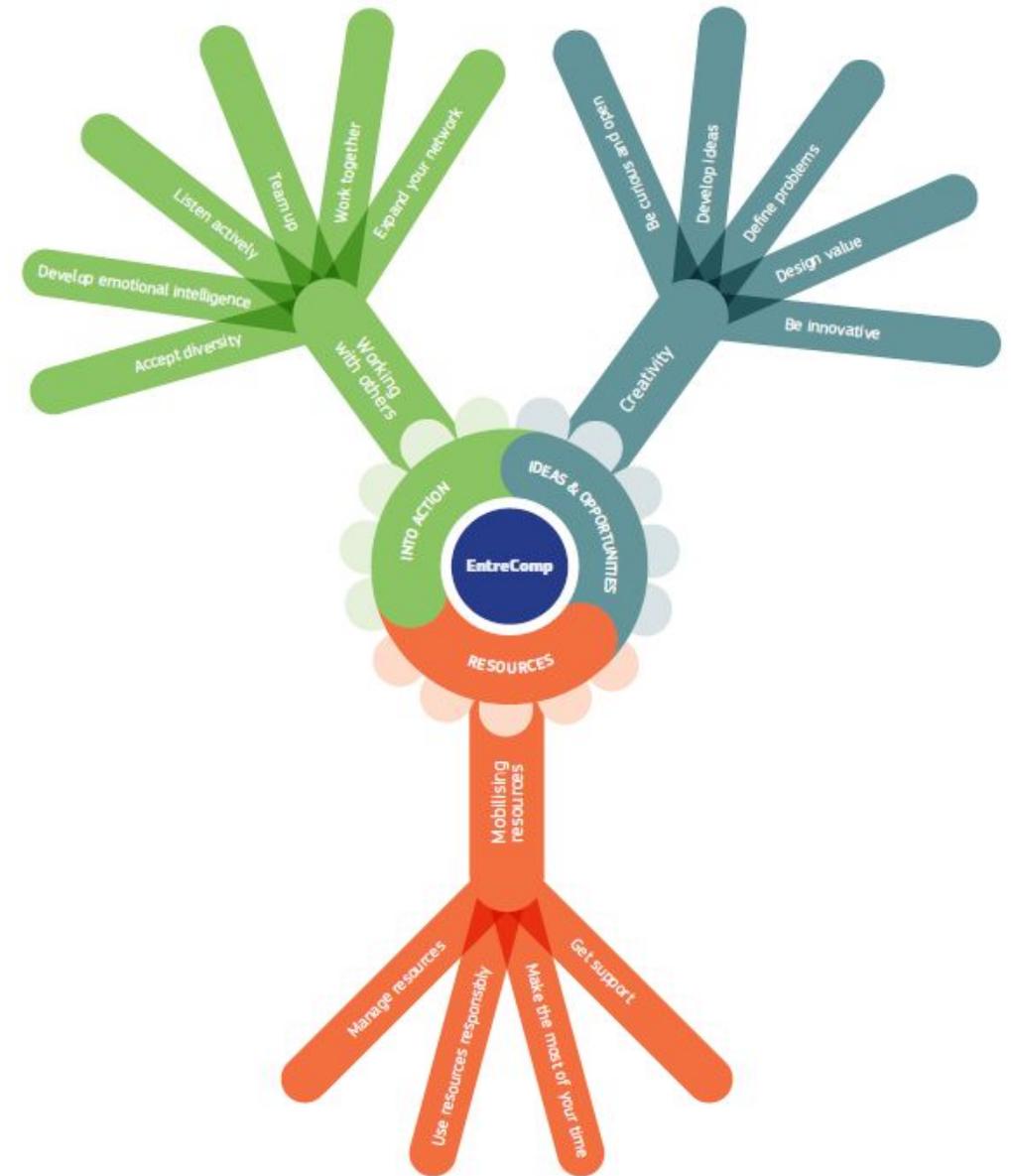
Expanding the EntreComp wheel to show the threads for 3 competences
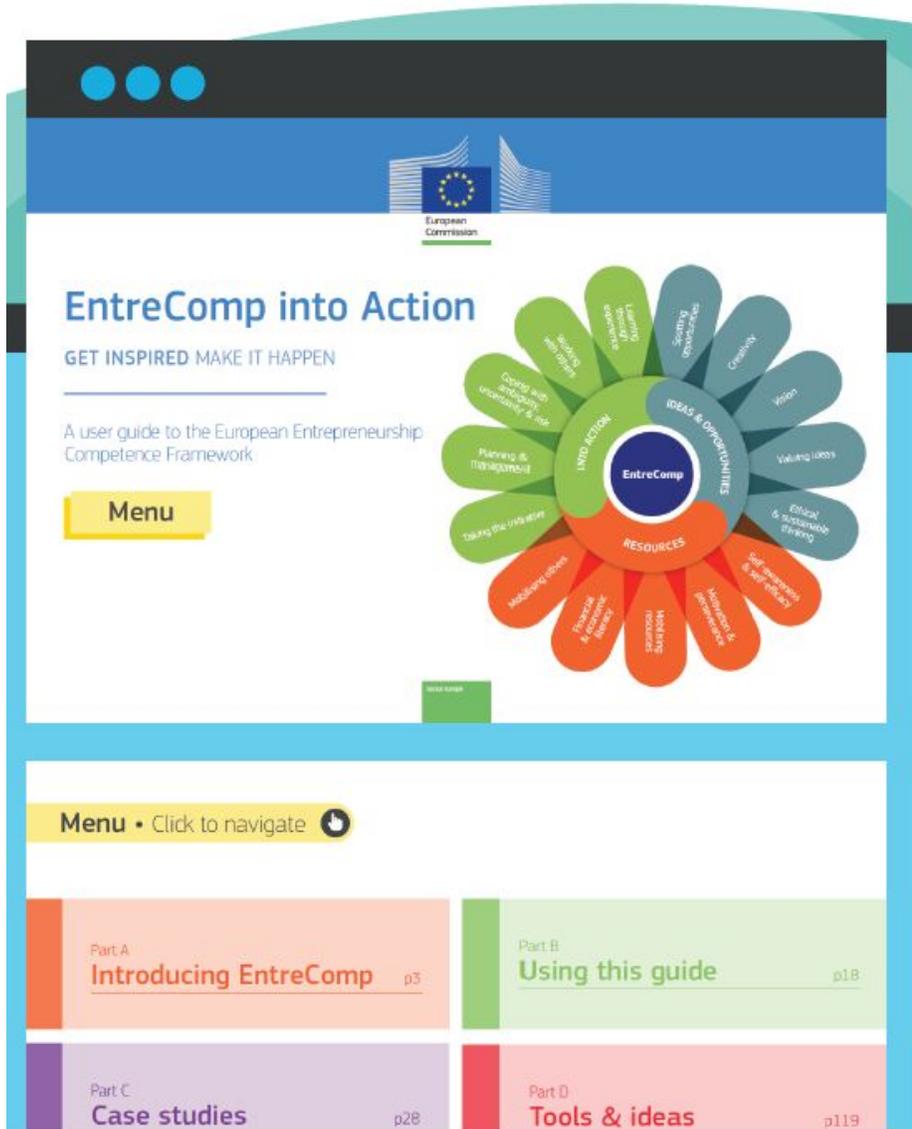
Let's take a closer look at the EntreComp

- Which area is better connected with your training activities?
- Which areas should be implemented or most needed in your sector of activity?
- Which are the opportunities to develop this area of Entrepreneurial competence? Which are the factors blocking such development?

Green Competence, last, but not least (2022)

The [GreenComp](#) or European sustainability competence framework is one of the policy actions set out in the European Green Deal as a catalyst to promote learning on environmental sustainability in the European Union.

GreenComp identifies a set of sustainability competences to feed into education programmes to help learners develop knowledge, skills and attitudes that promote ways to think, plan and act with empathy, responsibility, and care for our planet and for public health.

Let's take a closer look at the [GreenComp](#)

- Which area is better connected with your training activities?
- Which areas should be implemented or most needed in your sector of activity?
- Which are the opportunities to develop this area of Green competence? Which are the factors blocking such development?

On Open Education

What are OERs?

«a way of carrying out education, often using digital technologies. Its aim is to widen access and participation to everyone by removing barriers and making learning accessible, abundant, and customisable for all. It offers multiple ways of teaching and learning, building and sharing knowledge. It also provides a variety of access routes to formal and non-formal education, and connects» (Opening up Education: A Support Framework for Higher Education Institutions, 2016)

OERs can include any type of resource, such as a photo, an image, an animation, a podcast, a text or a video, up to textbooks (OpenTextbooks), as long as are educational resources with some educational relevance for teaching and self-learning (Nascimbeni, 2020).

Open Education on the European Agenda

The OpenEdu project was conceived as a response to the European Commission's Communication "Opening up Education: Innovative teaching and learning for all through new technologies and open educational resources".

The results of the project also contribute to priority 3 of the 6 new priorities of the Education and Training 2020 (E&T2020) monitoring programme:

«Open and innovative education and training, including by fully embracing the digital era»*

**https://joint-research-centre.ec.europa.eu/system/files/2017-03/20170328_openeduframework_centred_video_support.pdf

Open Education is an **umbrella term** under which different meanings of open education can be accommodated.

It goes beyond Open Educational Resources (OER) and open research findings to embrace teaching and collaboration between individuals and institutions.*

Open Education (OE) is not just about (or not only) MOOCs and OER.

It's about the democratic openness of education, the modernization and innovation of our higher education systems in Europe, through the use of digital technologies.
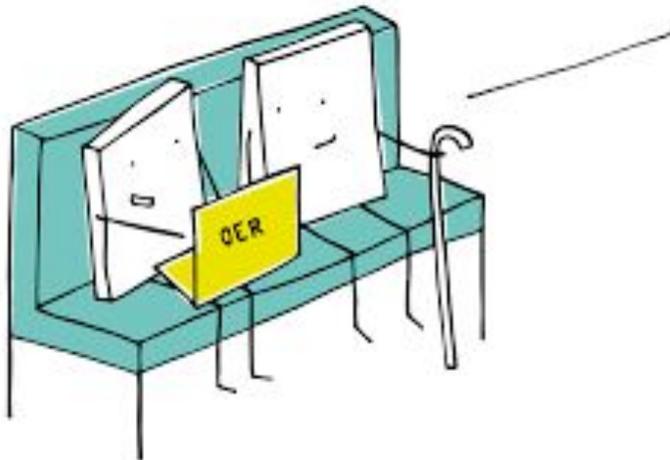
(Steger, 2018)

*(EU Science HUB, https://joint-research-centre.ec.europa.eu/what-open-education

Importance of OER

The use of digital technologies for teaching and learning is no longer limited to open universities or virtual universities, but has spread to all types of institutions, both more traditional and cutting-edge.

- First, it can help reduce or eliminate barriers to education (e.g., cost, geographical differences, time, entry requirements). This would give learners the opportunity to upgrade or retrain at little or no cost and in a flexible way.
  Secondly, it supports the modernisation of university education in Europe.
  Finally, it opens up the possibility of creating a bridge between non-formal and formal education.

This can only happen if stakeholders fully explore ways to support open educational practices: dialogue should be sought to form a common vision for the openness of education in Europe.

ACCESS to educational resources, through licenses and open technologies.

TRANSPARENCY of teaching practices, especially by teachers.

FREE compared to the possibilities offered by open licenses to use and modify existing resources.

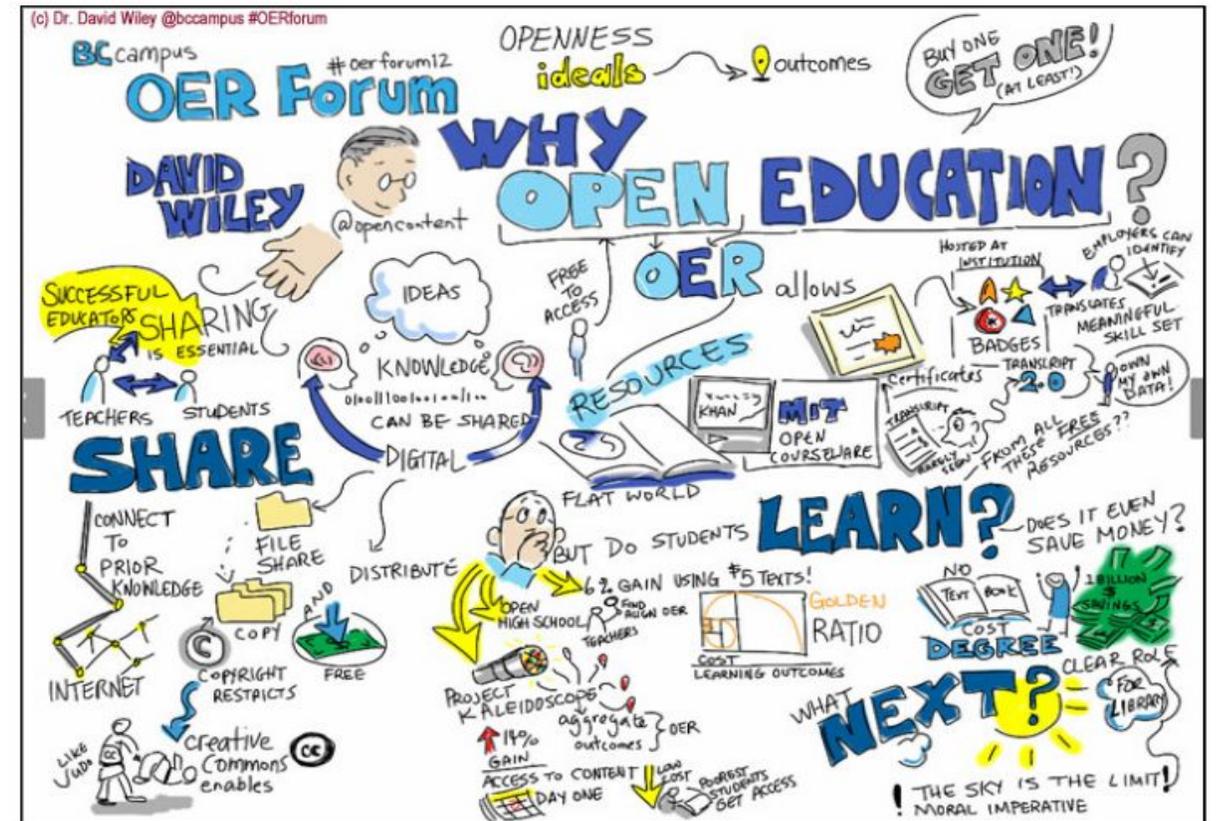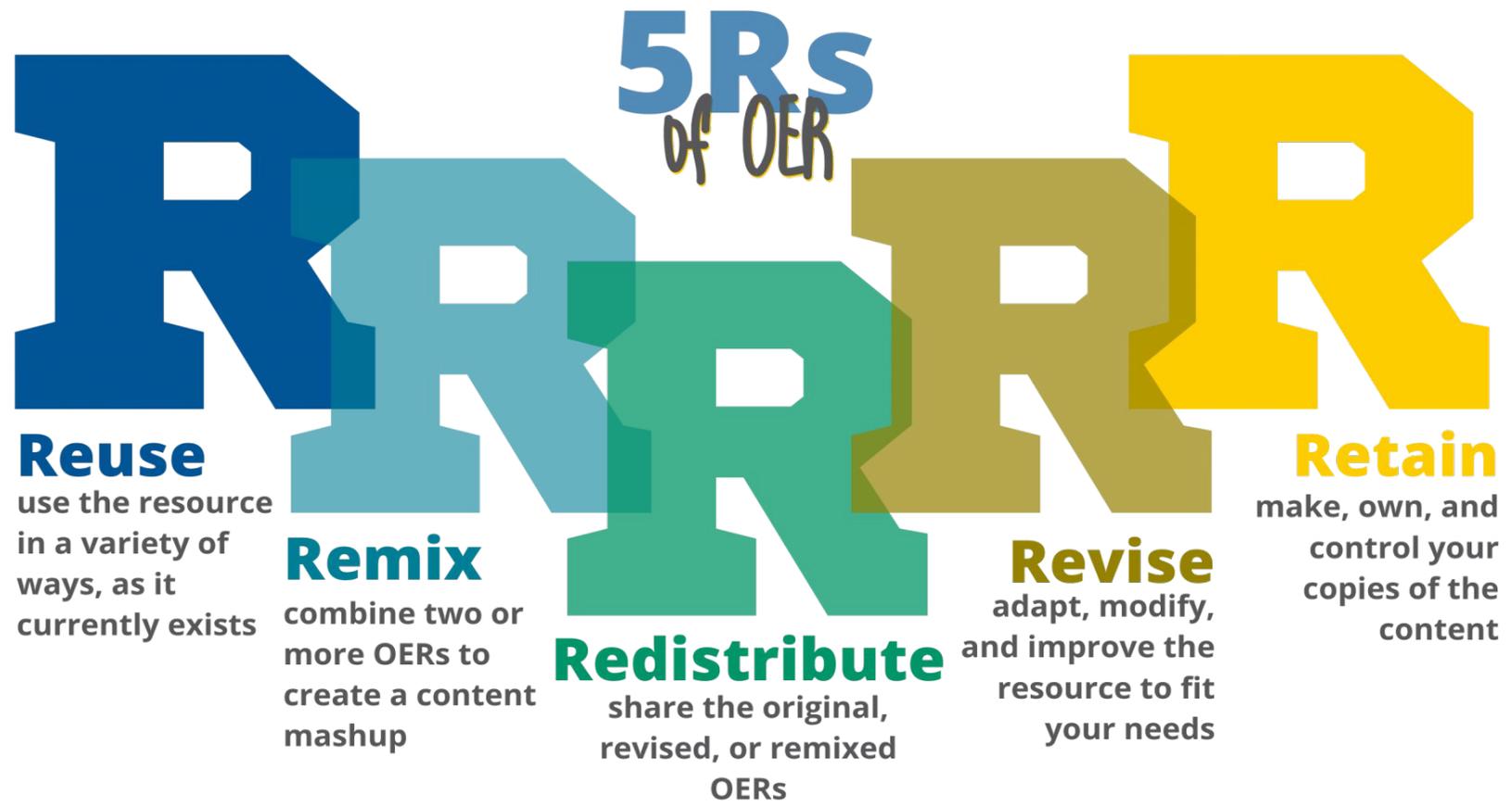SHARING of open resources, in an appropriate way.

Figura 2: Why Open Education? Autore: David Wiley, immagine di Giulia Forsythe. Licenza: Pubblico Dominio.

Open Education around the world - EU Science Hub
(https://www.youtube.com/@JRCaudiovisuals)

5Rs of OER

Reuse
use the resource in a variety of ways, as it currently exists

Remix
combine two or more OERs to create a content mashup

Redistribute
share the original, revised, or remixed OERs

Revise
adapt, modify, and improve the resource to fit your needs

Retain
make, own, and control your copies of the content

The most widely used classification globally regarding the characteristics that make a resource an OER is based on David Wiley's 2014 5R Framework, which argues that to be considered an OER, a resource must either be in the public domain or released under a license that allows anyone to do five things (Wiley 2014).

The 5R approach has had the merit, thanks also to the authoritativeness of its author, of providing a shared definition of what is meant by OER.

List of tools to create OER
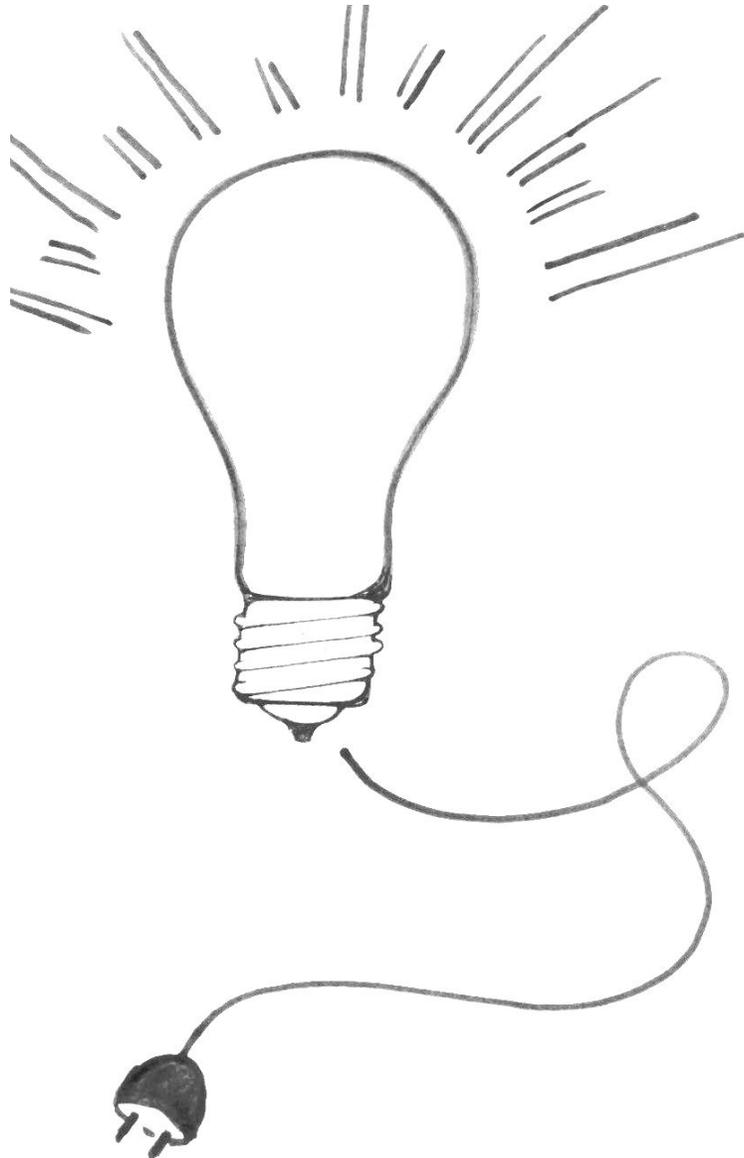
- <u>OSS Watch</u> provides suggestions for selecting open source or buying free or open software.

- <u>SchoolForge</u> and <u>SourceForge</u> allow you to find, create, and publish open software. SourceForge, for example, has millions of downloads every day.

- <u>Wikipedia</u> is an online, free and collaborative encyclopedia. Anyone can contribute to existing entries or create new ones.

- <u>Open Source Education Foundation</u> and <u>Open Source Initiative</u>, and other organizations like these help spread knowledge.

- <u>Creative Commons</u> is the non-profit organization Creative Commons, founded by Lawrence Lessig, at the origin of the Creative Commons licenses. These are licenses that allow the author of a work to choose the rights they wish to assign or not to a given work.

Sources of OER
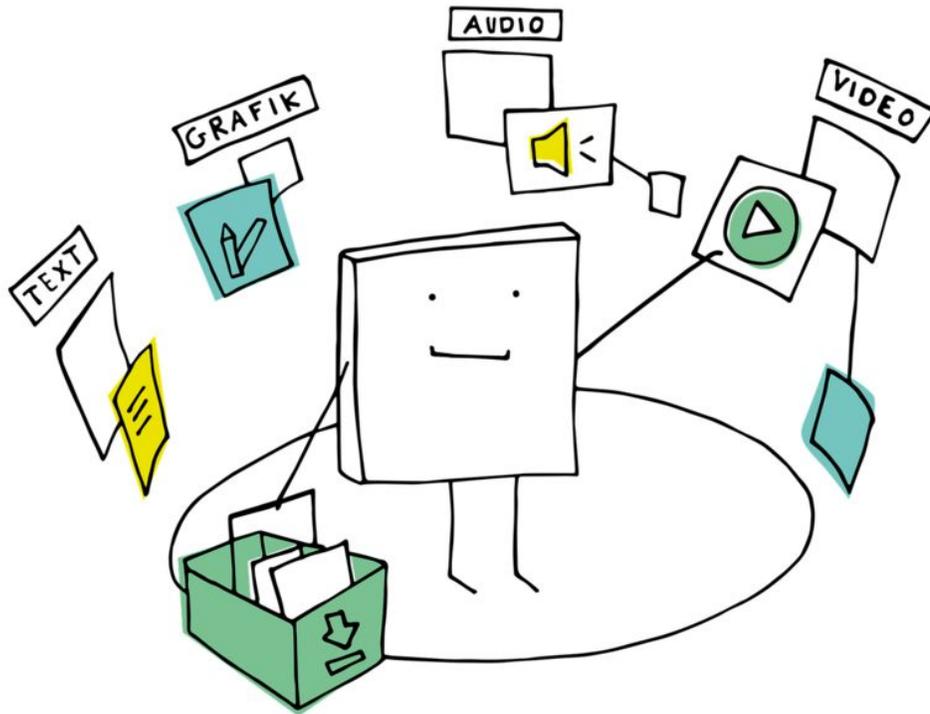
1. OER Repositories: There are a number of online repositories dedicated to OER, such as the OER Commons website, MIT OpenCourseWare, and even Wikipedia.

1. Universities & Educational Institutions: Many universities and institutes offer free online courses and open learning materials.

2. Collaborative Projects: Groups of educators often work together to create and share OERs. For example, the Wikimedia Commons project offers a wide range of free images.

Licenses and Copyrights

OERs are often released under open licenses, such as Creative Commons, which allow users to use, modify, and share the material.

However, it is important to comply with the conditions specified in the license (BY – Attribution; NC - Non-Commercial; ND – No derivative works; SA – Share Alike) when using OER.
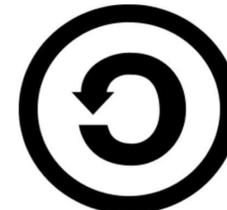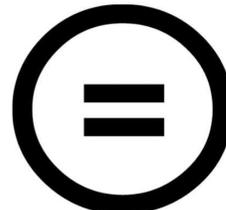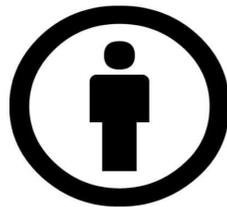

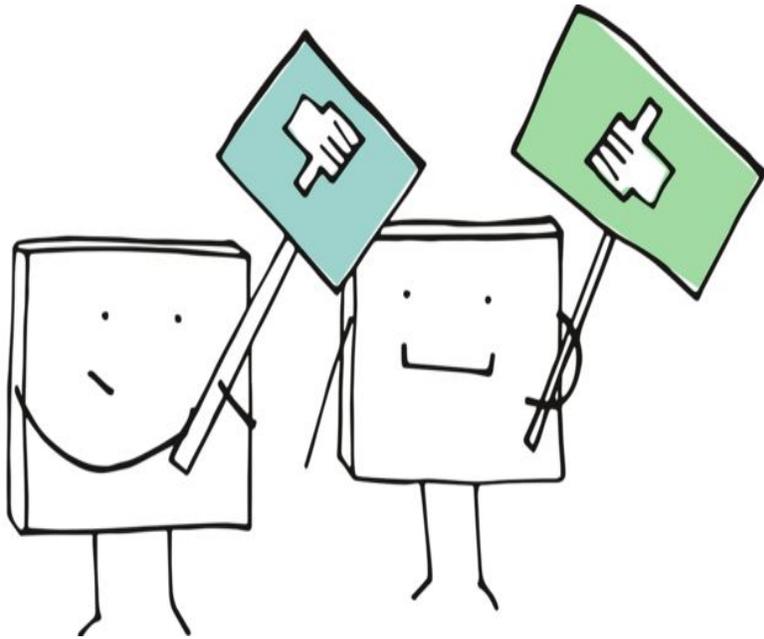| Attribution	Noncommercial	Non- Derivatives	Share alike
Compulsory - Must always **credit** me.	Use it but don't make **money**	Your version must **equal** mine - no changes	If I allow you to change it, **repeat** my CC **licence**

WIZBLOG.it, https://wizblog.it/che-cose-il-creative-commons

Importance and Benefits of OER

- Accessibility: OERs are accessible to anyone with an internet connection, promoting access to education worldwide.

- Financial savings: Educators and students can save significantly on the costs of learning materials.

- Personalization of learning: Educators can tailor OERs to the specific needs of their students.

- Collaboration: OERs encourage sharing and collaboration among educators.

- Innovation: Openness of resources promotes innovation in education, enabling new teaching approaches.

Open Science, https://images.app.goo.gl/TeAqgp11aAaRT6tY7

Frame the QRcode or use the following link:
ENCORE
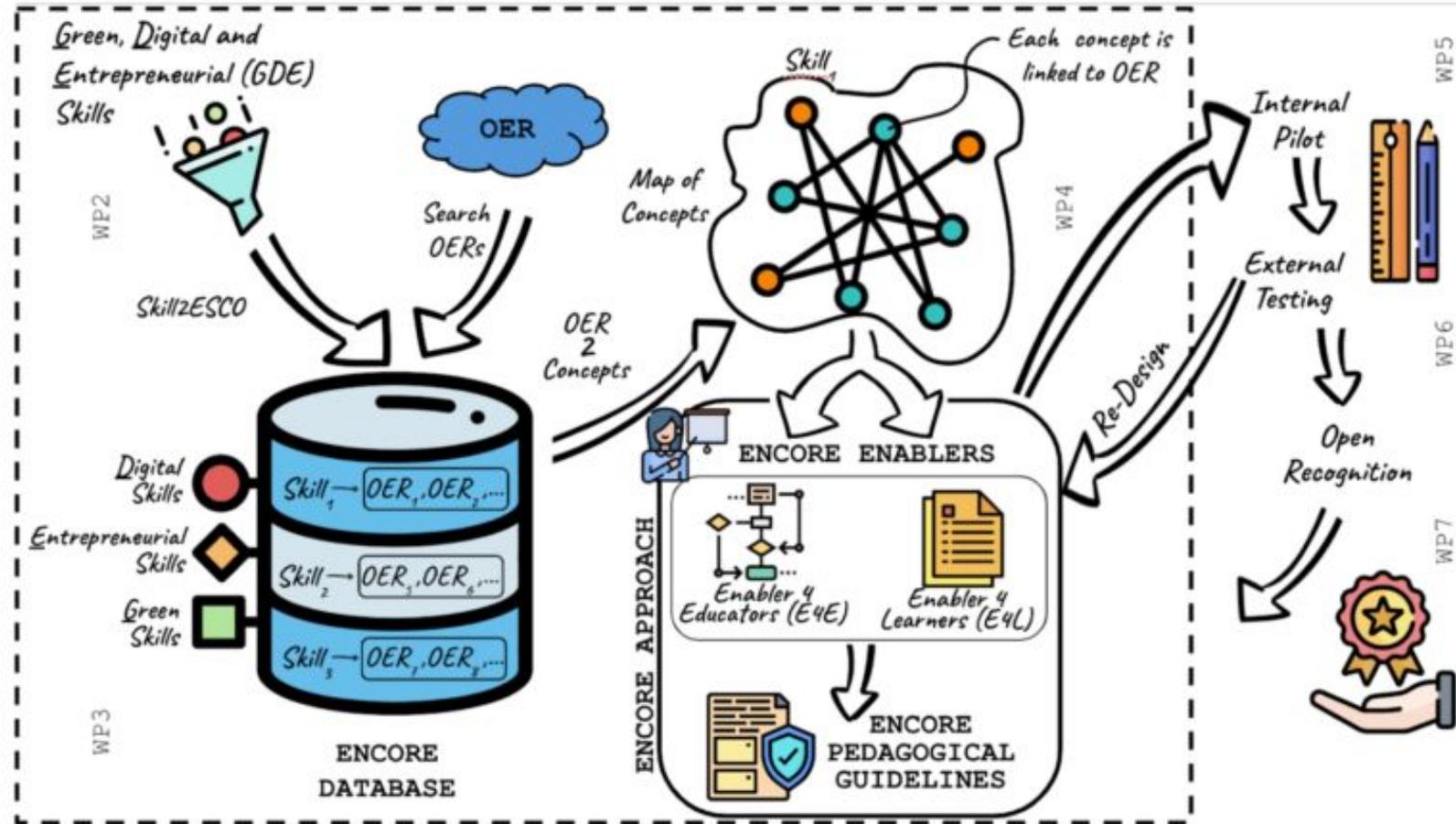
A specific focus on Green, Entrepreneurial and Digital Skills

A TEMPLATE TO SHARE RENEWED EDUCATIONAL DESIGNS!
- Syllabi
- Module
- Unit
- Lesson
- Training Session
- Activity

Frame the QRcode or use the following link:
[Template - Learning Design](#)

YOUR EXPERIENCE WITH OER...

Image: Source

Frame the QRcode or use the following link:

Your opinion on the session

ME AND THE DGE SKILLS!

We will send a synthesis of responses to all participants, comparing with the beginning of the session!

Frame the QRcode or use the following link:
My DGE approach to training

To claim an Open Badge (Open Recognition):
- Prepare your design to be published (as shared Gdoc, Canva, infographic, etc.);
- Get the link;
- Use the link demonstrating your work to share;
- Invite a colleague to endorse and comment your work.

Frame the QRcode or use the following link:
[Open Badge Recognition - OREC - Reconnaitre](#)

Useful Bibliography

ENTREPRENEURIAL, GREEN AND DIGITAL COMPETENCE

- Bacigalupo M, Kampylis P, Punie Y and Van Den Brande L. EntreComp: The Entrepreneurship Competence Framework. EUR 27939 EN. Luxembourg (Luxembourg): Publications Office of the European Union; 2016. JRC101581 - https://dx.doi.org/10.2791/593884
- European Commission, Joint Research Centre, *GreenComp, the European sustainability competence framework*, Publications Office of the European Union, 2022, https://data.europa.eu/doi/10.2760/13286
- Vuorikari, R., Kluzer, S. and Punie, Y., DigComp 2.2: The Digital Competence Framework for Citizens - With new examples of knowledge, skills and attitudes, EUR 31006 EN, Publications Office of the European Union, Luxembourg, 2022, ISBN 978-92-76-48882-8, doi:10.2760/115376, JRC128415.

OPEN EDUCATIONAL RESOURCES

- Open Educational Resources (26 Ottobre 2023). Wikipedia. https://en.wikipedia.org/wiki/Open_educational_resources
- Ossiannilsson, E., Zhang, X., Wetzler, J., Gusmão, C., Aydin, C. H., Jhangiani, R., Glapa-Grossklag, J., Makoe, M., Harichandan, D. (2020).From Open Educational Resources to Open Educational Practices. *Distances et médiations des savoirs*, 31. https://doi.org/10.4000/dms.5393
- Farrow, R., Pitt, R., de los Arcos, B., Perryman, L.A., Weller, M., McAndrew, P. (2015). Impact of OER use on teaching and learning: Data from OER Research Hub (2013–2014). *British Journal of Educational Technology*, 46(5), pp. 972-976. https://doi.org/10.1111/bjet.12310
- Raffaghelli, J. (2014). Keeping on doing what we do better or engaging in transformation? Achieving professional development through the usage of open educational resources. F*ormazione & Insegnamento*, 9(3 Suppl.), 75–102. Retrieved from https://ojs.pensamultimedia.it/index.php/siref/article/view/906
- Van Allen, J. and Katz, S. (2020). Teaching with OER during pandemics and beyond. *Journal for Multicultural Education*, 14(3/4), pp. 209-218. https://doi.org/10.1108/JME-04-2020-0027
- Wiley, D., Bliss, T.J., McEwen, M. (2014). Open Educational Resources: A Review of the Literature. In Spector, J., Merrill, M., Elen, J., Bishop, M. (eds) *Handbook of Research on Educational Communications and Technology*. Springer. https://doi.org/10.1007/978-1-4614-3185-5_63

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