

# Pedagogical Uses of Digital Technology

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# PLAN

1. Educational and Open Educational Resources for Teaching and Learning
2. Personal Learning Environment (PLE)
3. Pedagogical Activation
4. Supporting Resources

# Educational & Open Educational Resources for Teaching & Learning

1. Educational and Open Educational Resources for Teaching and Learning
2. Personal Learning Environment (PLE)
3. Pedagogical Activation
4. Supporting Resources



OpenEducation-LLL@uclouvain.be

We spend **45 minutes** together to

Become **aware**

- of the **diversity** of educational resources
- of your **freedom** as a teacher to **share** educational resources
- of the **benefits of opening** educational resources to other teachers & students
- of the fact that we are **at your disposal** !

Who are we ?

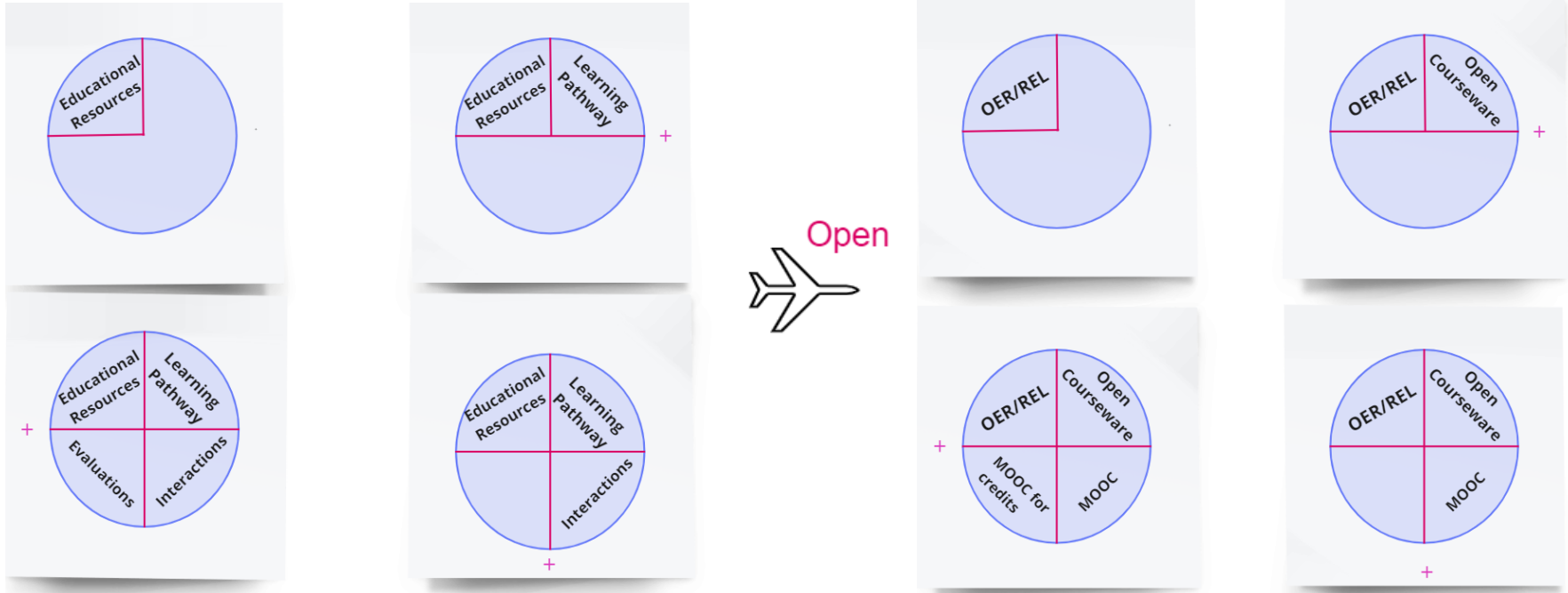
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**Pascal Vangrunderbeeck** [pascal.vangrunderbeeck@uclouvain.be](mailto:pascal.vangrunderbeeck@uclouvain.be)

# Part 1 : The 4 Components of Teaching



Witthaus G., Inamorato dos Santos A., Childs M., Tannhäuser A., Conole G., Nkyubwatsi B., Punie Y. (2016). *Validation of non-formal MOOC-based Learning: An Analysis of Assessment and Recognition. Practices in Europe (OpenCred)*. DOI: [10.2791/809371](https://doi.org/10.2791/809371).

Jacqmot C., Docq. F, Deville Y. (2020). *A Framework to Understand, Analyse and Describe Online and Open Education in Higher Education*. DOI: [20.500.12279/783](https://doi.org/10.12279/783).

## Part 1 : The 4 Components of Teaching

### **An (open) educational resource is**

A numerical or non-numerical entity

Subject to copyright

Its author(s) can decide to

- Sell it
- Or make it freely available (e.g. Creative Commons)

Translated from [Utiliser des ressources pédagogiques existantes](#) by Pôle Ingénierie pédagogique et production audiovisuelle de l'Université Clermont Auvergne

## Part 2 : Formats, Uses and Opening of Educational Resources

### **Pick 3 cards from your group's table:**

➤ I used this resource as a **teacher**;

Or

➤ I appreciated this resource as a **student**;

Or

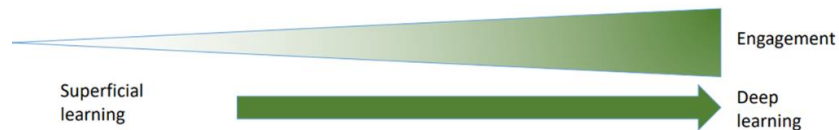
➤ I would **love to use** this resource as a teacher;

## Part 2 : Formats, Uses and Opening of Educational Resources

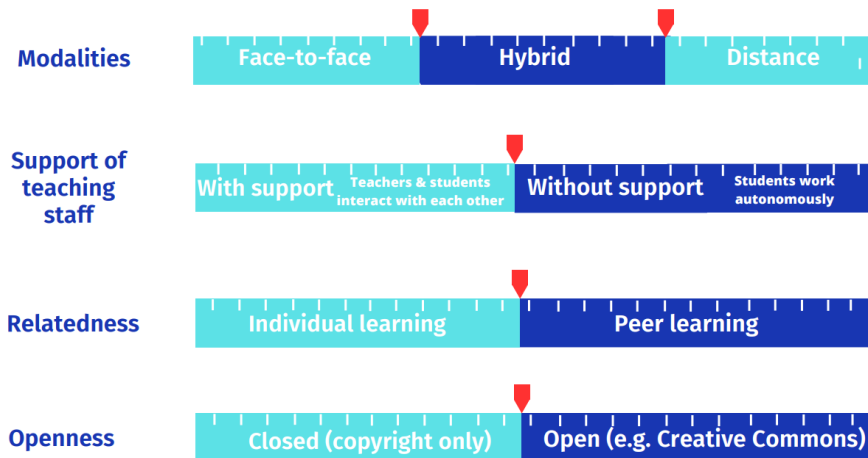
Here are 2 models to associate (open) educational resources (your cards) with :

### The ICAP Model

PASSIVE *Receiving*      ACTIVE *Manipulating*      CONSTRUCTIVE *Generating*      INTERACTIVE *Dialoguing*



### Teaching Configurations

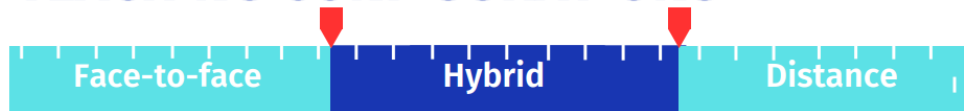




# Part 2 : Formats, Uses and Opening of Educational Resources

## TEACHING CONFIGURATIONS

Modalities



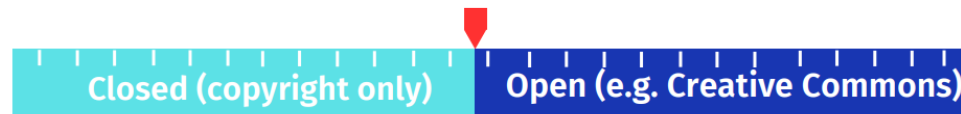
Support of teaching staff



Relatedness



Openness

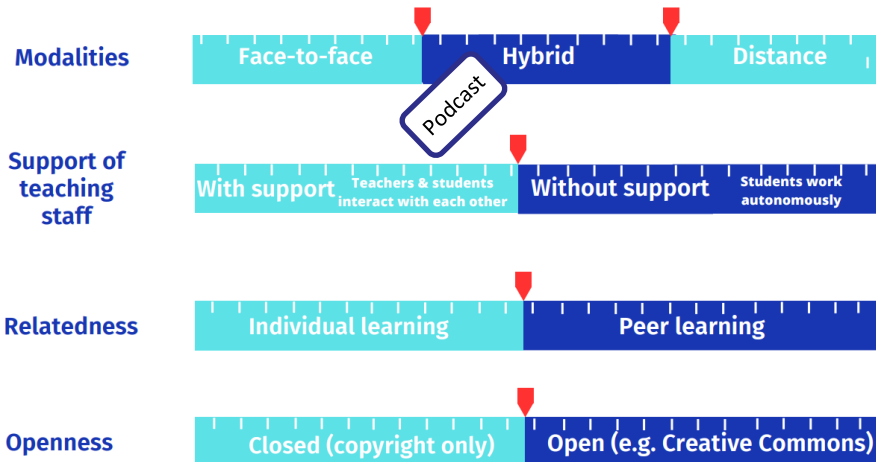
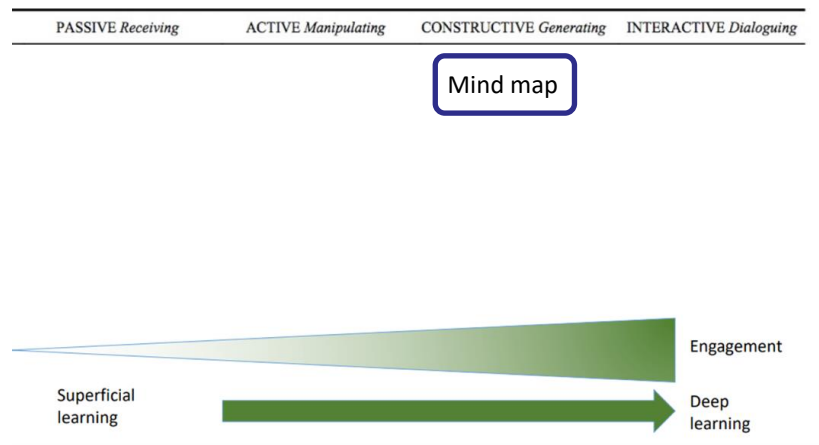


Inspiré de Cahiers du LLL, N°14 Enseigner à distance, 5 balises pour vous lancer

## Part 2 : Formats, Uses and Opening of Educational Resources

Place your **cards on both models** where you find it most relevant.

*As an example :*



## Part 2 : Formats, Uses and Opening of Educational Resources

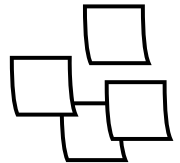
Answer the questions in **2 rounds** / Each round takes **7 minutes**.

- Round 1 : The ICAP Model
- Round 2 : Teaching Configurations

## Part 2 : Formats, Uses and Opening of Educational Resources

### Round 1 : The ICAP model – 7 min

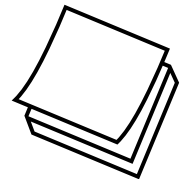
- Justify the **placement** of the cards on the model.
- **Compare different modes** of cognitive engagement for the **same resource**.
- How to push a resource towards **a higher ICAP level** or how to encourage **deeper learning**?



## Part 2 : Formats, Uses and Opening of Educational Resources

### Round 2 : Several teaching configurations – 7 min

- **Justify** the **placement** of the cards on the model.
- **Move** a card to the **left** or to the **right** on its slider. To what extent would the teaching **configuration** be **changed** if you moved the card
  - Towards more distance, face-to-face or hybrid teaching ?
  - Towards more or less support of the teaching staff ?
  - Towards more individual or peer learning ?
  - Towards more opening ?
- Slider 4 : What are the **benefits** of Open Education for **teachers** ? And for **students**?
- How to make an educational resource **open or more accessible** while protecting Copyright?
- **Where** can you **publish** an Open Educational Resource ?
  - Do you know open repositories and metarepositories ?
  - Who is [www.oer.uclouvain.be](http://www.oer.uclouvain.be) aimed for ?

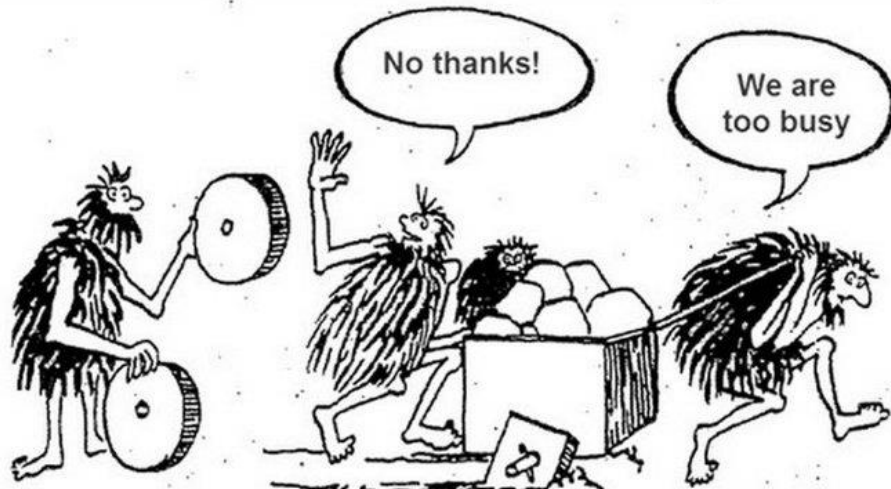


## Let's imagine ...

In the context of your new courses and lectures, you create a (huge) number of digital resources and you are proud of them, hopefully!

These resources will be at the heart of your competences and experience. Preparing them takes time. Therefore, you would like to share them with the entire world and other HEI but you do not want to lose your ownership.

How to proceed?



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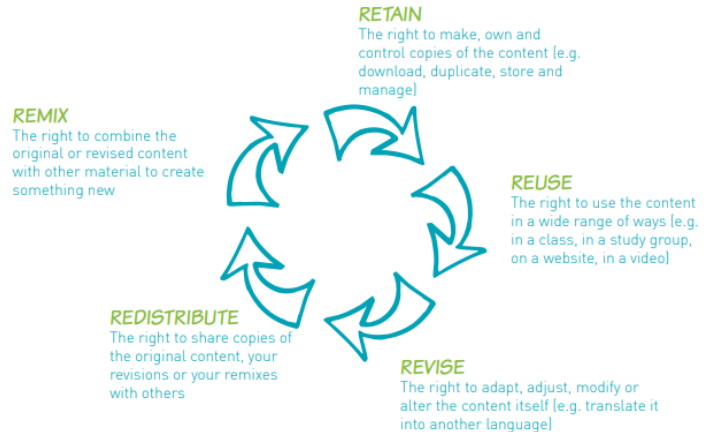
These resources will be at the heart of your competences and experience. Preparing them takes time. Therefore, you would like to share them with the entire world and other HEI but you do not want to lose your ownership.

How to proceed?

“Reuse could take the form of using our materials in the classroom, directing other individuals toward the freely available materials and tools, drawing on the content in your own writing, study or research. **Remixing** could take the form of **reworking**, **rewriting**, and **translating** units.”

([OpenLearn Create](#))

## THE 5 PRINCIPLES OF OERS



These five principles are made possible by Creative Commons licences, which permit the authors to retain the right of authorship of the resources while assigning some usage rights (depending on the licence) so that anyone can use them (subject to certain conditions) without the need to request prior permission.

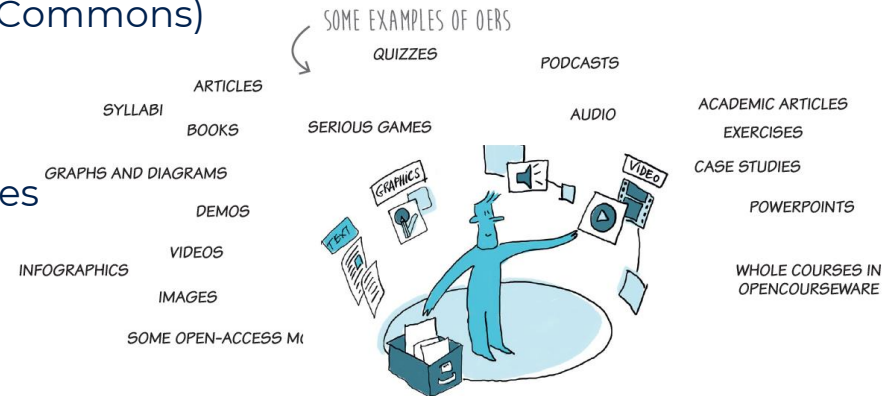
[Les Cahiers du LLL-N°6bis : Open Education. A few tips to get started](#) by Mathelart, C. et al. under [CC BY-SA](#) , page 22

# Open Educational Resources (OERs) Ressources éducatives libres (RELs)



*OERs : "Any type of teaching material freely available and accessible to the public. Teachers are encouraged to use, copy, adapt and re-share open resources to suit their needs and the needs of their students" (UNESCO2012)*

- Training materials in a digital format
- Books, videos, images, exercises, lessons, online coursewares, case studies, serious games, assessments, simulators...
- Can be **R**etained, **R**eused, **R**evised, **R**edistributed and **R**emixed (5 Rs)
- Protected by an open license (e.g. Creative Commons)
- Compared to MOOCs or Moodle :
  - Static
  - Accessible at any time
  - No formal assessment of learning outcomes
  - No credit, no certification





# Rights, Ownership : How to Protect your Resources?



[How To Attribute Creative Commons Photos](#) by Foter is licensed under [CC-BY-SA](#)

CREATIVE COMMONS LICENSES

		COPY & PUBLISH	ATTRIBUTION REQUIRED	COMMERCIAL USE	MODIFY & ADAPT	CHANGE LICENSE
	PUBLIC DOMAIN	✓	✗	✗	✓	✓
	CC BY	✓	✓	✓	✓	✓
	CC BY-SA	✓	✓	✓	✓	✗
	CC BY-ND	✓	✓	✓	✗	✓
	CC BY-NC	✓	✓	✗	✓	✓
	CC BY-NC-SA	✓	✓	✗	✓	✗
	CC BY-NC-ND	✓	✓	✗	✗	✓

Legend:

- You can redistribute (copy, publish, display, communicate, etc.)
- You have to attribute the original work
- You can use the work commercially
- You can modify and adapt the original work
- You can choose license type for your adaptations of the work.

Choose the appropriate license



Follow this Open Courseware about Creative Commons



# Advantages of Sharing & Opening your Resources

## Teachers

- Increases visibility and thereby creates new opportunities for collaboration
- Saves time: one can use quality resources colleagues have produced
- Incentive to develop better-quality educational resources that they are proud to show to the outside world
- Can reach students that would never travel to Belgium to take the course (virtual mobility)
- Allows new approaches to teaching (such as multimodal, flipped learning, etc.)
- ....

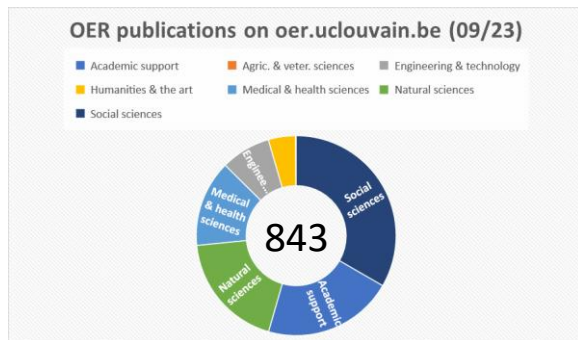
## Institution

- Impact on the quality of teaching
- Increases visibility and reputation
- Internationalization
- Demonstration, attractiveness
- Lifelong learning opportunities, service to alumni
- Democratization of access
- Guidance : students can explore a discipline before choosing their studies
- More than speaking of Openness : doing Openness
- ....

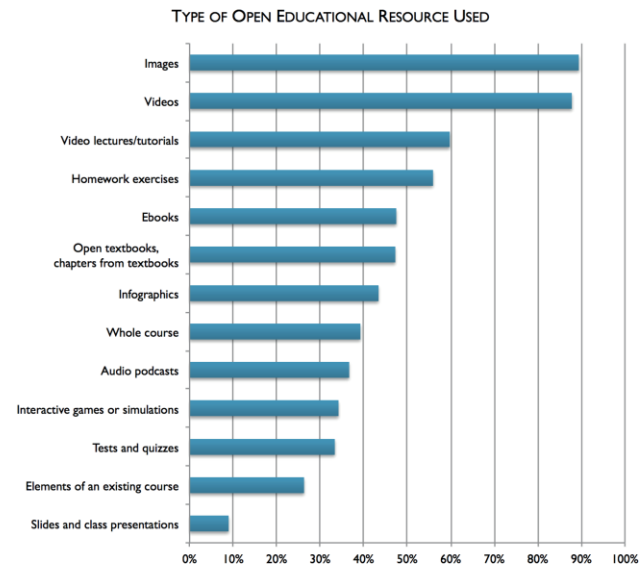
## Students

- Free (+gratis) access
- Can come across materials that contribute to the understanding of the course (Remediation, leveling up, Deepening)
- Micro Learning
- Self paced learning
- Can access learning material from other (top) universities
- Latest version of course material available online

# Where to Access & Deposit Educational Resources?



- [Oer Commons](#)
- [Merlot](#)
- [Khan Academy](#) (Eng); [Khan Academy](#) (fr)
- [Oasis](#)
- [OpenStax](#) and [Pressbooks](#) (Open Textbooks)
- [Oxford Open Conted](#)
- [Wikimedia Commons](#), YouTube (licensed under CC)
- [Open Moodle](#)



[Allen & Seaman, 2014]

Learn how to  
reuse & deposit  
OERs



## Communities in OER-UCLouvain

Choose a community to browse its collections.

<a href="#">Academic support</a> <span>178</span> Resources for Academic Support and Professional Development
<a href="#">Agricultural and veterinary sciences</a> <span>1</span>
<a href="#">Engineering and technology</a> <span>68</span>
<a href="#">Humanities and the arts</a> <span>37</span>
<a href="#">Medical and health sciences</a> <span>118</span>
<a href="#">Natural sciences</a> <span>160</span>
<a href="#">Social sciences</a> <span>281</span>

## Discover

Author

<a href="#">PLUMAT, Jim</a> <span>103</span>
<a href="#">DE KESEL, Myriam</a> <span>100</span>
<a href="#">BODART, Vincent</a> <span>51</span>
<a href="#">CONTINO, Francesco</a> <span>42</span>
<a href="#">KAMINSKI, Ludovic</a> <span>35</span>
<a href="#">RAUCENT, Benoît</a> <span>30</span>
<a href="#">VAN DER LINDEN, Bruno</a> <span>29</span>
<a href="#">JACQMOT, Christine</a> <span>28</span>
<a href="#">RAUCENT, Benoît</a> <span>21</span>
<a href="#">HINDRIKS, Jean</a> <span>19</span>
<a href="#">next &gt;</a>

Subject

<a href="#">SS to PSI</a> <span>90</span>
<a href="#">fiche pédagogique</a> <span>81</span>
<a href="#">physique</a> <span>71</span>
<a href="#">orthopédie</a> <span>66</span>
<a href="#">vidéo</a> <span>66</span>
<a href="#">expérience</a> <span>62</span>
<a href="#">emploi</a> <span>45</span>
<a href="#">marché du travail</a> <span>43</span>
<a href="#">chômage</a> <span>42</span>
<a href="#">pédagogie active</a> <span>32</span>
<a href="#">next &gt;</a>

Educational Level

<a href="#">Master</a> <span>418</span>
<a href="#">Baccalaureat</a> <span>325</span>
<a href="#">Doctoral</a> <span>264</span>
<a href="#">longlife</a> <span>228</span>
<a href="#">Secondary</a> <span>121</span>
<a href="#">Bachelor</a> <span>110</span>
<a href="#">next &gt;</a>

# OERs : One component of Open Education

- A movement aimed at making education universal, available to the greatest number of people
- Based on the sharing of educational resources and practices in order to break down barriers to access
- Encourages everyone to take advantage of the growing number of learning opportunities.

🎯 Discover Openness at UCLouvain :  
[Université numérique](#) (FR) or  
[Digital University](#) (ENG)



# Bibliography

## The 4 Components of Teaching



Jacqmot C., Docq. F, Deville Y. (2020). *A Framework to Understand, Analyse and Describe Online and Open Education in Higher Education*. [DOI: 10.500.12279/783](https://doi.org/10.500.12279/783).

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## Open Education and OERs

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<https://www.youtube.com/watch?v=AGpAz3x4xFQ&list=PL3KHgL7BQvbVcYsmj4vRekHXBtm92uo2g&index=5>.

# Personal Learning Environment (PLE)



num-LLL@uclouvain.be

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*« PLE is the way people are using technology for learning and which allows them to shape their own learning spaces, to form and join communities and to create, consume, remix, and share material. »*

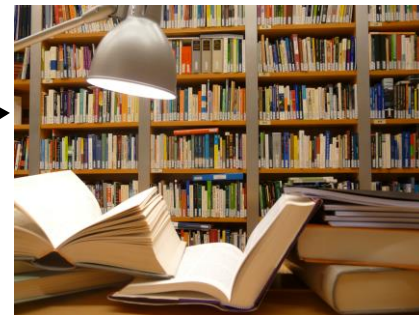
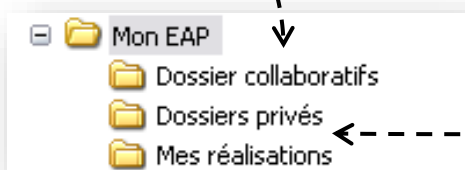
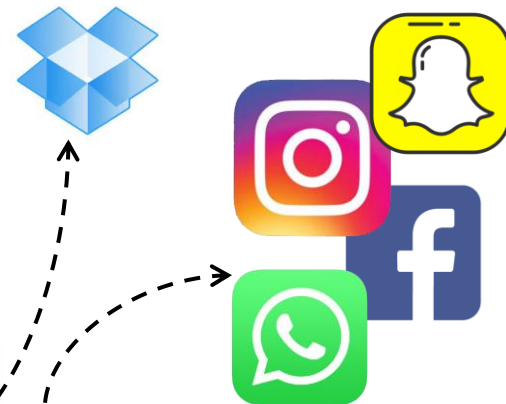
(Attwell, 2006)

*« Un écosystème de personnes et d'outils analogiques ou numériques que l'individu mobilise et agence dans le cadre d'activités de construction de connaissances.»*

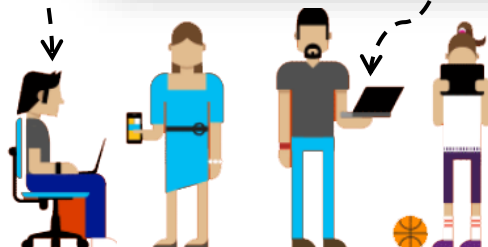
(Nicolas Roland, 2013)



# An example of Personal Learning Environment (PLE)



[moodle.uclouvain.be](http://moodle.uclouvain.be)



# Pedagogical Activation

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2. Personal Learning Environment (PLE)
3. **Pedagogical Activation**
4. Supporting Resources

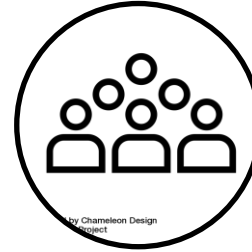
# Different interactions



with the  
content



between  
teacher and  
students



between  
peers



# How does interactivity **with course content** enhance student learning ?



How, which digital tool ?

What is the added value ?

--	--

--

# How does interactivity **between teacher and students** enhance student learning ?



How, which digital tool ?

What is the added value ?

# How does interactivity **between peers** enhance student learning ?



How, which digital tool ?

What is the added value ?

# Various educational practices with digital technology

1. Personal Learning Environment (PLE)
2. Pedagogical Activation
3. Different educational practices with digital technology
4. A combination of teaching modalities
5. Open Educational Resources for Teaching and Learning
6. Supporting Resources

## Définir le scénario et les modalités du cours

Hybrider les enseignements

Donner cours à distance

Emprunter du matériel pour enseigner

Donner cours en comodal

S'inspirer d'exemples de scénarios

Investir des locaux d'enseignement innovants

## Favoriser les interactions

Dynamiser son auditoire avec des quizz

Proposer des activités collaboratives

Donner la parole en présence et à distance

Faire intervenir un expert à distance

## Proposer des activités

Proposer des exercices en différé

Proposer une activité de lecture

Organiser un travail de recherche

## Partager des ressources

Exploiter des ressources existantes

Générer du contenu interactif

Créer un jeu pédagogique

Réaliser un podcast pédagogique

Smartphone

Screencast

Animation

Vidéomaton

Montage

Réaliser une vidéo pédagogique

Créer un diaporama efficace

Créer des parcours d'apprentissage autonomes

Proposer des notes visuelles

CONSTRUIRE MON COURS  
DANS L'ENVIRONNEMENT  
NUMÉRIQUE UCLouvain

UCLouvain

LOUVAIN  
LEARNING  
LAB



MISE À JOUR  
28/07/23

## Organiser le suivi des acquis et le feedback

Se faire aider pour la correction

Evaluer les étudiant.es à distance

Accompagner les stages à distance

Accompagner les mémoires à distance

Organiser une évaluation continue

Organiser un travail évalué par les pairs

Donner du feedback aux étudiant.es

Proposer une auto-évaluation

Demander du feedback aux étudiant.es



# Supporting Resources

1. Educational and Open Educational Resources for Teaching and Learning
2. Personal Learning Environment (PLE)
3. Pedagogical Activation
4. Supporting Resources

# Training in digital practices & a contact address

## 4 LLDays & on demand trainings



**Contact adress :** [num-lll@uclouvain.be](mailto:num-lll@uclouvain.be)