One step away: embracing OER in libraries as a key element of Open Science

swissuniversities

Swiss Library Network for Education and Research

Bern, 26.09.2024

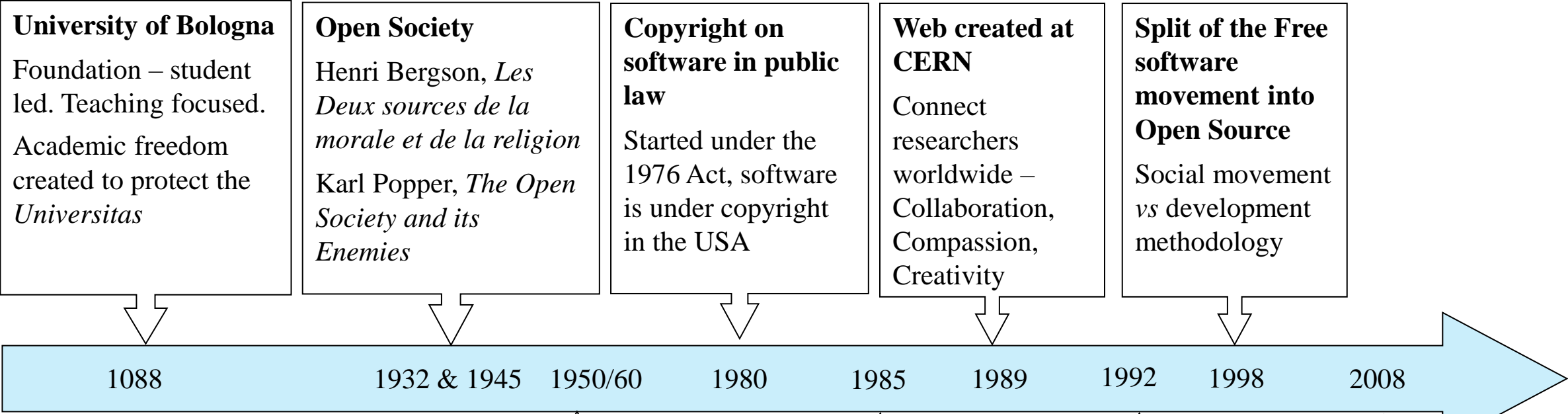Barbara Class , UNIGE & Mathilde Panes, HEP Vaud

A keynote on Openness in two parts

Part 1: Conceptual and historical background

Part 2: Closer to librarians' reality

# Where do Open Science and Open Education come from?

University of Bologna

Foundation – student led. Teaching focused.

Academic freedom created to protect the *Universitas*

Open Society

Henri Bergson, *Les Deux sources de la morale et de la religion*

Karl Popper, *The Open Society and its Enemies*

Copyright on software in public law

Started under the 1976 Act, software is under copyright in the USA

Web created at CERN

Connect researchers worldwide – Collaboration, Compassion, Creativity

Split of the Free software movement into Open Source

Social movement *vs* development methodology

| 1088 | 1932 & 1945 | 1950/60 | 1980 | 1985 | 1989 | 1992 | 1998 | 2008 |
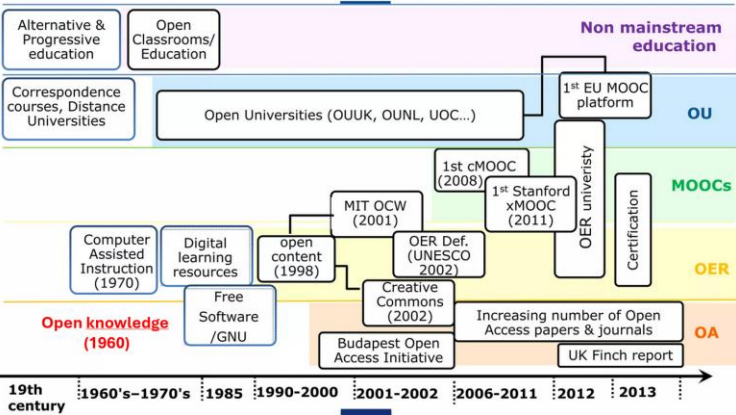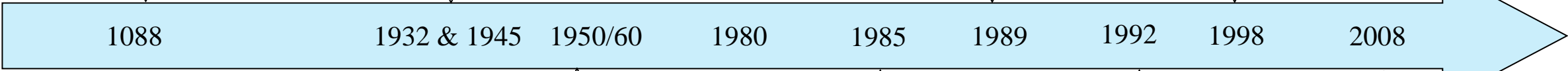
Computers / Internet Open Knowledge

Code is openly shared, working together to understand this new science

Free software

R. Stallman creates the Free software as a social movement with copyleft as a tool

Public domain

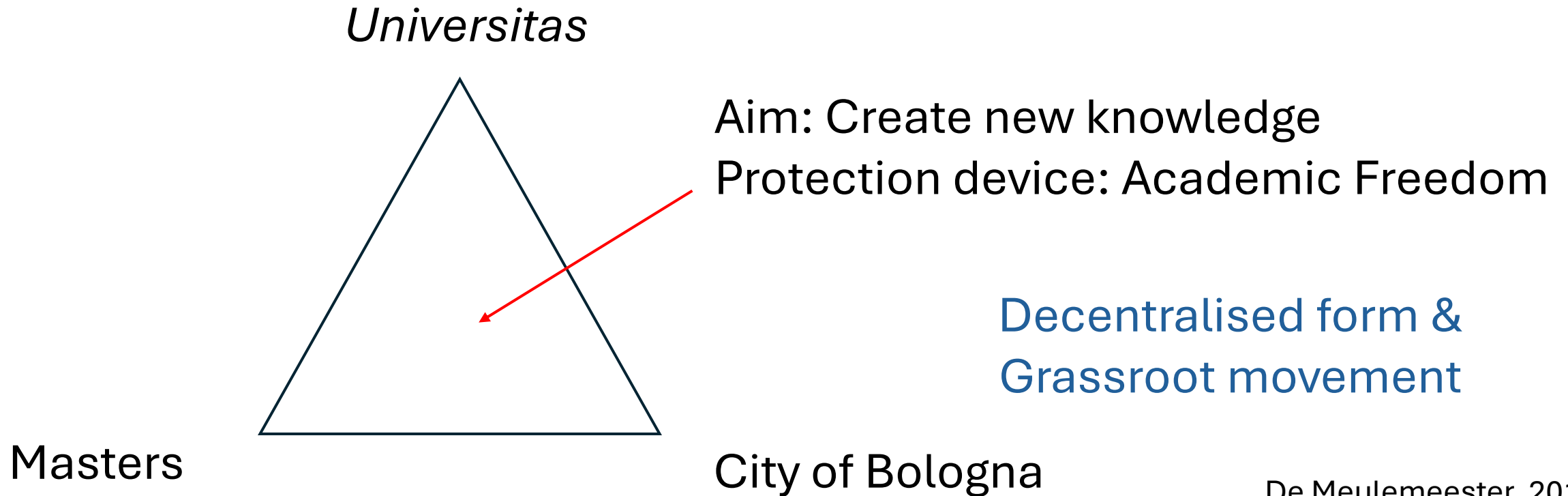Copyright creates the legal concept of public domain

First cMooc

Connect massively worldwide and create knowledge together

Punie, 2014

Openness: the many conceptions

"Despite the **illustrious history of openness as the cornerstone of liberal thinking**, the **2020s are not a time for naïve calls for 'openness for its own sake'**, whatever that may mean. As the **Internet** becomes a playground for **corporate monopoly and fake news threatens** to overwhelm attempts at earnest debate, the dangers and **misuses of the idea of free information** have become apparent for all to see."

Leonelli, 2023, p. 3

1088: the Bologna *Universitas*

Universitas

Aim: Create new knowledge
Protection device: Academic Freedom

Decentralised form &
Grassroot movement

Masters

City of Bologna

De Meulemeester, 2011
Paul, 2014
Rangel, 2007
Scott, 2006

Enclosure 1

Middle Ages
Open = "**commons**-oriented", e.g. Open Field
i.e. integrated social organism, relational dynamics
Freedom to use

XVIth – XIXth Enclosure
Legal property   Copyright (1710 Statute of Anne)

Pomerantz
Bollier, 2024
https://en.wikipedia.org/wiki/Inclosure_acts

The concept of Open Society: *Open* is back

Bergson - 1932	Popper - 1945
Open society, inclusive of the **entire humanity** - opposed to a closed society	Open and **liberal** society, focusing on **freedom** and **democracy** – opposed to a totalitarian society
Dynamic, creative, **universal** oriented moral which aims at peace. Uses intuition and imagination.	Scientific oriented with rational thinking, experience, and the value of **critical thinking** in the scientific process

Henri Bergson, *Les Deux sources de la morale et de la religion*
Karl Popper, *The Open Society and its Enemies*

Bergson, 1932
Popper, 1945

1950/60: Open Knowledge

Begining of computers and informatics

  ➢ Universities are early adopters
  ➢ They apply their sharing culture to advance this new science
  ➢ Technology is dencentralisation-oriented and facilitates sharing (Internet, Hypertext)
  ➢ Librarians are involved (ERIC Education Resources Information Center)

Open Knowledge takes the form of peer production and peer governance to advance new knowledge

1970-1980 Copyright on software
Serial crisis

Peters, 2016

1980s: 4th key historical moment of Openness

- ➤ 1985: Free software movement created
  - o Continuing decentralized forms of knowledge production
  - o Copyleft to create information commons
- ➤ 1989: World Wide Web THE technology to empower Open Knowledge
  - o Aim: Information sharing wolrdwide among scientists
  - o Values: Collaboration, Compassion, Creativity
- ➤ 1991: ArXiv Open Access grassroot initiative

Enclosure 2

1992/3 Public domain is created in European law

Peters, 2016
Berners-Lee, 2024
Bibliothèques et communs de la connaissance, 2014
https://fr.wikipedia.org/wiki/Enclosure_des_communs_informationnels

1998: Split of the Free software movement

Free software	Open source software
Copyleft, decentralised	Copyleft, decentralised
Social movement	Development methodology
Relational, connection-oriented	Transactional, resource and object-oriented
Grant users **Freedoms**	Grant users **Rights**
Holistic paradigm?	Mechanistic paradigm?

Bollier, 2024; Leonelli, 2023; Peters, 2016; Sterling, 2021

Does paradigm matter?

➢ Paradigm = underlying set of perceptions, assumptions, values, and concepts with internal consistency

➢ Paradigm shapes purpose and determines practice and policy

➢ Two major paradigms in Europe: holistic (prior to 1500, focus on the whole) and mechanistic (post 1700, focus on parts)

"With Open Access, we had such big dreams and now we are locked in and pay fees" Nicole Krüger, 2024

Policy & Practice

OA
ORD
OER

Purpose
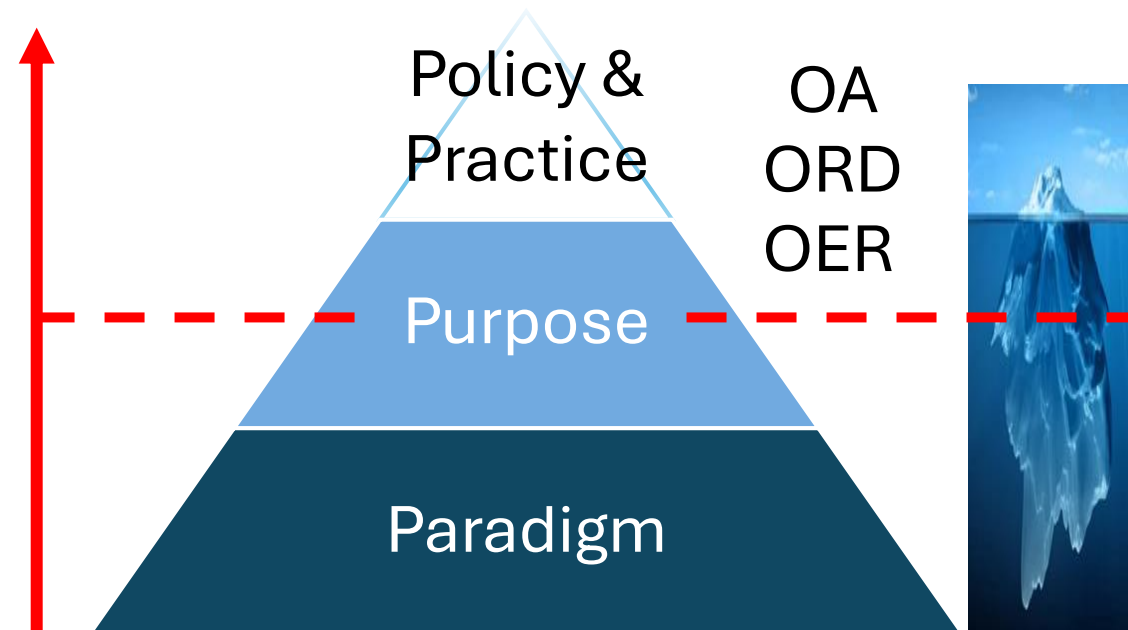
Paradigm

Could paradigm explain why non-grassroot OA did not work?

Sterling, 2021, 2024

A starting point to discuss paradigm?

In Switzerland, why do we use concepts of Openness in English in official documents? What about the Revise device of the 5R to translate it and embed it in the diversity of our cultures?

5 R: Retain, Reuse, **Revise**, Remix, Redistribute

The memory of freedom is present in at least two of our national languages and decentralisation is also in our culture since the Middle Ages...

➢ Ressources éducatives **libres**
➢ **Freie** Bildungsresourcen
➢ Risorse educative aperte

Wiley, 2014

GenAI: A third enclosure or a lever towards freedom?

PgB Open Education 2025-28 => mostly answered with GenAI proposals...

➤ Threshold period
➤ Responsiblity to choose the Openness we want
   o Free software movement of 1985?
   o Open source of 1998?
➤ How can librarians, who have the common good, understood as integrated social organism in your DNA, help to be attentive to details and reflect at the paradigm level?

Thank you for your attention :)

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A keynote on Openness in two parts

Part 1: Conceptual and historical background

Part 2: Closer to librarians' reality

OER : a document / UNESCO definition

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.
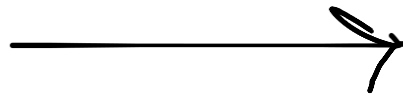
→ Any document that is open under the 5 R?

UNESCO, 2023

5R principles for open resources

- **Revise** – the right to adapt, adjust, modify, or alter the content itself (e.g., translate the content into another language)
- **Remix** – the right to combine the original or revised content with other material to create something new (e.g., incorporate the content into a mashup)
- **Reuse** – the right to use the content in a wide range of ways (e.g., in a class, in a study group, on a website, in a video)
- **Retain** – the right to make, own, and control copies of the content (e.g., download, duplicate, store, and manage)
- **Redistribute** – the right to share copies of the original content, your revisions, or your remixes with others (e.g., give a copy of the content to a friend)

Wiley, 2014

OER : beyond resources

- OER are resources that are created with the goal of being shared

- New practices when creating content = collaboration, issues of rights and licensing, formats, metadata…

- Sharing happens with the document **and in a context**: sequence, whole lesson, notes for teachers, etc.

- Cultural shift to foster / endorse

OER life cycle

Need definition → **OER discovery** → **Conception** → **Development** → **Dissemination**
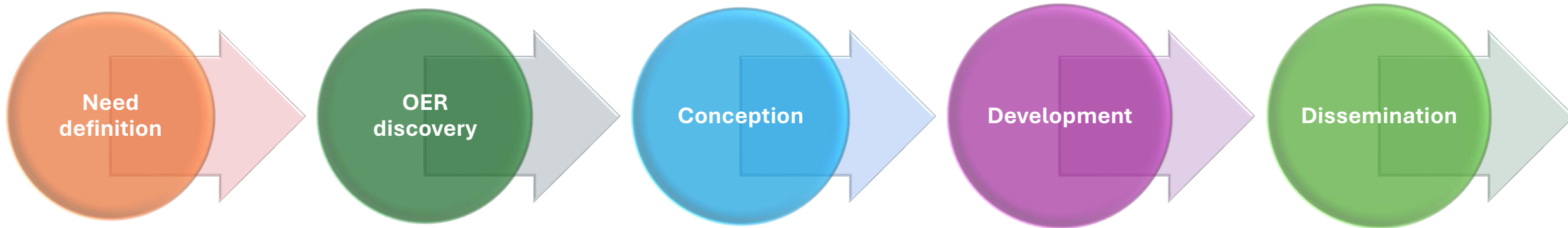
- Get involved in parts of the cycle
- Host the life cycle
- This life cycle is not locked with by commercial solutions, there is room for exploration
- Outside of the research prism ?

Translated and adapted from FabriqueREL, 2020

The role of libraries & librarians' skillset

Figure 8: What services do you provide that relate to OE? Please choose as many as apply (n=99)
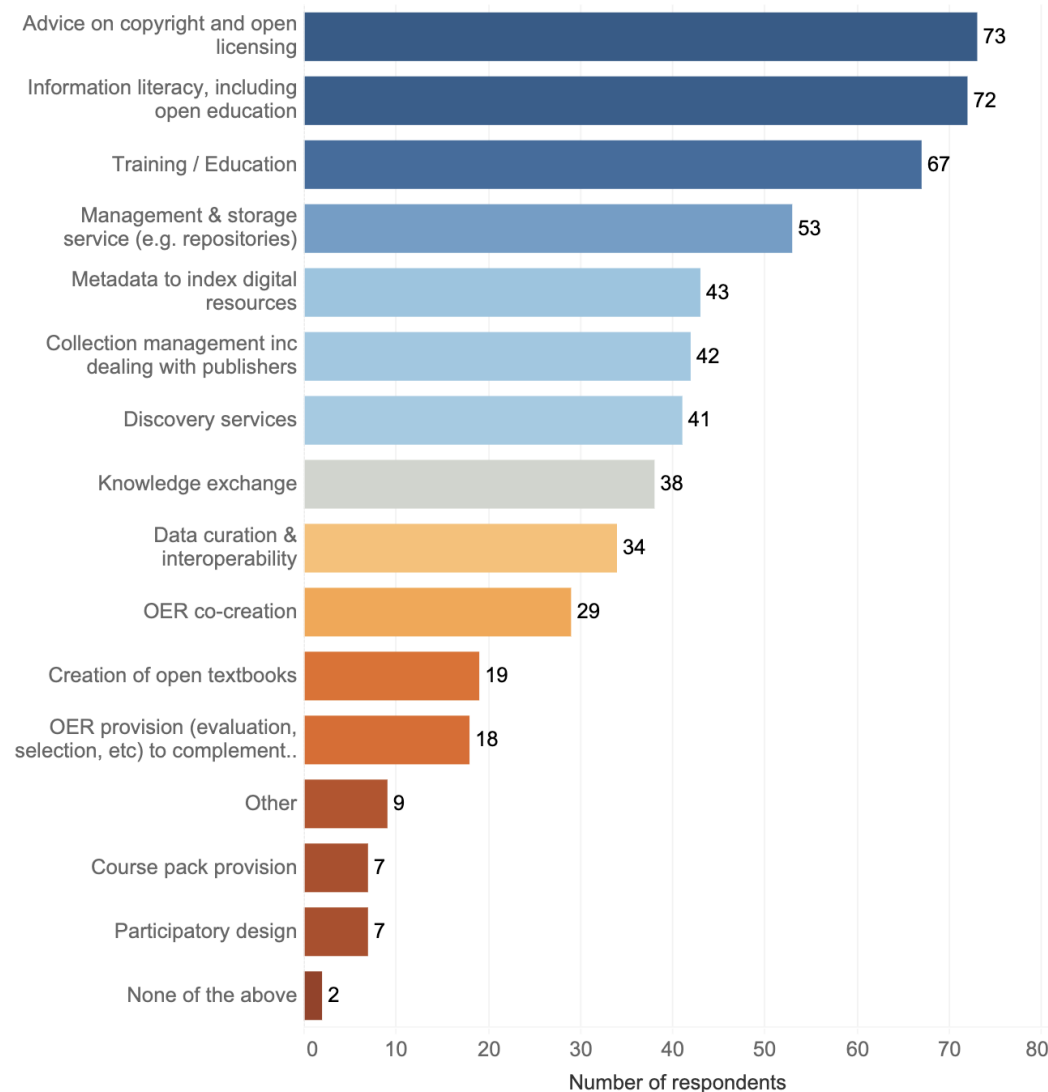
SPARC Report 2024:

- 116 respondents, including 8 swiss institutions

- Libraries are central in supporting Open Education and Open Educational Resources, particularly by providing advice on copyright, open licensing, information literacy, and training for educators.

- Challenges include resource constraints like funding and staffing, as well as uncertainties around legal aspects.

Treadway et al, 2024

Potential roles and services

- OER discovery
- Referencing, checking metadata
- Training and support
- Provision of a repository
- Advocacy and OER embassy
- OER co-creation and project curation

1. OER discovery

Skills : ✅

Challenges

- Search skills and needs differ for OER creators, teachers and students : tailor support
- Multiple repos / catalogs, various types of contents : lack of standardisation
- Source evaluation : new criterias ?

2. Reference and metadata

Skills :   ☑

Challenges

- Where to start ?
    - Contents created outside the org that are valuable for learners ?
    - Find contents created within the institution but not referenced
- Where to include it ?
    - Library catalog
    - Dedicated repo
    - Somewhere else (i.e. Zenodo)

3. Training and support

Skills : ✅

- Habit of training students and researchers

- Lots of knowledge regarding content: copyright, Creative commons licences, and sharing formats

Challenges

- New material to create (or use OER)
- Reframe previous expertise
- Collaborate with others stakeholders

4. Repository provision

Skills : ✅

- Long tradition of provision information systems (repositories, library catalogs)

Challenges

- Funding
- Re-inventing the wheel or joining something existing
- User adoption

5. Advocacy and OER embassy

Advocacy within the institution to promote OER as part of Open Science
OER embassy : position the library as a place to ask about OER, create OER, share OER, etc.
(whether this position is officially attributed by the institution or if it is 'de facto')

Skills : ✅

Challenges

- OER are becoming «trendy» (association with digital skills within the latest PgB, association with generative AI)
- OER are sometimes assimilated to MOOCs
- Considerations around teaching

6. OER co-creation and OER project (co-curation)

OER co-creation : being actively involved in the creation process of OER
OER project curation : select, fund, coordinate for OER creation projects (example follows)

Skills : **?**

Challenges

- For this role, libraries need to be at the forefront of OER within the institution
- It is a new role for most libraries to be involved as content editors
- Potentially managing funds and allocating resources

Support for OER creation and project curation

Projet 1 – Initiation aux modes d'intervention en situation de conflits (MISC) afin d'améliorer l'accès à la justice des citoyen.ne.s (Projet MISC)

Projet de manuel phase 1

Responsable : Marie-Claire Belleau, professeure à la Faculté de droit de l'Université Laval

Binôme : Jean-François Proteau, conseiller en pédagogie universitaire et Marilou Bourque, bibliothécaire en éducation ouverte

Licence prévue : CC BY

Pooling expertise in repository management (Repository provision)

Requirements / need

Platform for teachers to exchange teaching materials

Clear licences (Creative Commons)

Easy search and discovery thanks to metadata

Low cost per higher ed institution // scaling up

Solution

Central OER entry point for higher education institutions

Pilot project underway since November 2023

oer.switch.ch

OER repository selection (OER discovery)

Outils de recherche de REL variés (français)

Ces outils de recherche contiennent divers types de contenus pédagogiques (cours, présentations, vidéos, images, matériel pédagogique, manuels, MOOC, etc.).

Outil	Fournisseur	Licences
Bibliothèque numérique du CRDI	CRDI (société d'état canadienne)	La plupart CC-BY
BNEUF	Agence universitaire de la francophonie (AUF) : regroupement d'universités francophones à travers le monde.	CC variées
Ceres	Vitrine technologie-éducation (VTÉ)	Licences variées, pas toujours indiqué
EDUQ	Centre de documentation collégiale (CDC)	Licences variées, pas toujours indiqué
Bibliothèque libre	Consortium national de développement de ressources pédagogiques en français au collégial	Licences CC variées
Google - Recherche avancée Voir Astuce de recherche -	Google	Varie en fonction du type de recherche

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Take away message

Libraries are in a unique position, as third places in higher education institutions, to host reflexions on Openness

- ➢ Guarantee critical thinking
- ➢ Guarantee a deontology oriented towards the common good
- ➢ Guarantee freedoms to users towards learning, exchange and creativity

Libraries have the skills and knowledge of Openness in their DNA…

Looking forward to your reactions!

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