



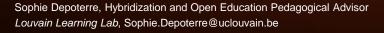


Open Education : From Strategies to Actions

Yves Deville Sophie Depoterre

Nantes, December 2023

Prof. Yves Deville, Senior advisor to the President for the digital university and Open Science, *Ecole Polytechnique de Louvain*, Yves.Deville@uclouvain.be





Objectives

At the end of this workshop, you will

- Be familiar with the present state of Open Education and the diversity of benefits it brings about
- Be able to explain why Open Education matters
- Be able to assess objectives and concrete actions to deploy openness
- Be able to discuss the role of the different university actors in the deployment of Open Education



Plan

An Interactive Introduction to Open Education

Setting up the Concepts

From Strategies to Actions



- Created in 1425
- 38,900 students
- 3,400 researchers
- 2,200 academics
- 19 faculties
- 25 research institutes
- 8 campuses in Belgium
- 4th largest French-speaking (complete) university in the world
- QS: 195th
- THE: 170th
- ARWU: 151-200th











- Allez sur wooclap.com
- 2 Entrez le code d'événement dans le bandeau supérieur

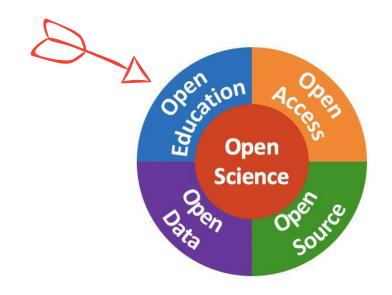
Code d'événement
OENANTES

Plan

- An Interactive Introduction to Open Education
- Setting up the Concepts
 - Open Education
 - The Forms of Openness
 - OERs & Open Coursewares
 - MOOCs & Distance Leaning
 - Digital Tools
- From Strategies to Actions



Multiple Dimensions of Openness





What is Open Education?

- Making education universal and accessible to as many people as possible
- Sharing educational resources and practices with colleagues and learners from around the world
- Removing barriers to access
- Open = free to use and distribute



What are we talking about?

Open educational practice is a global movement whose underlying principle is the production, use and sharing of a wide range of learning resources to increase access to educational opportunity through freely available online content and services and to empower educators by sharing best practice and quality resources. (Beetham et al., 2012)



More than a Concept ...



UNIVERSITY & MEDICINE















openmichigan



TUDelft OpenCourseWare































Why Open Education?

- Makes educational resources accessible to everyone
- Increases transparency, re-use, sharing, participation, cooperation for teachers and learners
- Improves the quality of educational resources through principles like inclusion, equity and sharing
- Reinforces collaborative knowledge construction
- Prevents from re-inventing the wheel again and again

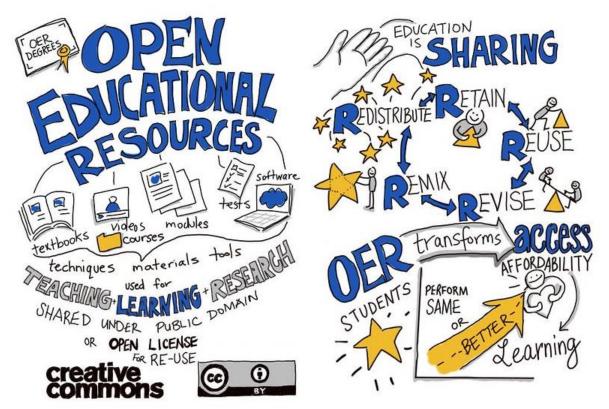
knowledge
creativity
learning
change open resources education
accessibility interactive
flexible partage inspiration
philosophy freedom know-how
values access
transparency
universal collaboration autonomy
reuse

Add references





Open Education is Sharing





Open Education and SDG







"The free flow of information and knowledge is critical for three reasons.

First, it allows **citizens to educate themselves** on issues of climate change, biodiversity, health, education, poverty, food production, water, energy, urban planning, and all of the critical challenges encapsulated in the United Nations Sustainable Development Goals (SDGs).

Second, it prepares us for a new institutional regime of learning, where the **education system opens** itself to **learners of all ages**, **from all countries and all professions**, extending quality education far beyond its traditional reach.

Third, it allows **knowledge creation and revision processes** to reflect the diversity and context of people from different parts of the world, and to foster a **global dialogue**."

SDG Academy & Creative Commons by Cable Green and Chandrika Bahadur is licensed under CC BY 4.0

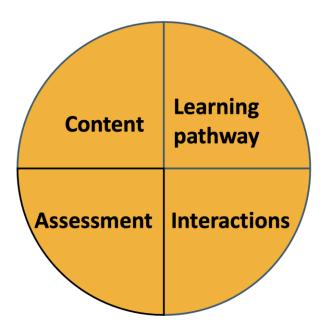


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The 4 Components of Teaching



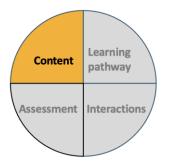
Witthaus, G., 2017. Recognition of open learning and the unbundling of higher education. EMOOCs 2017 conference, Madrid.

Jacqmot C., Docq F., Deville Y. 2020. A Framework to Understand, Analyze and Describe Online and Open Education in Higher Education 12th International Conference on Computer Supported Education, DOI: 10.5220/0009470704580465

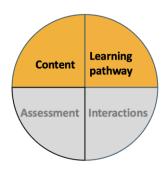


The Forms of Digitalisation

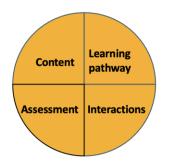
Educational Resources



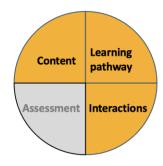
Courseware



Online Education for Credits

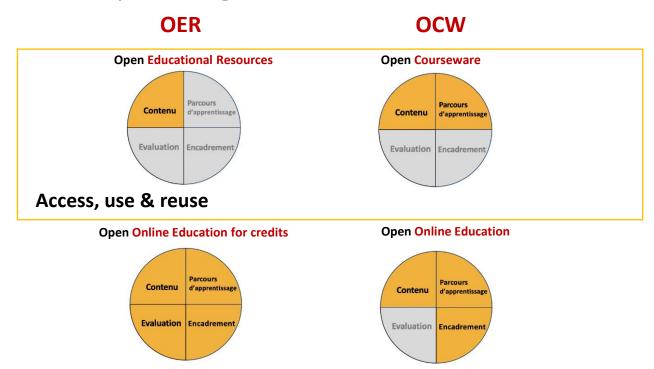


Online Education



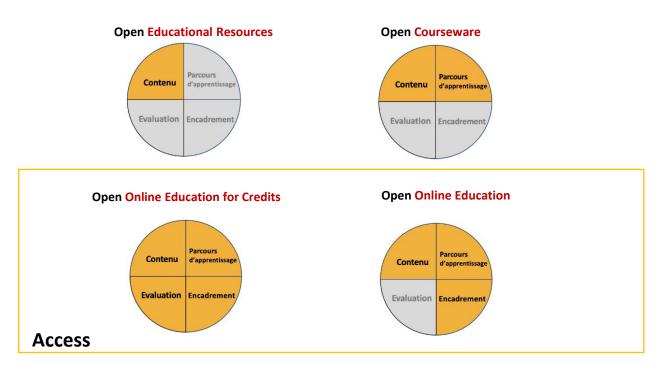


Model: the Opening Forms





Model: the Opening Forms



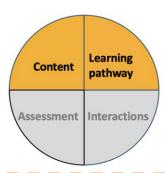




Interactions

Interactions

students-content



Interactions

- students-content
- teacher-student(s)
- student(s)-student(s)



Jacqmot, C.; Docq, F. and Deville, Y. (2020). A Framework to Understand, Analyze and Describe Online and Open Education in Higher Education. In Proceedings of the 12th International Conference on Computer Supported Education - Volume 1: CSEDU, ISBN 978-989-758-417-6, pages 458-465. https://doi.org/10.5220/0009470704580465



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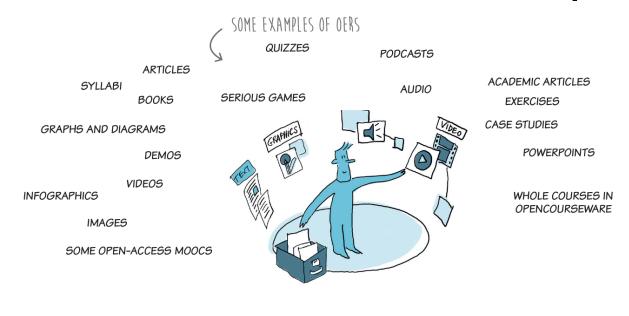
Open Educational Resources





What are Open Educational Resources?

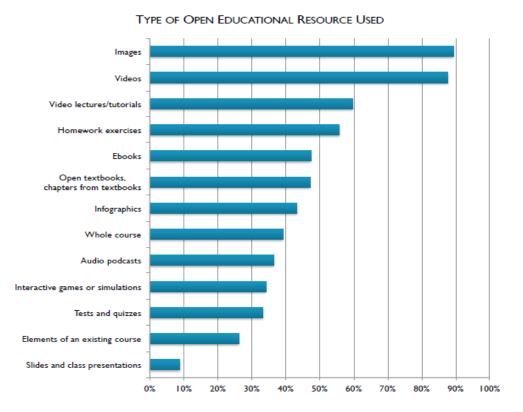
"any educational material that is freely available and accessible to the public. Teachers are encouraged to use, copy, adapt and share open resources to meet their needs and those of their students." [Unesco 2012].







Which Types of OERs Are Commonly Used?

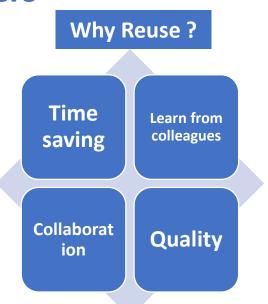


Faculty that reported any OER use (regularly, occasionally, or rarely) were asked detailed questions about the type of OER materials that they were using Allen E., Seaman J. [2014]. Opening the Curriculum: Open Educational Resources in U.S.
Higher Education. https://eric.ed.gov/?id=ED572730.



Why Reuse and Share OERs?

Teachers









Why Reuse and Share OERs?

Institution

- Student attractiveness
- Showcasing of innovation and talent
- Alumni
- Democratization of access to education
- Lifelong learning support
- Many institutions already involved in the world

•

Students



Encourages learners to build their own knowledge and learning path

Supports lifelong learning

Lowers the cost of studying by offering alternatives to paid-for publications

Provides access to resources and learning opportunities that might not be available locally

Offers flexible study times and locations

Allows you to explore a discipline before making your study choices

Encourages you to compare resources and develop a critical mindset

Provides opportunities to acquire concepts required for further studies

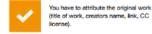
Les Cahiers du LLL - N°6 - Open Education by Raucent B. et al. is licensed under CC BY SA



How to Make it Open?

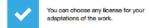








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Where to Find **OER**?

Where to Find **OCW**?



Coursewares can be made accessible via a Leaning Management System (LMS), such as Moodle.

4 étapes pour basculer ses contenus pédagogiques en Open. Dezoom sur l'Open Education. Zoom sur les OER par DEPOTERRE, S. sous licence CC BY SA.



OERs and Open Coursewares at UCLouvain



OER UCLouvain oer.uclouvain.be

Open Educational Resources are freely accessible, openly licensed documents and media that are useful for teaching

Today (2023)

- 800 resources
- 25.000 items seen / month
- 1.200 downloads / month
- 500 contributors







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https://www.edx.org/school/louvainx

43 courses











5 programs













LouvainX: International Law

★★★★ 3.9 stars 17 ratings

Learn about the Law of the International Community, including how International Law is created, applied and upheld in today's world.





12 weeks

6-8 hours per week



Self-paced

Progress at your own speed



Free

Optional upgrade available

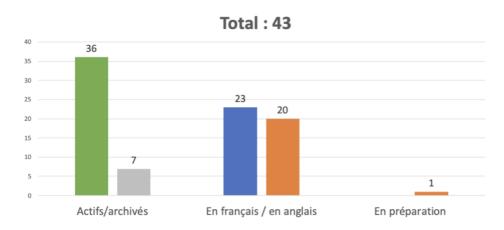
There is one session available:

122 547 already enrolled! After a course session ends, it will be archived \(\bar{\bar{\alpha}} \).

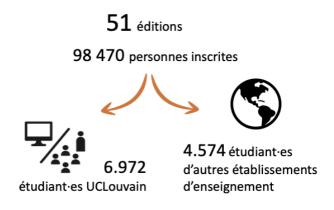


MOOCs at UCLouvain on the edX Platform

Catalogue des MOOCs UCLouvain en décembre 22



Volume d'activité en 2021





A Paradigm Shift

On-site face-to-face

- Focus on the teacher
- Synchronous
- Communication channels : oral and non-verbal
- Implicit teaching scenario

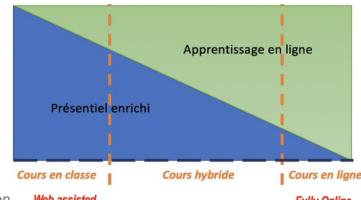
Remote

- Focus on the students
- Asynchronous or synchronous
- Communication channels : written and multimedia
- Explicit teaching scenario



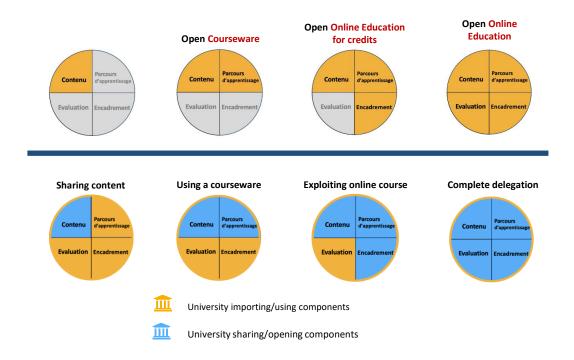
Continuum of Teaching Methods ...

- Classroom: 1%-29% of e-learning components. Most of the teaching takes place face-to-face in lecture theatres, with occasional use of web-assisted technologies (Bates, 2016).
- Hybrid: 30%-79% of training components
 - are online
 - are used outside the classroom
- Online: 80%-100% of the course components are online. Most of the teaching takes place online, outside the lecture theatre, if not all (fully on-line: no face-to-face teaching at all)





Strategies for Sharing Courses between Universities





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Use of Technology in Education

« Can the use of technology in education really help students to succeed at school? Many studies have shown that they can. But to do so, we need to look beyond the purely utilitarian view of technology and identify the educational transformations it could bring to the classroom. »

Enseigner et apprendre avec le numérique Thierry Karsenti et Julien Bugmann (dir.), Université de Monstréal, OpenEdition Books, 2018. Translated by DeepL.



Classification of Digital Tools

Content Creation

- Office software: Microsoft suite, Google suite, Prezi
- Interactive presentation: Genially
- TextBook: exeLearning (OS), Pressbooks, Manifold, Opale
- Design : Canva, Crello
- Publishing and sharing slides: Slideshare

Content Integration

- Easygenerator, Articulate, iSpring, Nearpod, EdPuzzle, Lectora, isEazy, Gomo Learning, Evolve, Adapt
- StoryTelling: Sway (Microsoft), TimeLineJS (taken over by H5P)

Multimedia Tools (image, audio, video)

- Editing, video capture, screen cast: OBS (OS), Snagit,
 Quicktime, Camtasia, Screencast-O-Matic, Loom, Animoti,
 Ezvid, EZCast (OS)
- Audio editing and capture: Audacity (OS)
- Creation of interactive media: Visia, H5P (OS), Hihaho, Thinglink
- Educational video recorder/player: EZcast (OS)
- Publishing and sharing videos: Youtube, Vimeo, EZcast (OS)

Learning Management System (LMS) andOnline Courses

- **LMS**: Moodle (OS), Google classroom, Blackboard Learn, Canvas (OS), EasyClass (OS), Open EdX (OS)
- Online courses: MS Learn, Coursera, EdX, Udacy,
 FutureLearn, Khan Academy, OpenLearn, Masterclass,
 FUN



Tool Categories

Top Tools for Learning 2023: Results of the 17th Annual Survey Tools By Category













This image can be reused with full attribution:

Jane Hart. Top 100 Tools for Learning 2023 toptools4learning.com

Classification of Digital Tools

Videoconferencing and Virtual Classrooms

MS Teams, Livestorm, Adobe Connect, Zoom, Google meet, Skype, Webex, Skype, Google Meet, Flipgrid, Adobe Connect, Whereby, WebEx, Jitsi Meet, BigBlueButton (OS), WebinarGeek, Blackboard Collaborate, BlueJeans, GoBrunch

Exercisers and Rehearsal software

- Interactive quizzes: Hot Potatoes, Moodle Test, ActiveQuiz Moodle Quizlet, Quizizz, Factile, Kahoot, Plickers, LearningApps
- Games (crosswords, hidden word, millionaire, hidden picture, etc.): Moodle plugin, Space Race (Socrative)
- Flashcards: Wooflash, Quizzlet, Mnemosyne, Anki, SuperMemo

Tools for Student Engagement

- Votes, polls: Wooclap, Socrative, Plickers, Poll Everywhere, Gimkit, AnswerGarden
- Sales pitch: forums, chat, email, FlipGrip
- •Mind maps: Coggle, Freemind (OS), Mindmeister, Ayoa, C-Map Tools, X-Mind,
- Social and collaborative reading of texts and documents : Persuall
- Digital notebooks: Evernote, Notability, Google Keep, OneNote

Collaborative Tools

- Collaborative office software: Google docs, Microsoft 365, Framapad, Framacalc
- Wiki:
- Virtual wall and whiteboard: Padlet, Jamboard (Google), MS White board, Mural, Miro, NoteBookCast
- Evaluation-based Pairagogy (learning by and with peers): Comprooved, PeerGrade
- Mission: LabNbook (OS)
- Communication: Slack



Classification of Digital Tools

Project Management Tools

■Trello, ClickUp

Social Networks

Web Resources

- Translator: Google translate, DeepL
- Encyclopaedia: Wikipedia, Quora, slideshare
- Search engine: Google, Bing, DuckDuckGo, Zotero
- Spelling and grammar
- Image library: Pixabay, Shutterstock, Unsplash, Pinterest
- Survey: SurveyMonkey, Google forms
- File sharing: Dropbox, WeTransfer, Smash, TransferNow

AI-based Tools

- Generative AI for text : ChatGPT, Bing, Bard, LaMBDA, Jasper.ai, Copy.ai, PaLM 2
 - Production of content
 - Text synthesis, text improvement, translation
- Image : Dall-E, Midjourney, Bing
- Translation : DeepL, Google Translate, Bing, ChatGPTText
- Vidéos : Heygen
- Coding: Github Copilot, Cursor



Classification of Digital Tools: Evaluation

Submission of Individual or Group Work

- Documents submission : Moodle-devoir, Gradescope, suite Microsoft, suite Google, Framapad, Genial.ly, LabNbook
- Interactive presentation : Genially, Prezi
- Rapports structurés : exeLearning (OS),
 Pressbooks, Mahara
- Recordings: voir outils multimedias, avec mode de diffusion « privé »
- Partage de fichiers : Dropbox, WeTransfer, Smash, TransferNow

Oral Exam

Teams, Zoom, BigBlueButton, Adobe Connect

Digitalized Paper Exam

 Gradescope, Contest, Viatique, QCM Direct

Written Exam without lockdown without proctoring

- Test en ligne : Moodle-test, Gradescope-Online, Formative, Wooclap
- Evaluation par les pairs : Comproved, Moodle-Atelier

Written Exam with lockdown without proctoring

 Moodle-test+Safe Exame Browser, TestWe sans proctoring, Wiseflow sans proctoring, Inspera, Passnum, Respondus

Written Exam without lockdown with proctoring

Moodle-test+Teams, Proctorio

Written Exam with lockdown with proctoring

■ TestWe, Wiseflow, ProctorU, Respondus



Using Digital Tools in an Open Education Context

Non Open Source tools can be used

- for the development of OERs and Open Coursewares
- to improve the quality of a course (interactions, evaluation, illustration, translation, ...)



Next step : Open Pedagogy





Open Pedagogy (or Open Educational Practices)

- Using open educational resources (OER) to support learning
- Open sharing of teaching practices with a goal of improving education and training at the institutional, professional, and individual level
- Inviting students to be part of the teaching process by participating in the co-creation of knowledge and open materials



Next step : Open Pedagogy



Two examples

- University of California, San Francisco (UCSF) School of Medicine: students learn by producing open educational resources (CC licensed Wikipedia articles – 16.1 million views)
- Ohio State University:
 students write chapters of the Open Textbook on Environmental
 Science (https://ohiostate.pressbooks.pub/sciencebites/)



To go further



Open Education A few tips to get you started

Under the direction of Céline Mathelart



https://uclouvain.be/fr/etudier/lll/cahieropen-education.html





Plan

An Interactive Introduction to Open Education

Setting up the Concepts

From Strategies to Actions



World Café Open Education

Make 3 groups of 6 participants each

For each dimension

- Each participant receives a set of possible recommendations
 From: Open Education Recommendations for Stakeholders by Deville, Y. and Jacqmot, C.
- As a group, choose 1 or 2 recommendations that you would like to discuss
- Propose several concrete actions to implement the chosen recommendation(s)
- Describe each action in terms of actors involved, potential impact, possible costs, barriers...
- Fill in the Padlet of your group with your propositions

Dimensions

- Open Educational Resources and Open Courswares (15 minutes)
- Hybrid and Distance Learning & Digital Tools (15 minutes)





:Padlet

Yves Deville • 10m



Group 1 World Cafe Open Education

Workshop Nantes 2023

- Padlet Group 1 : https://bit.ly/OE_G1
- Padlet Group 2 : https://bit.ly/OE_G2
- Padlet Group 3 : https://bit.ly/OE G3

DIMENSION 1: Open Educational **Resources and Coursewares**

Recommendation A

Copy the chosen recommendation here.

Action A.1

Propose a concrete action to achieve the chosen recommendation here.

Analysis of Action A.1

Who are the actors involved? (Teachers, students, univ. governance, administration, other)

Potential impact?

Potential cost?

What are the possible barriers?

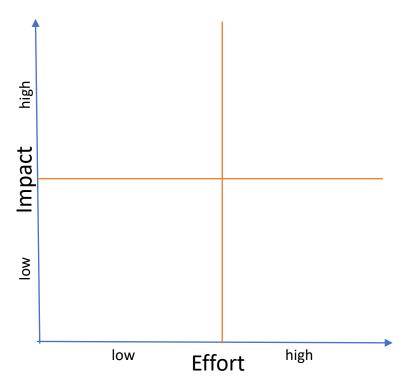
Action A.2

Propose another concrete action to achieve the chosen recommendation here.

UCLouvain

Open Education: From Strategy to Actions

World Café: The Impact/Effort Matrix



- Write down each action on a postit note.
- Choose a group representative; he/she summarizes your discussions for the whole group in 5 minutes
- While talking, he/she also places the actions on this matrix

