

Welcome to the

ENCORE+

Final Conference

30 November - 5 December 2023

<https://encoreproject.eu/events/>

ENCORE+

Final Conference



30 November - 5 December 2023

Free virtual event

Register your interest now

ENCORE+ FINAL CONFERENCE



30 Nov

A Network for Open -
Why and for whom?

1

Networking for OER
3 Years of ENCORE+

10:00-12:00

2

Open to Open?
Enabling Open &
Multistakeholder
Collaboration

13:00-15:00

1 Dec

ENCORE+ Network
themes

3

OER Technology
Advancing
Interoperability and
Standards

10:00-11:30

4

Policy & Practice
in Higher Education and
Business

12:30-14:00

4 Dec

ENCORE+ Network
themes

5

Quality
and Transparency

10:00-11:30

6

OER Innovation &
Business Models

12:30-14:00

5 Dec

OER in Europe -
Today & Tomorrow

7

Catalysing OER
Policies &
Recommendations
for Europe

10:00-12:00

8

Beyond ENCORE+
OER, AI & the Future

13:00-15:00



**All event times listed in CET*

Day 3

ENCORE+ Network Themes

Monday
4th December



Session 6

Monday 4th December
12:30 - 14:00 CET

*OER Innovation &
Business Models*



European Network for Catalysing
Open Resources in Education

OER Innovation and Business Models

Dr. Robert Farrow

Institute of Educational Technology

The Open University (UK)

This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

This document is licensed under a **Creative Commons Attribution-ShareAlike 4.0 International license** except where otherwise noted.

Co-funded by the
Erasmus+ Programme
of the European Union



Today's Panel

- Paz Díez Arcón (Knowledge 4 All / UNED)
- Andrew Law (The Open University, UK)
- Professor Antonio Martínez-Arboleda (University of Leeds)
- Davor Orlic (Knowledge 4 All)
- Professor Dr. Ebba Ossiannilsson (ICDE &c.)
- Vidminas Vizgirda (University of Edinburgh)

Run of Play

- Introduction
- Conceptual Frameworks for Understanding OER Innovation
- OER Business Models
- Stakeholder Mapping
- ENCORE+ Innovation Showcase
- OER Value Propositions
- Discussion

Introduction





European Network for Catalysing
Open Resources in Education



Project Period: 01.01.2021 - 31.12.2023

European Network for Catalysing Open Resources in Education

An Erasmus+, Knowledge Alliance project funded by the European Commission.

The ENCORE+ Network amplifies existing OER initiatives, projects, platforms and networks into **a European OER Ecosystem**. Community building and collaboration for increased adoption, use and impact of OER (defragmenting the OER community).

500+ Stakeholders

20+ Network Events hosted



ENCORE+ Partners



- International Council for Distance Education (Norway)
- Baden-Wuerttemberg Cooperative State University (Germany)
- The Open University (UK)
- Universidad Internacional De La Rioja (Spain)
- Knowledge 4 All Foundation (UK)
- Joubel (Norway)
- Fondazione Politecnico di Milano (Italy)
- Instructure Global (UK)
- Dublin City University (Ireland)

Open Educational Resources (OER)

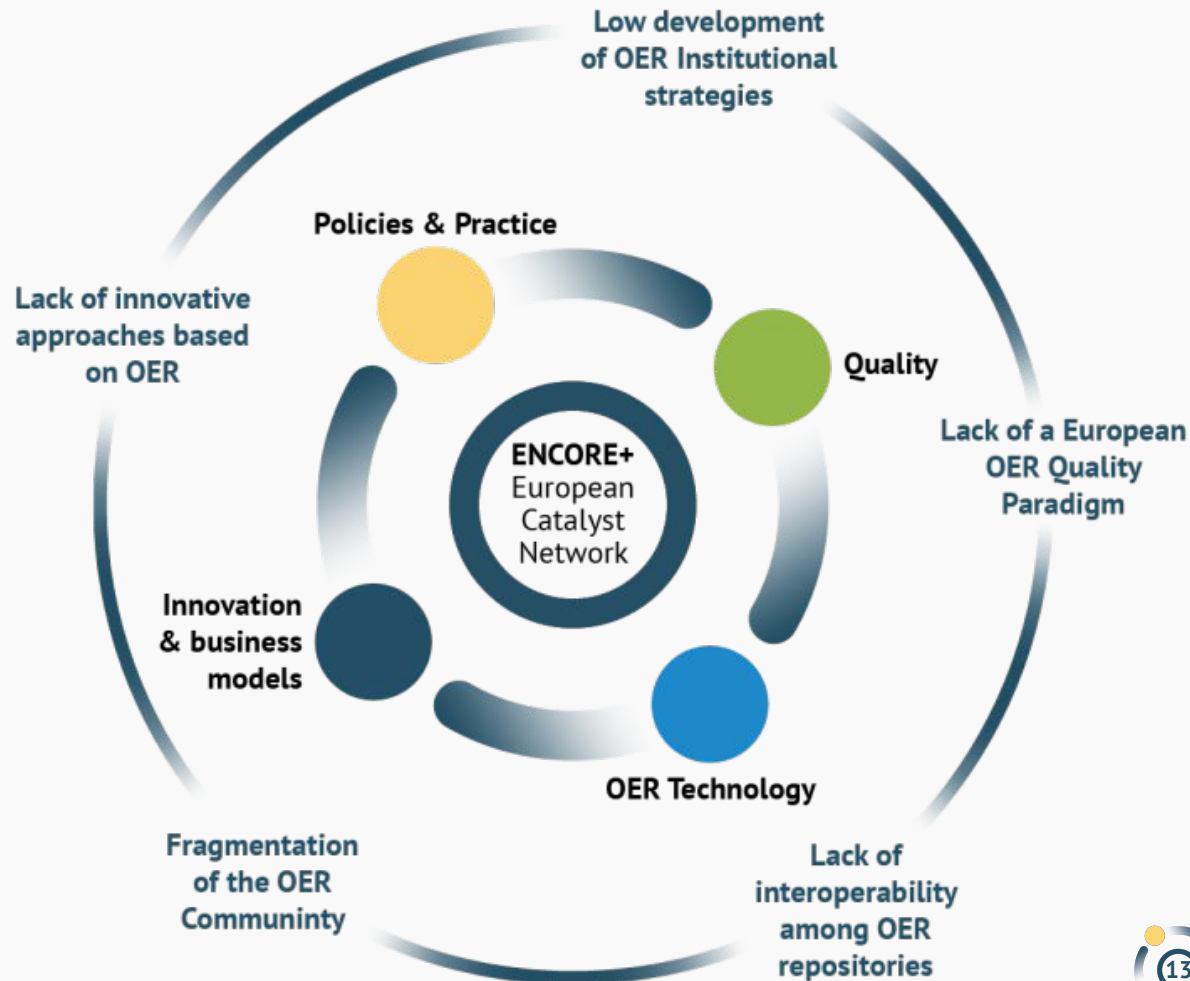
Open Educational Resources (OER) are teaching, learning and research materials in any medium – digital or otherwise – that are in the public domain and/or released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions. They are free at the point of use and ‘free’ in the sense that they provide users with greater freedoms in how resources are shared, used, customised and iterated.

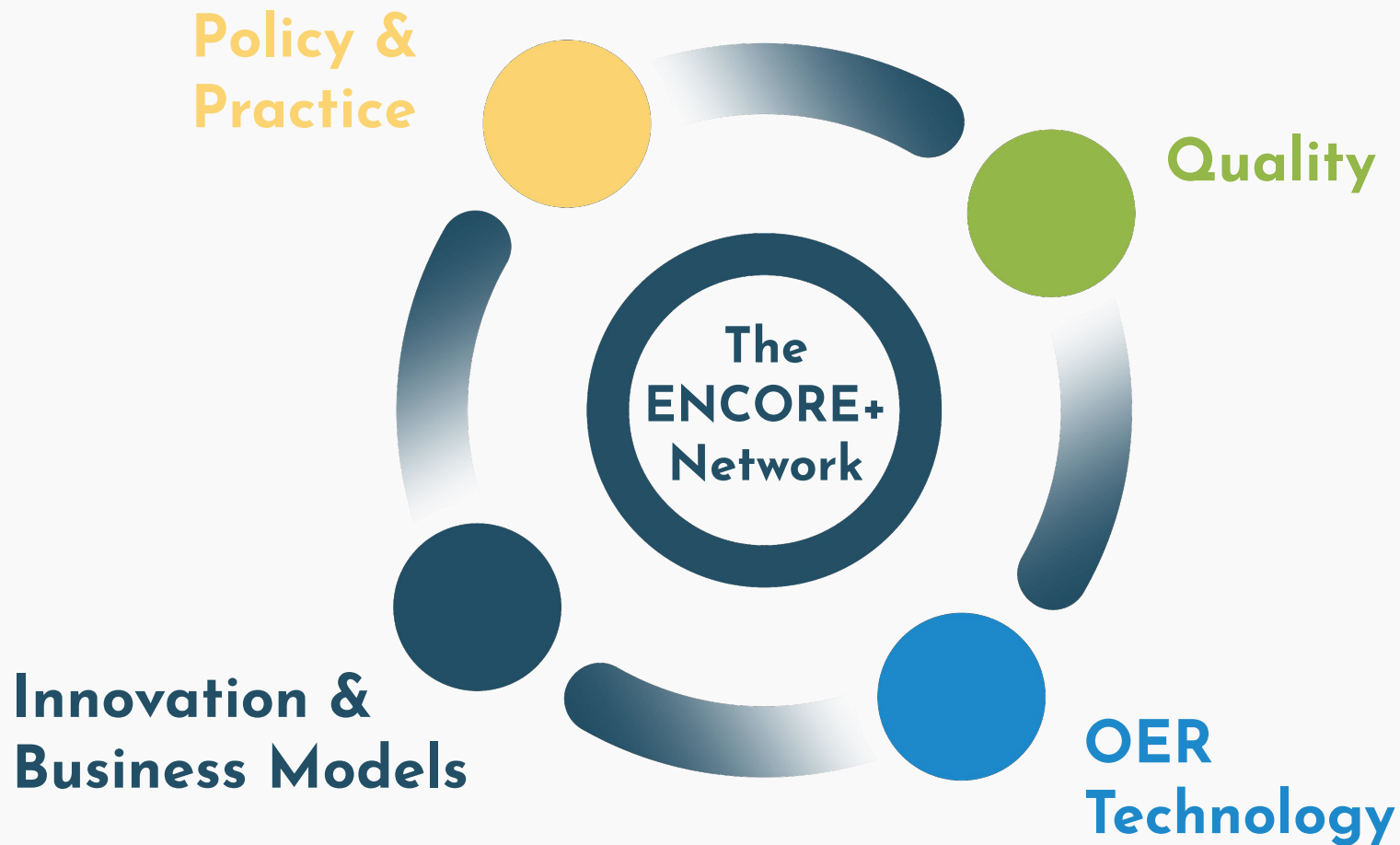
Compatible definitions of OER are provided by [UNESCO](#), [Hewlett Foundation](#) and [OER Commons](#).

ENCORE+ Ecosystem

ENCORE+ functions as a **network catalyst** for a socio-technical ecosystem.

ENCORE+'s main mission is to amplify existing OER initiatives, projects, platforms and networks by integrating them across the four thematic *Circle* strands and three crosscutting integration events.







Innovation & Business Models

YOU

For

YOU

OER Innovation = ?

Open Innovation



OER Innovation: Conceptual Frameworks



ENCORE+ OER Innovation Evaluation Framework

The framing work on innovation that informs the design of this tool includes Rogers (2003); Carroll, Kellogg & Rosson (1991) and Puentedura (2006).

OER related practices are being conceptualised through the SAMR framework (Puentedura, 2006) and Darwish's (2019) model of edupreneurship. Business strategies are aligned with the 'defenders and prospectors' indicators (Miles & Snow, 1978; Orr et al., 2018).

The ENCORE+ OER business model typology is synthesized from Tlili et al. (2020); Padilla Rodriguez et al., (2018); Belleflamme & Jacqmin (2015); Ubachs & Konings (2016); and Farrow (2019).

The stakeholder value proposition and impact matrices combine categories from Rogers (2003) and the Cabinet Office 'UPIG' or 'CPIG' stakeholder model (no citation).

Evaluation Framework: Challenges

- Lack of accepted method for evaluating innovation
- Imposing categories on innovative practices
- Avoiding dogmatic approach
- Different styles and maturities of implementation
- Qualitative measurement or quantitative description?
- Triangulation?
- What kind of information is actually useful to people? Practices they can emulate? Or something more visionary/inspirational?
- How can people actually use the tool?

Strategic Focus



TABLE 1. Characteristics of the Defender

Entrepreneurial Problem	Engineering Problem	Administrative Problem
<p><i>Problem:</i></p> <p>How to “seal off” a portion of the total market to create a stable set of products and customers.</p> <p><i>Solutions:</i></p> <ol style="list-style-type: none"> 1. Narrow and stable domain. 2. Aggressive maintenance of domain (e.g., competitive pricing and excellent customer service). 3. Tendency to ignore developments outside of domain. 4. Cautious and incremental growth primarily through market penetration. 5. Some product development but closely related to current goods or services. <p><i>Costs and Benefits:</i></p> <p>It is difficult for competitors to dislodge the organization from its small niche in the industry, but a major shift in the market could threaten survival.</p>	<p><i>Problem:</i></p> <p>How to produce and distribute goods or services as efficiently as possible.</p> <p><i>Solutions:</i></p> <ol style="list-style-type: none"> 1. Cost-efficient technology. 2. Single core technology. 3. Tendency toward vertical integration. 4. Continuous improvements in technology to maintain efficiency. <p><i>Costs and Benefits:</i></p> <p>Technological efficiency is central to organizational performance, but heavy investment in this area requires technological problems to remain familiar and predictable for lengthy periods of time.</p>	<p><i>Problem:</i></p> <p>How to maintain strict control of the organization in order to ensure efficiency.</p> <p><i>Solutions:</i></p> <ol style="list-style-type: none"> 1. Financial and production experts most powerful members of the dominant coalition; limited environmental scanning. 2. Tenure of dominant coalition is lengthy; promotions from within. 3. Planning is intensive, cost oriented, and completed before action is taken. 4. Tendency toward functional structure with extensive division of labor and high degree of formalization. 5. Centralized control and long-looped vertical information systems. 6. Simple coordination mechanisms and conflict resolved through hierarchical channels. 7. Organizational performance measured against previous years; reward system favors production and finance. <p><i>Costs and Benefits:</i></p> <p>Administrative system is ideally suited to maintain stability and efficiency but it is not well suited to locating and responding to new product or market opportunities.</p>

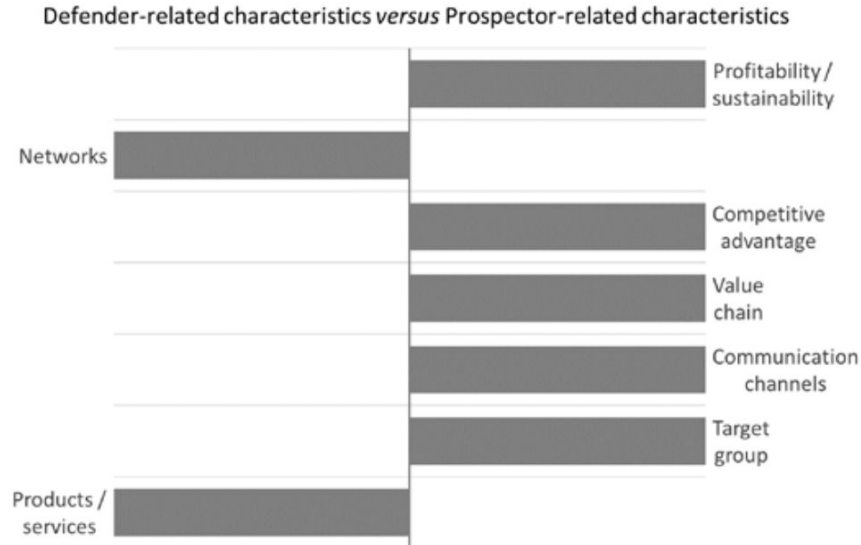
Source: Raymond E. Miles and Charles C. Snow, *Organizational Strategy, Structure, and Process* (New York: McGraw-Hill, 1978) Table 3-1.

TABLE 2. Characteristics of the Prospector

Entrepreneurial Problem	Engineering Problem	Administrative Problem
<p><i>Problem:</i></p> <p>How to locate and exploit new product and market opportunities.</p> <p><i>Solutions:</i></p> <ol style="list-style-type: none"> 1. Broad and continuously developing domain. 2. Monitors wide range of environmental conditions and events. 3. Creates change in the industry. 4. Growth through product and market development. 5. Growth may occur in spurts. <p><i>Costs and Benefits:</i></p> <p>Product and market innovation protect the organization from a changing environment, but the organization runs the risk of low profitability and overextension of its resources.</p>	<p><i>Problem:</i></p> <p>How to avoid long-term commitments to a single technological process.</p> <p><i>Solutions:</i></p> <ol style="list-style-type: none"> 1. Flexible, prototypical technologies. 2. Multiple technologies. 3. Low degree of routinization and mechanization; technology embedded in people. <p><i>Costs and Benefits:</i></p> <p>Technological flexibility permits a rapid response to a changing domain, but the organization cannot develop maximum efficiency in its production and distribution system because of multiple technologies.</p>	<p><i>Problem:</i></p> <p>How to facilitate and coordinate numerous and diverse operations.</p> <p><i>Solutions:</i></p> <ol style="list-style-type: none"> 1. Marketing and research and development experts most powerful members of the dominant coalition. 2. Dominant coalition is large, diverse, and transitory; may include an inner circle. 3. Tenure of dominant coalition not always lengthy; key managers may be hired from outside as well as promoted from within. 4. Planning is comprehensive, problem oriented, and cannot be finalized before action is taken. 5. Tendency toward product structure with low division of labor and low degree of formalization. 6. Decentralized control and short-looped horizontal information systems. 7. Complex coordination mechanisms and conflict resolved through integrators. 8. Organizational performance measured against important competitors; reward system favors marketing and research and development. <p><i>Costs and Benefits:</i></p> <p>Administrative system is ideally suited to maintain flexibility and effectiveness but may underutilize and misutilize resources.</p>

Source: Raymond E. Miles and Charles C. Snow, *Organizational Strategy, Structure, and Process* (New York: McGraw-Hill, 1978), Table 4-1.

Figure 7.8: Example of entrepreneurial model with fixed core - Hamdan Bin Mohammed Smart University, Arab Emirates



Established in 2002, Hamdan Bin Mohammed Smart University (HBMSU) is a research-based university located in Dubai with a focus on smart learning. Currently, HBMSU is the only accredited online university in the United Arab Emirates (UAE) and keen to promote this approach as a viable business model, planning to expand operations to the Gulf and MENA regions in the coming years. According to the classification of its business model, HBMSU is innovating in 7 from 8 dimensions. Similar to many other HEIs, whilst it innovates, its activities are largely developed and delivered within its own institutional network. In order to meet

Orr, D., Weller, M., & Farrow, R. (2018). Models for online, open, flexible and technology-enhanced higher education across the globe – a comparative analysis. *International Council for Open and Distance Education (ICDE)*. Oslo, Norway. Available from <https://oofat.oerhub.net/OOFAT/>. CC-BY-SA.

Implementation



OER “Innovation”



```
graph LR; A["OER 'Innovation'"] --> B["1. OER as an innovation in teaching and learning (includes adoption / substitution)"]; A --> C["2. OER is being used to support or enable innovative behaviours and practices"];
```

1. OER as an innovation in teaching and learning (includes adoption / substitution)
2. OER is being used to support or enable innovative behaviours and practices

THE SAMR MODEL

Dr. Ruben R. Puentedura

R

REDEFINITION

Technology allows for the creation of new tasks, previously inconceivable

M

MODIFICATION

Technology allows for significant task redesign

A

AUGMENTATION

Technology acts as a direct substitute, with functional improvement

S

SUBSTITUTION

Technology acts as a direct substitute, with no functional change

ENHANCEMENT

TRANSFORMATION

OER Implementation

OER use can involve simple substitution of course materials or to support more transformatory approaches. The SAMR framework (Puentedura, 2006) is used here to provide a conceptual framing for this spectrum.

Substitution	Augmentation	Modification	Redefinition
OER substituted for proprietary content with no functional change	Substitution of OER for proprietary content with functional change or task redesign	OER use allowed for significant redesign of tasks or functions associated with teaching/learning	Using OER allowed for new ways of conceiving teaching and/or learning

Edupreneurship Business Models (Darwish, 2019)

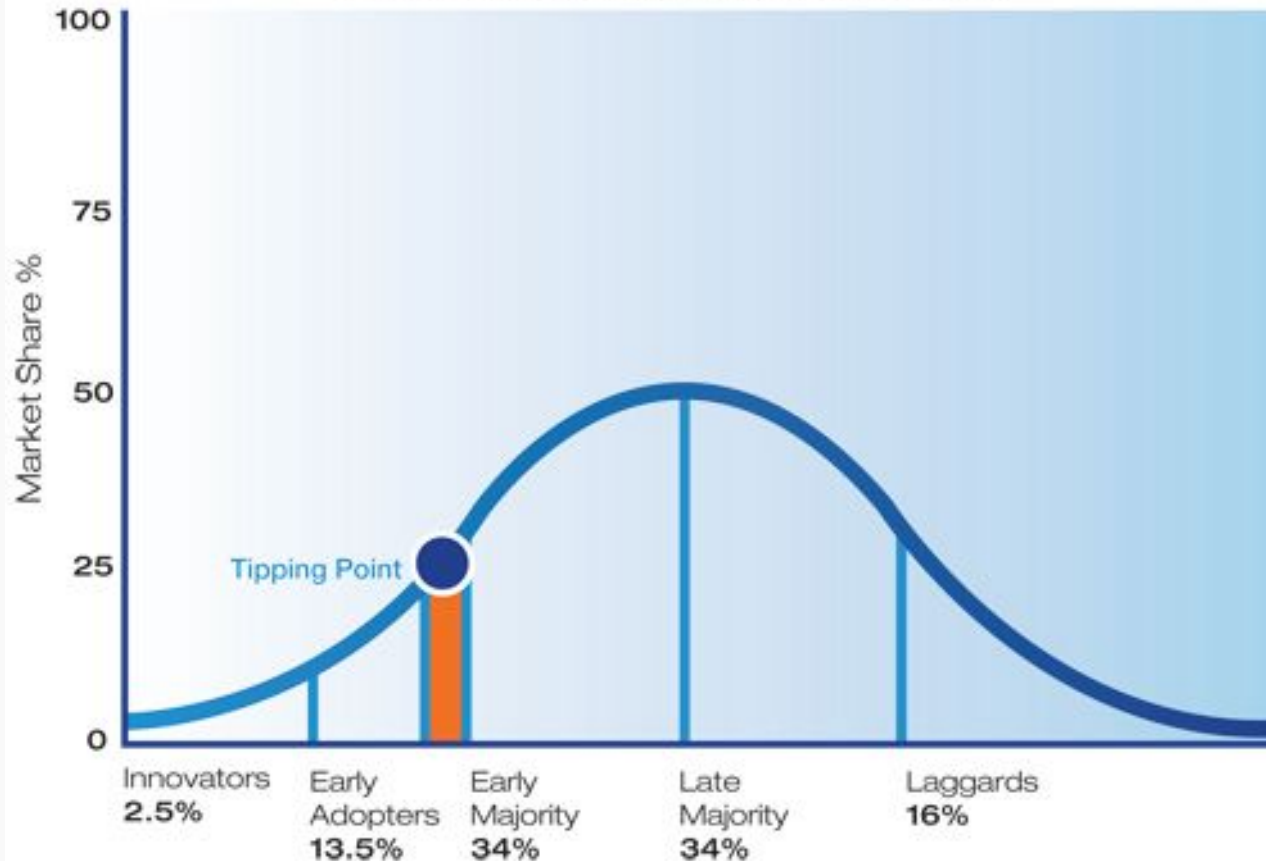
Model	Definition & providers' motivations	Technical requirement, organization & management	Revenue streams & issues
<i>Static</i>	<p>This model is content-based (content aggregation & curation) for supplementary use (e.g. repositories, libraries & courseware)</p> <p>.....</p> <p>Motivations of provider: Making educational material available for free &/or creating relationships with the educational community</p>	<p>open-source platform (e.g. ATutor & WordPress blogs)</p> <p>.....</p> <p>Organization: Classification & categorization model, search engine for updating</p> <p>Management: DIY, system development</p> <p>.....</p> <p>Community production, collaboration & sharing.</p>	<p>Revenue: None, Donation, subsidizing model</p> <p>.....</p> <p>Issue: Members participation is not sustainable and updated</p> <p>.....</p> <p>Lack of committed members</p>
<i>Interactive</i>	<p>IMM Courses/ products for self-study & blended learning (xMOOCs, Edutainment & Games)</p> <p>.....</p> <p>Motivations of provider: Production-based Industry/Business</p>	<p>platform with interactive learning environment such as OpenMOOC</p> <p>.....</p> <p>multimedia authoring software and audio/video production equipments</p> <p>.....</p> <p>Organization: On-site studio production, IMM learning theory and approaches, AI scenarios,</p> <p>.....</p> <p>Management: Meetings with institutions & agreeing on the business model or models</p>	<p>Revenue: Based on level of interaction and optimization of user experience</p> <p>.....</p> <p>Issues: Updating material isn't feasible, production for different platforms</p>
<i>Dynamic</i>	<p>Online courses/ blended learning</p> <p>.....</p> <p>Motivations of provider: Distance & Online learning (Online learning environment. cMOOC)</p>	<p>LMS; Moodle & JoomlaLMS</p> <p>.....</p> <p>Organization: University centre</p> <p>.....</p> <p>Management: Regulations & Policies for online degree</p>	<p>Revenue: Units of courses, Online degree Accomplishment/ degree</p> <p>.....</p> <p>Issues: Quality of learner participating content, Workload of instructor</p>
<i>Transformative</i>	<p>Service-based/Career-based Courses/</p> <p>.....</p> <p>Motivations of provider: Tailoring projects/ On job training</p>	<p>platform with interactive learning environment such as Second life/ game development environments</p> <p>MOOCs/Object Oriented software and audio/video communication channels</p> <p>.....</p> <p>Organization: scheduled, Real time online communication</p> <p>.....</p> <p>Management: Recruitments/ Needs Analyses of the market & industry/ transdisciplinary team management/ intermediating contracts between institutions & industry</p>	<p>Revenue: Platforming/ Brokerage Model: Marketplace Exchange Efficiency/ service-network</p> <p>.....</p> <p>Issues: Outsource parties commitment</p>



Model	Definition & providers' motivations	Technical requirement, organization & management	Revenue streams & issues
<i>Static</i>	<p>This model is content-based (content aggregation & curation) for supplementary use (e.g. repositories, libraries & courseware)</p> <p>.....</p> <p>Motivations of provider: Making educational material available for free &/or creating relationships with the educational community</p>	<p>open-source platform (e.g. ATutor & WordPress blogs)</p> <p>.....</p> <p>Organization: Classification & categorization model, search engine for updating</p> <p>Management: DIY, system development</p> <p>.....</p> <p>Community production, collaboration & sharing.</p>	<p>Revenue: None, Donation, subsidizing model</p> <p>.....</p> <p>Issue: Members participation is not sustainable and updated</p> <p>Lack of committed members</p>
<i>Interactive</i>	<p>IMM Courses/ products for self-study & blended learning (xMOOCs, Edutainment & Games)</p> <p>.....</p> <p>Motivations of provider: Production-based Industry/Business</p>	<p>platform with interactive learning environment such as OpenMOOC</p> <p>multimedia authoring software and audio/video production equipments</p> <p>.....</p> <p>Organization: On-site studio production, IMM learning theory and approaches, AI scenarios,</p> <p>.....</p> <p>Management: Meetings with institutions & agreeing on the business</p>	<p>Revenue: Based on level of interaction and optimization of user experience</p> <p>.....</p> <p>Issues: Updating material isn't feasible, production for different platforms</p>

		institutions & agreeing on the business model or models	
Dynamic	<p>Online courses/ blended learning</p> <p>.....</p> <p>Motivations of provider:</p> <p>Distance & Online learning (Online learning environment. cMOOC)</p>	<p>LMS; Moodle & JoomlaLMS</p> <p>.....</p> <p>Organization: University centre</p> <p>.....</p> <p>Management: Regulations & Policies for online degree</p>	<p>Revenue: Units of courses, Online degree Accomplishment/ degree</p> <p>.....</p> <p>Issues: Quality of learner participating content, Workload of instructor</p>
Transformative	<p>Service-based/Career-based Courses/</p> <p>.....</p> <p>Motivations of provider:</p> <p>Tailoring projects/ On job training</p>	<p>platform with interactive learning environment such as Second life/ game development environments</p> <p>MOOCs/Object Oriented software and audio/video communication channels</p> <p>-----</p> <p>.....</p> <p>Organization: scheduled, Real time online communication</p> <p>.....</p> <p>Management: Recruitments/ Needs Analyses of the market & industry/ transdisciplinary team management/ intermediating contracts between institutions & industry</p>	<p>Revenue: Platforming/ Brokerage Model: Marketplace Exchange Efficiency/ service-network</p> <p>.....</p> <p>Issues: Outsource parties commitment</p>

Innovation Diffusion Curve



Rogers (2003)

- Relative advantage
- Trialability
- Observability
- Compatibility
- Complexity



Business Models

OER Business Models



Farrow, R. (2023). A Typology of OER Business Models. In: *EDEN 2023 Annual Conference “Yes we can!” – Digital Education for Better Futures*, 18-20 June 2023, Dublin, Ireland. *Ubiquity Proceedings*, 3(1): 394-401
<https://doi.org/10.5334/uproc.114>

Farrell, O., O'Regan, M., Whyte, A., Aceto, S., Brown, M., & Brunton, J. (2022). Strategic support for OER value proposition. Encore+ Policy and Strategy Report (1). Doi: 10.5281/zenodo.6720310
https://doras.dcu.ie/27378/2/Strategic-support-for-OER-value-proposition_published.pdf

ENCORE+ OER Business Model Typology

Externally Funded	Internally Funded	Community Funded	Service Models
Donations model	Institutional model	Community owned infrastructure	Data exploitation model
Governmental model	Substitutions model	Membership model	Dual mode university
Sponsorship / Advertising model	Author Pays model	Platformisation	Freemium
			Online programme
			Segmentation model

OER Service Models

Accreditation/Recognition	Platformisation
Authoring & Publication	Proctoring
Authentication	Quality Assurance
Course creation	Rapid reskilling
Curation	Self-directed learning
Equality, Diversity & Inclusion (EDI)	Teaching
Forecasting & Needs analysis	Training
Learning pathways	Translation
Lifelong learning	TVET

Externally Funded	Internally Funded	Community Funded	Service Models
<p>Donations model</p> <ul style="list-style-type: none"> • Open Stax • Hewlett OER Grantees <p>Governmental model</p> <ul style="list-style-type: none"> • Minnesota State Z Degree (Anderson, Kelly & Lynch, 2021) • JISC • Open Texas (Stanberry, 2022) <p>Sponsorship / Advertising model</p> <ul style="list-style-type: none"> • Siyavula (Goodier, 2017) 	<p>Institutional model</p> <ul style="list-style-type: none"> • KU OER Grant Initiative • East Carolina University / University of North Carolina (Thomas & Bernhardt, 2018) • University of Washington Tacoma Library (Petrich, 2020) <p>Substitutions model</p> <ul style="list-style-type: none"> • Library support for OA (Sweet & Clarage, 2020) <p>Author Pays model</p> <ul style="list-style-type: none"> • Pressbooks 	<p>Community owned infrastructure</p> <ul style="list-style-type: none"> • Open Education Consortium • MERLOT <p>Membership model</p> <ul style="list-style-type: none"> • ISKME • Coursera Plus • Open Textbook Network (Sweet & Clarage, 2020) <p>Platformisation</p> <ul style="list-style-type: none"> • Lumen Learning 	<p>Data exploitation model</p> <ul style="list-style-type: none"> • ? <p>Dual mode university</p> <ul style="list-style-type: none"> • FutureLearn collaboration (Farrell et al., 2022) <p>Freemium / Conversion</p> <ul style="list-style-type: none"> • OpenLearn <p>Online programme</p> <ul style="list-style-type: none"> • MOOCs • MIT OpenCourseWare <p>Segmentation model</p> <ul style="list-style-type: none"> • Kortext • Print-on-demand

Stakeholders



	USERS				PROVIDERS		INFLUENCERS			GOVERNANCE				
MACRO	MOOC Providers National/ International Education Providers National & International Training Providers Open Education Initiatives		Repositories	Publishers	Ed Tech Companies Infrastructure Providers Technology Providers		Funders International Development Agencies International Education Partnerships Lobbyists NGOs Philanthropy		Leaders	Broadcast Media	Policymakers	Management	Student Assessment and Testing Organizations Standardization Bodies Quality Assurance Agencies Ministries	
MESO	Companies and Employers Continuous Education Industry and Corporate Sector Lifelong Learning Initiatives Training Providers				Collections Course Providers Galleries, Libraries, Archives, Museums Open Access Publishers Open Source Software Communities		Advocacy Groups Charities Education Associations Open Data and Open Science Communities Open Education Communities Professional Associations Professional Organizations Researchers & Scientists Student Organizations: Trade Unions and Labor Organizations						Local Governments and Municipalities Evaluators Educational Authorities Copyright and Intellectual Property Experts	
MICRO	Community-Based Organizations Educators Instructional Designers Learner Support Services Learners Workers				Content Creators Education Technology Startups Libraries Remixers		Accessibility and Inclusion Advocates Advocates of OER Education Consultants Institutional actors Learning Analytics Experts Parents and Guardians Private Foundations and Donors			Social Media			Copyright/Data Officers Higher Educational Institution decision makers Student Governments	

	USERS		PROVIDERS	INFLUENCERS		
MACRO	MOOC Providers National/ International Education Providers National & International Training Providers Open Education Initiatives	Repositories	Publishers	Ed Tech Companies Infrastructure Providers Technology Providers	Funders International Development Agencies International Education Partnerships Lobbyists NGOs Philanthropy	Broadcast Media
MESO	Companies and Employers Continuous Education Industry and Corporate Sector Lifelong Learning Initiatives Training Providers			Collections Course Providers Galleries, Libraries, Archives, Museums Open Access Publishers Open Source Software Communities	Advocacy Groups Charities Education Associations Open Data and Open Science Communities Open Education Communities Professional Associations Professional Organizations Researchers & Scientists Student Organizations: Trade Unions and Labor Organizations	
MICRO	Community-Based Organizations Educators Instructional Designers Learner Support Services Learners Workers			Content Creators Education Technology Startups Libraries Remixers	Accessibility and Inclusion Advocates Advocates of OER Education Consultants Institutional actors Learning Analytics Experts Parents and Guardians Private Foundations and Donors	Social Media

PROVIDERS		INFLUENCERS			GOVERNANCE		
Repositories	Publishers	Ed Tech Companies Infrastructure Providers Technology Providers	Funders International Development Agencies International Education Partnerships Lobbyists NGOs Philanthropy	Leaders	Broadcast Media	Policymakers	Student Assessment and Testing Organizations Standardization Bodies Quality Assurance Agencies Ministries
		Collections Course Providers Galleries, Libraries, Archives, Museums Open Access Publishers Open Source Software Communities	Advocacy Groups Charities Education Associations Open Data and Open Science Communities Open Education Communities Professional Associations Professional Organizations Researchers & Scientists Student Organizations: Trade Unions and Labor Organizations				Local Governments and Municipalities Evaluators Educational Authorities Copyright and Intellectual Property Experts
		Content Creators Education Technology Startups Libraries Remixers	Accessibility and Inclusion Advocates Advocates of OER Education Consultants Institutional actors Learning Analytics Experts Parents and Guardians Private Foundations and Donors		Social Media		Copyright/Data Officers Higher Educational Institution decision makers Student Governments

Innovation Showcase



ENCORE+ OER Innovation Case Studies

- Collection by survey between September 2022 and February 2023
- 57 responses
- 49 usable records in the data set
- Wide geographical spread includes Argentina, Canada, Germany, Greece, Hungary, India, Kenya, Myanmar, Netherlands, Norway, Spain, UK, USA
- User base ranged from a few dozen up to 10,000,000+ monthly users

OER Innovation Case Studies

- | | |
|--|--|
| <ul style="list-style-type: none">• 5 years of Open Educational Resources at University of Edinburgh• Alternative Textbook Grant• Basics of Gardening for sustainable health and society• BMELTET• Clinical Cases• Critical Curation and Collaboration in Learning (Cur8)• Curso 0• Developing a Library Service to support OER• Digital Education for Universities in Kenya (Skills for Prosperity) | <ul style="list-style-type: none">• Digital Open Textbooks for development• eDoer• Form and Function(s): Sustainable Design Meets Computational Thinking• Framework for Open and Reproducible Research Training (FORRT)• Frontiers for Young Minds• Future of learning initiative• h5pcatalogue• Institute for Interactive Systems• LibreTexts• MOOC programme, UoS |
|--|--|

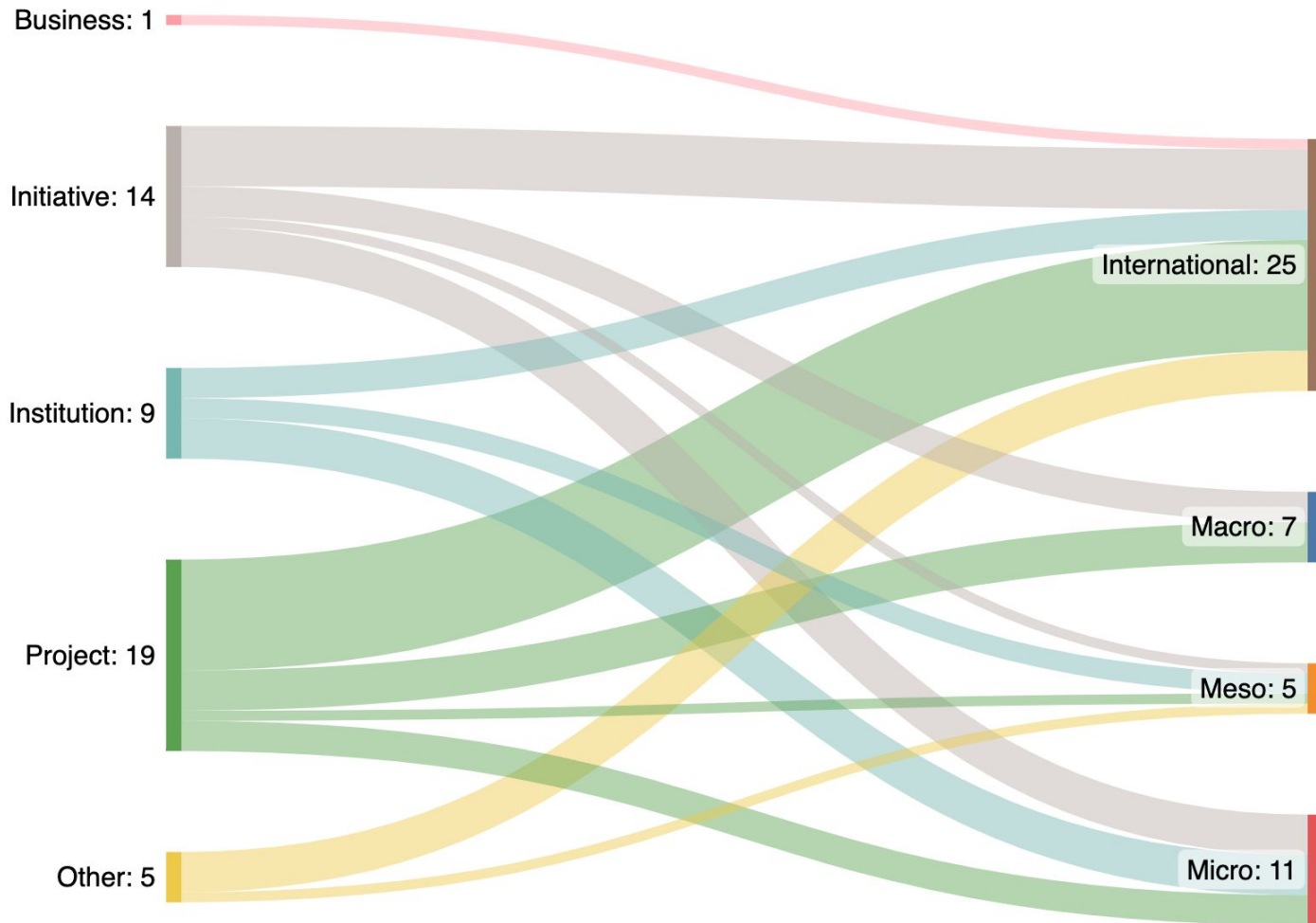
OER Innovation Case Studies

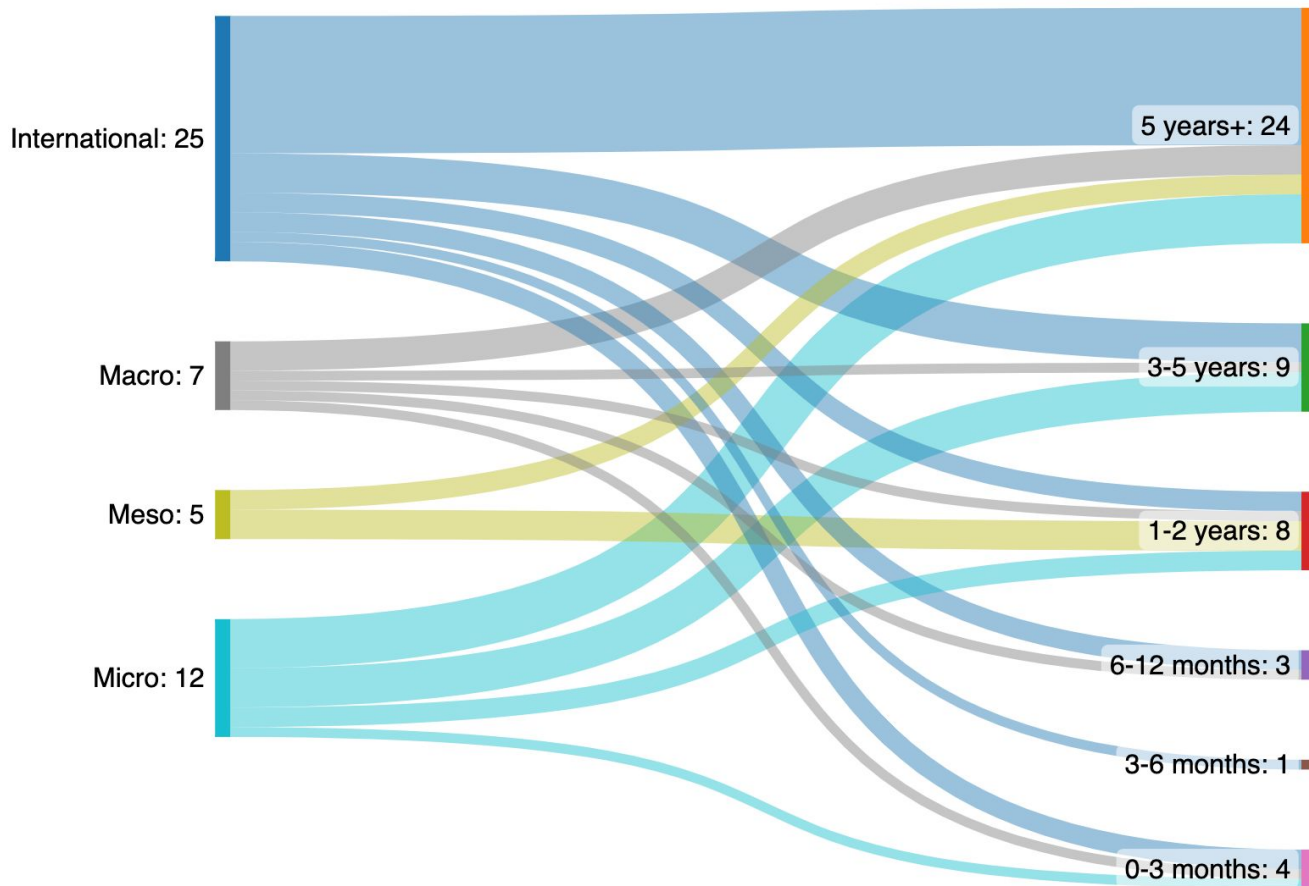
- | | |
|---|--|
| <ul style="list-style-type: none">• MOOC Puertas Abiertas: Curso de Español para necesidades inmediatas (Part of the MOONLITE Project)• MoodleNet• MOONLITE• Norwegian Digital Learning Arena (NDLA)• OEP-based course for teaching family education• OER Committee, Cape Breton• Oklahoma State University, OpenOKState• Open Academic e-textbooks KALLIPOS | <ul style="list-style-type: none">• Open Education for a Better World (OE4BW)• Open Library 'Maktaba Huria'• Open Resources Campus NRW (ORCA.nrw)• Open.Ed - The University of Edinburgh's OER Service• OpenLearn• Peoples-uni• Pressbooks• SABIER• SITO (Foundation on IT and Education)• Smith ScholarWorks• Software development teaching |
|---|--|

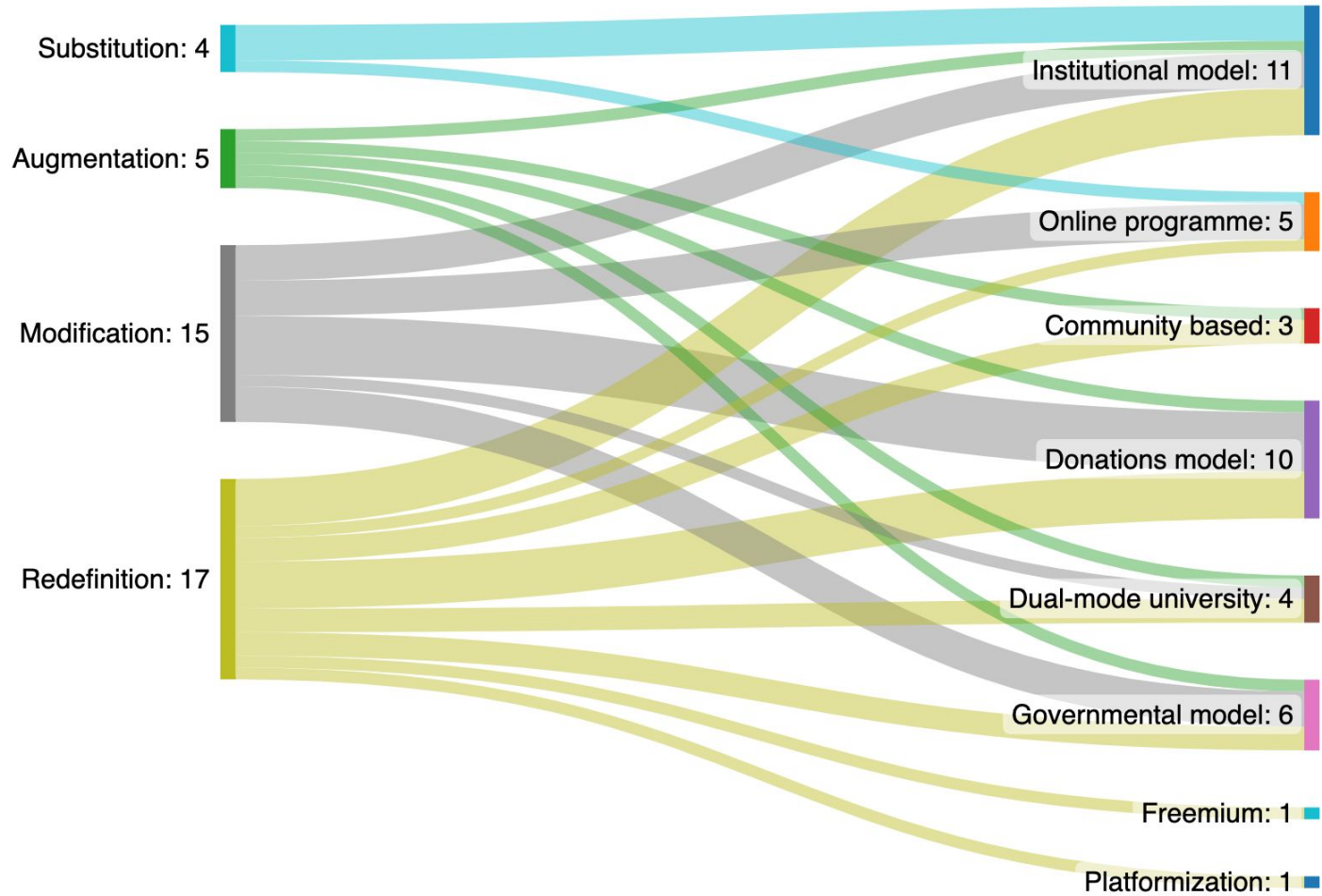
OER Innovation Case Studies

- Teaching Pre-service Teachers
- Technology-enabled organisational learning & improvement for complex fragmented problems (ULTIMATE)
- SPLOTs
- TMU MOOCS
- Transformation by Innovation in Distance Education (TIDE)

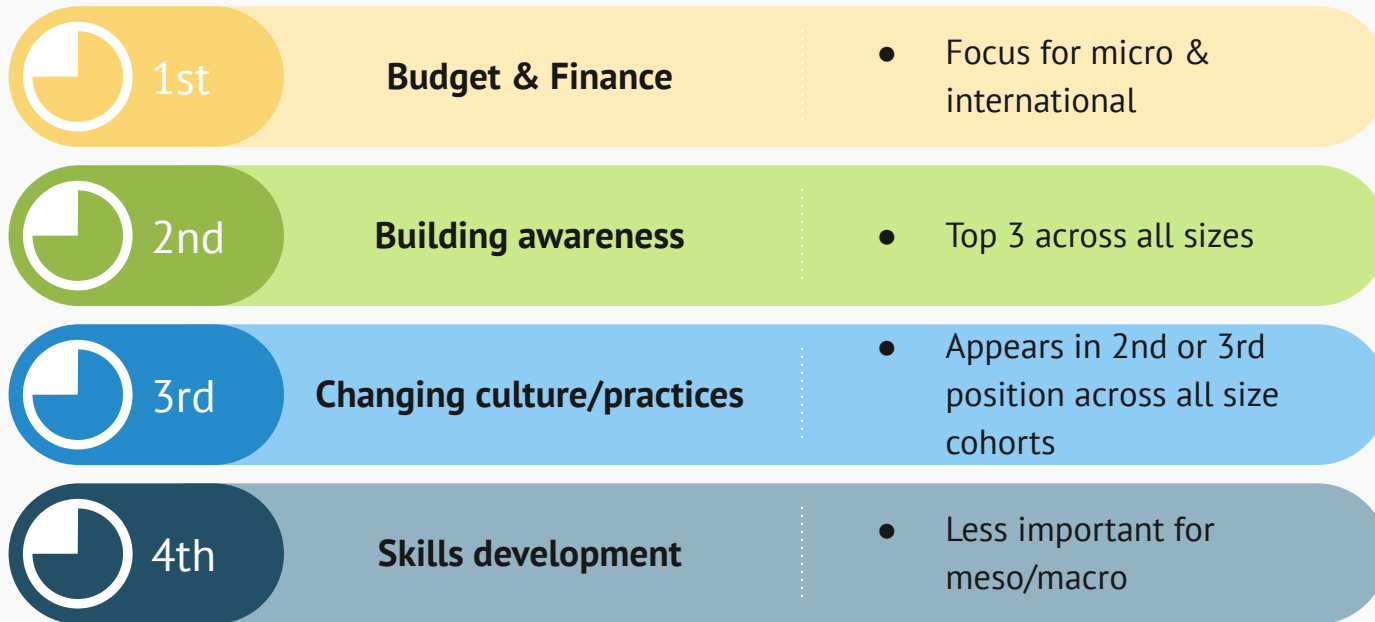
- Universidad del Aconcagua
- University education
- University of Wisconsin Collaborative Language Program
- Webinars on OEP
- WIHEA #knowhow project
- YourMOOC4all







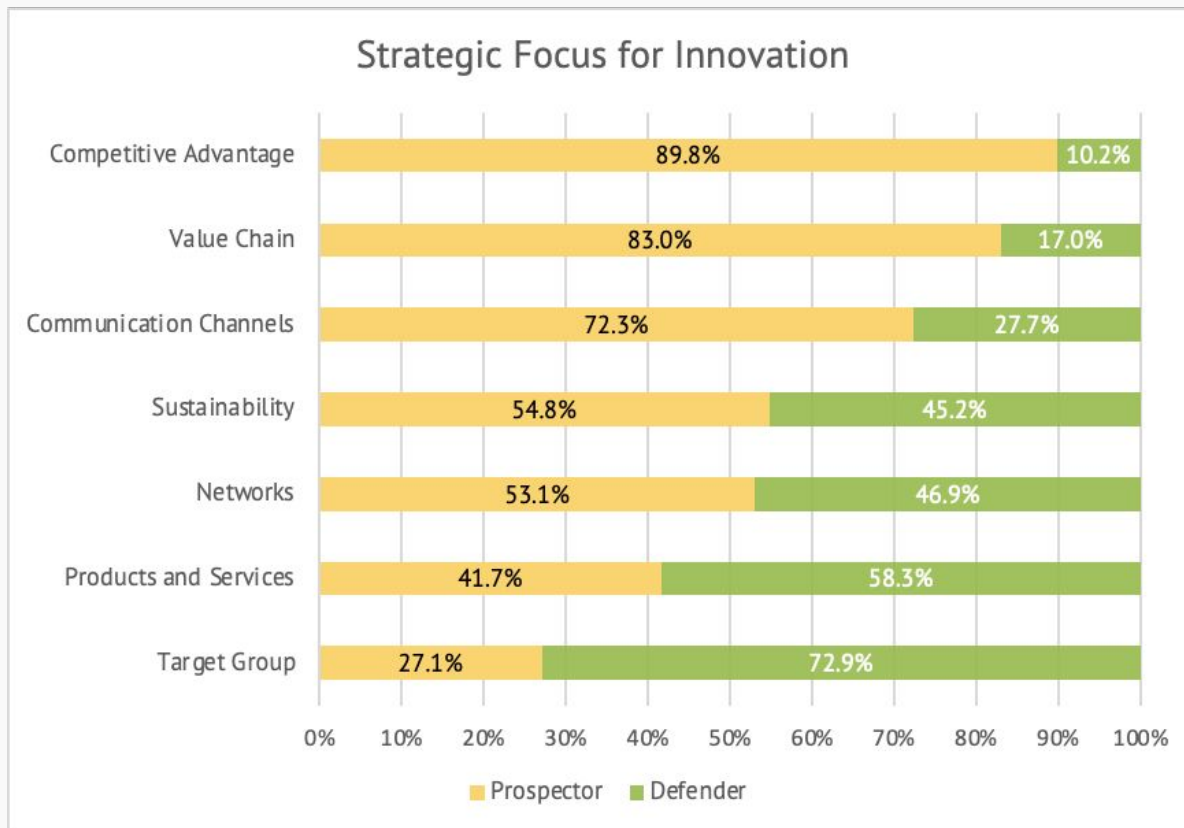
Challenges faced (n=48)



Challenges by implementation size (n=48)

	International (n=24)	Macro (n=7)	Meso (n=5)	Micro (n=12)
Most significant challenge	<i>Budget & finance</i>	<i>Building awareness</i>	<i>Budget & finance</i>	<i>Building awareness</i>
2nd most significant challenge	<i>Building awareness</i>	<i>Time pressure</i>	<i>Changing culture / practices</i>	<i>Changing culture / practices</i>
3rd most significant challenge	<i>Changing culture/practices</i>	<i>Changing culture/practices</i>	<i>Building awareness</i>	<i>Budget & finance</i>

Strategic Approach (n=49)



Enabling Factors (n=49)

- | | |
|--|--|
| <ul style="list-style-type: none">● 97.4% Open source software● 95.1% Leadership (*)● 91.4% Personal characteristics● 91% Relevance and applicability● 87.1% Quality of evidence● 86.8% Responding to authentic learners' needs● 86.7% Virtual Learning Environments | <ul style="list-style-type: none">● 84.8% Our skills (*)● 84.2% Existence of evidence (*)● 84.2% Internet access● 83.7% Open Educational Practices● 83.3% Social context● 78.1% Research-practice links● 74.2% Stakeholders' relationships● 71.4% Accessibility of evidence |
|--|--|

(*) = Affected by the variable 'size of implementation'

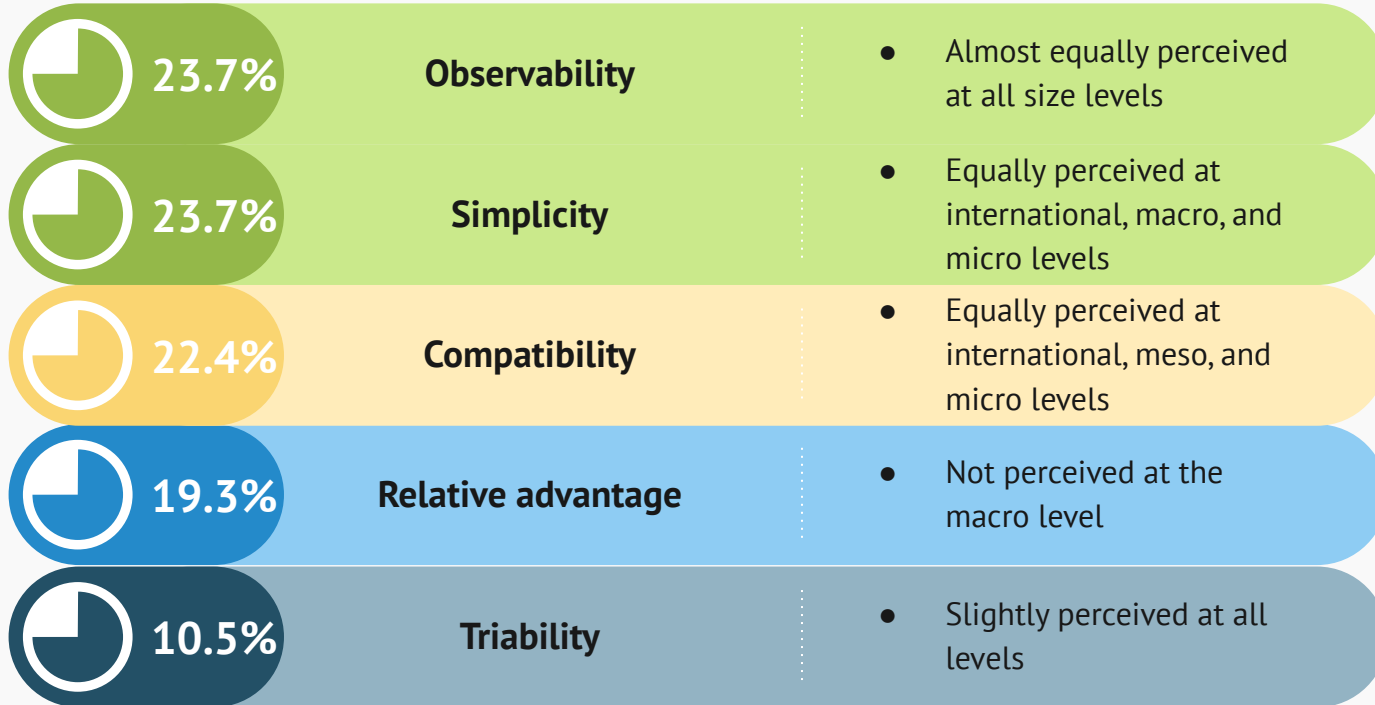
Organisational Culture (n=49, Likert)

Statement	Score
Innovation is clearly aligned to our organisational strategies	+53
My organisation is open to new and innovative approaches	+47
Our staff are empowered to develop their capacity for innovation	+45
Innovation activity is a part of daily activity and tasks in this organization	+36
Our leaders recognise the innovation achievements of our staff	+35
Our organisation is committed to a continuing and meaningful evaluation of best practices	+35

Organisational Culture (n=49, Likert)

Statement	Score
Key performance indicators (KPIs) are used to track and analyse innovation behaviours	-15
We have a management system for tracking innovation	-14
Our decision making is bottom-up	-1
Our decision making is top-down	+9
Our organisation responds quickly to adopt/adapt new ideas and approaches	+12
Our decision making is middle-out	+12

Perceived attributes of innovation (n=36)



OER Value Propositions



Company	Business Focus	Open Strategy	Revenue	Value Proposition
Instructure	VLE/LMS	Free version (Canvas); open community	Institutional subscription	Deliver dynamic learning experiences
Catalyst IT	E-learning services and hosting	Open source; open philosophy	Institutional subscription	Fully managed solutions
H5P/Joubel	Content creation platform & services	Open version of product; open community	Value added services	Facilitate creation of engaging content
Study Central	VLE/LMS	Open community	Institutional subscription	Community oriented learning experiences
Lumen Learning	Courseware	OER; open community	Value added services; grants	Create deeper, inclusive learning experiences
MERLOT	Metadata, repositories, community services	OER; open community	Value added services; grants	Access to learning tools; international academic community
Cogbooks	Courseware	Leverage OER for courseware	Institutional subscription; grants	Personalised online learning & support

OER Strategy Cases

ENCORE+ Policy Network event 4a: Organisational Integration of OER: Good Practice from HE & Business

<https://encoreproject.eu/event/policy-event-spring-23/>

Consistency of strategy (e.g. Frontiers for Young Minds)

	Users	Providers	Influencers	Governance
Value proposition	Easy access to free OERs	Peer review process and mentoring	To increase views and downloads to be considered attractive partners	To increase international partners' interest
Impact	Increased interest, use, and access. CC-BY licences enabled the re-use of resources. Social media enabled dissemination	Impact is varied due to different ways of engagement, but they have received excellent feedback from educators	Regional funders/sponsors gained excellent brand exposure and corporate social recognition	Plans to expand their services and resources
Innovation aspect	<i>Simplicity</i>	<i>Relative advantage</i>	<i>Observability</i>	<i>Trialability</i>



Qualities of OER Value Propositions

1

Transformative

Mostly related to the “modification” and “redefinition” approaches (SAMR)

2

Practical

Mostly targeted to users and providers (UPIG)

3

Observable, simple & compatible

Top 3 perceived attributes of innovation

4

Aspirational

A progressive interest in making value propositions to all stakeholders

OER for Business Sustainability

1

Decentralise OER

Value propositions
are service-based

2

'Living' OER

Accessible,
discoverable,
useful

3

Innovative

Transformational
practice

4

Cutting Edge

Supporting
innovation
through
technology (AI)

OER for Business Sustainability

1

Decentralise OER

Value propositions
are service-based

2

'Living' OER

Accessible,
discoverable,
useful

3

Innovative

Transformational
practice

4

Cutting Edge

Supporting
innovation
through
technology (AI)

OER Service Models

Accreditation/Recognition	Platformisation
Authoring & Publication	Proctoring
Authentication	Quality Assurance
Course creation	Rapid reskilling
Curation	Self-directed learning
Equality, Diversity & Inclusion (EDI)	Teaching
Forecasting & Needs analysis	Training
Learning pathways	Translation
Lifelong learning	TVET

OER for Business Sustainability

1

Decentralise OER

Value propositions
are service-based

2

'Living' OER

Accessible,
discoverable,
useful

3

Innovative

Transformational
practice

4

Cutting Edge

Supporting
innovation
through
technology (AI)

AI-powered services in Ed-Tech business

	Services	Technologies	Business model	Place of OERs
Viblio www.viblio.com	Recommendations + Automatic interview to get personality traits + expert's collection of resources	Semantic technology + Machine Learning + Future investment	Transformative	Planning to use a OER repository to extend the content used
Atingi www.atingi.org	Flexible & personalised learning options + implementation via open-source LMS	Open-source LMS + Future: centralised OER repository	Dynamic → Transformative	Planning to use a OER repository to provide additional services
eDoer https://labs.tib.eu/edoer/	Personalised curricula based on personal learning contexts	Algorithms development for different functionalities	Transformative	Planning to integrate OERs in their services

Discussion

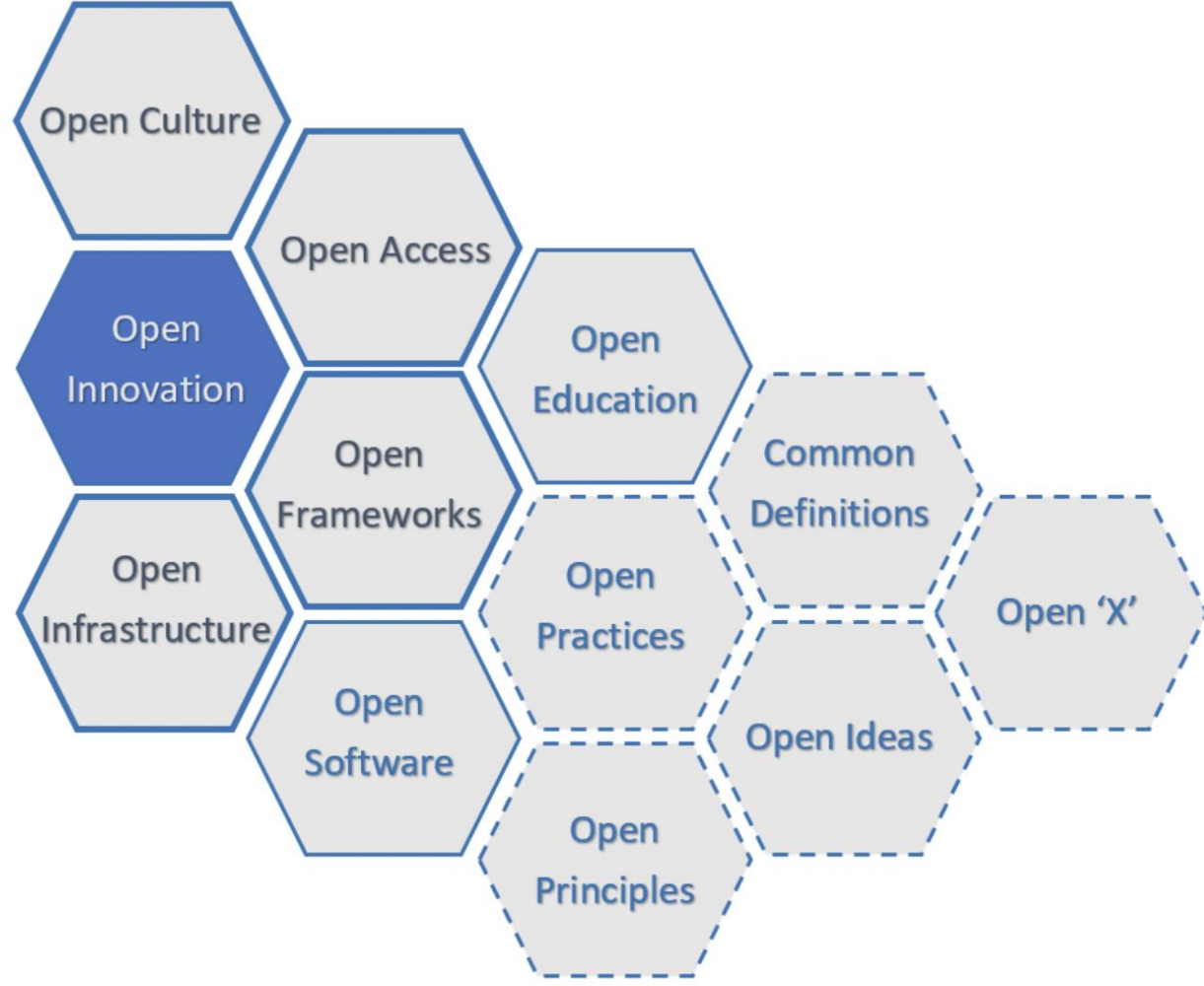


Competition



Ecosystem





Ossiannilsson, E., Gomes de Gusmão, C. M., Ulloa-Cazarez, R. L., Obiageli Agbu, J.-F. (2022). Open Science, Open Educational Resources, and Open Innovation. International Council for Distance

Education. <https://www.icde.org/knowledge-hub/open-innovation-framework-oerac-2022>



Culture



Openness beyond OER



Reflections

1. Delivery of WP6 required more conceptual work than anticipated
2. Most of our examples in the Showcase did not come from Europe (despite us mostly asking Europeans)
3. To define more comprehensive business models we need work to be done around understanding costs as well as revenue
4. Services offered around content appear to be the focus for those striving for sustainability, not developing and selling content
5. The open paradigm for collaboration and innovation still has much potential but also demands significant changes in practice – are we there yet?
6. Low awareness of OER remains a significant barrier to an open innovation ecosystem

OER as a catalyst for innovation in Higher Education

Version 1.0 - June 2023

White Paper

I



Coordinator of this work:

UNIR - La Universidad A Distancia

Participants:

Knowledge 4 ALL (UK)

The Open University (UK)

UNIR - La Universidad A Distancia

1. Two stage model for innovation (nb SAMR)
2. OER as a means, not an end
3. Changing educational culture
4. Centralising place of OER
5. Rethinking instruction and assessment approach
6. Educating stakeholders about open licences
7. Promoting a culture of innovation
8. National training actions (technical, creative, pedagogical)
9. Strengthen ecosystem connections through strategic funding



Co-funded by the
Erasmus+ Programme
of the European Union

This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

This document is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International license](https://creativecommons.org/licenses/by-sa/4.0/) except where otherwise noted.



Forthcoming Publications

D6.1 OER Innovation: Drivers, Barriers and Enablers

Desk research report summarising empirical evidence (n=251) around factors influencing OER innovation; providing a model to conceptualise OER innovation

D6.2 ENCORE+ Innovation Briefings

A series of approachable publications which act as an introduction to OER for different audiences and is compiled into one volume at the conclusion of the project.

Forthcoming Publications

D6.3 ENCORE+ OER Innovation Showcase

Comprising the full framework (D6.4) with theoretical background, CC BY tools for collecting and analysing data, and more than 40 examples of the completed framework.

D6.4 ENCORE+ OER Innovation Evaluation Framework

An openly licenced tool for describing, comparing and evaluating instances of innovative practice which are supported by OER and open practices

Thank you!

<https://encoreproject.eu>





European Network for Catalysing
Open Resources in Education

Website

For further and updated information
about this project please see:

www.encoreproject.eu

Contacts

rob.farrow@open.ac.uk

info@encoreproject.eu

Project partners:



INTERNATIONAL
COUNCIL FOR OPEN AND
DISTANCE EDUCATION



DHBW
Duale Hochschule
Baden-Württemberg



The Open
University

unir
LA UNIVERSIDAD
EN INTERNET



K4A
knowledge for all

Joubel



Fondazione
Politecnico
di Milano



canvas



DCU
Official Chapter
Bhaile Átha Cliath
Dublin City University



European Network for Catalysing
Open Resources in Education

Final Conference

Network Theme - Quality

Ulf-Daniel Ehlers, DHBW

Lena Sperle, DHBW

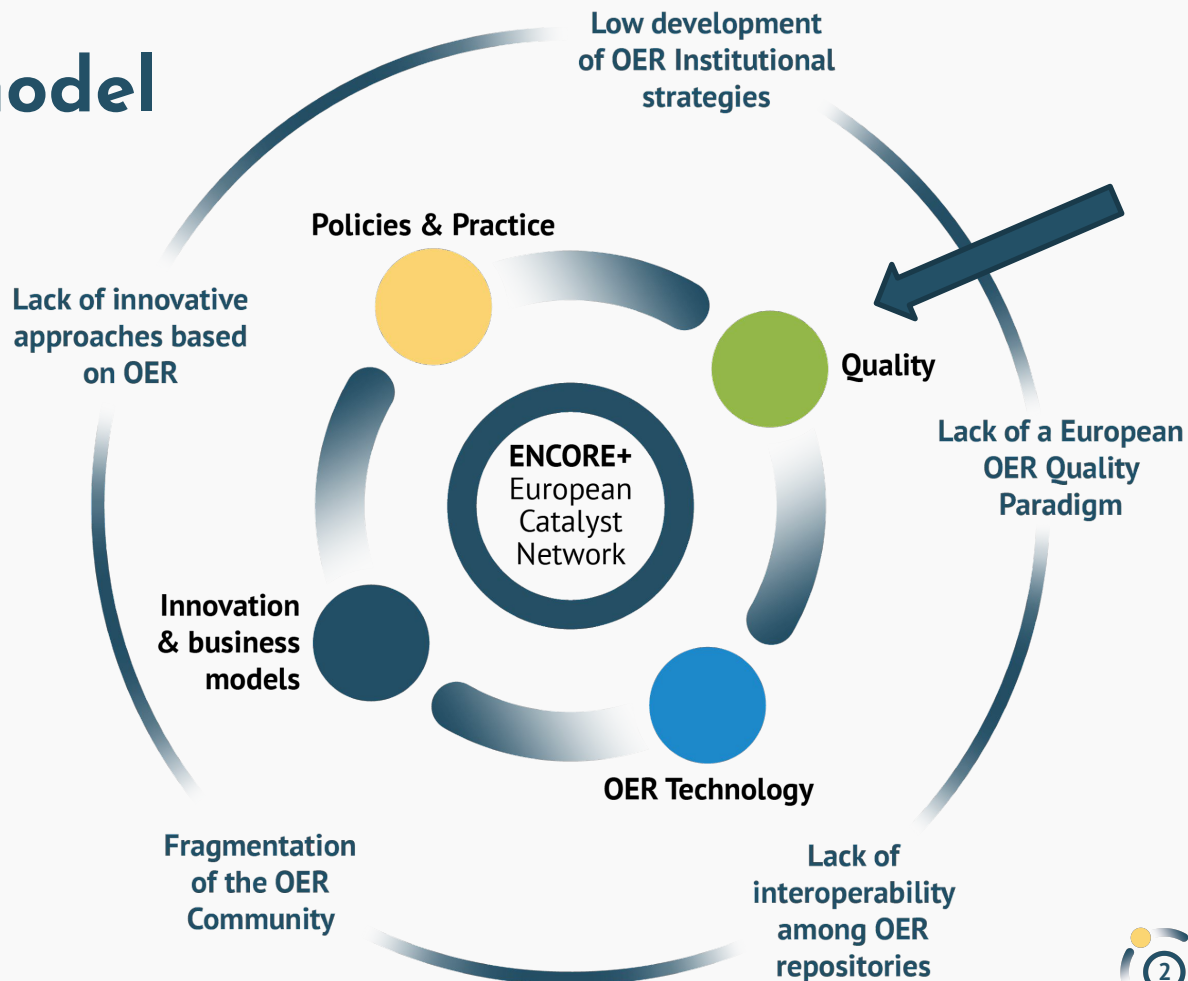
This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

This document is licensed under a **Creative Commons Attribution-ShareAlike 4.0 International license** except where otherwise noted.

Co-funded by the
Erasmus+ Programme
of the European Union

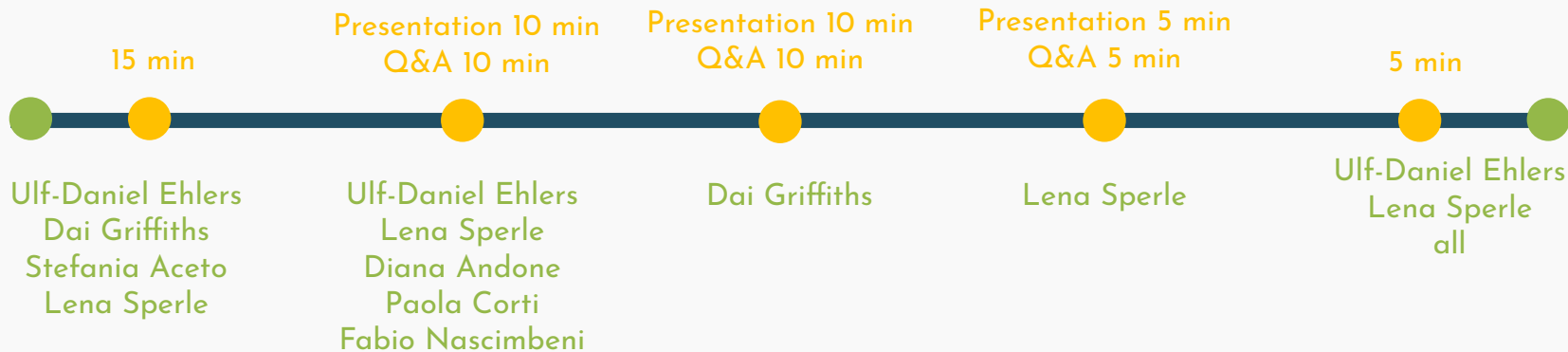


The Ecosystem model



Agenda

Chat Show & Discussion – Key Takeaways	Quality Transparency Framework	Views & Experiences on the QTF from Piloting Activities	Hybrid Delphi Study	The Future of Quality of OER – Wrap Up
--	--------------------------------	---	---------------------	--



Key Takeaways



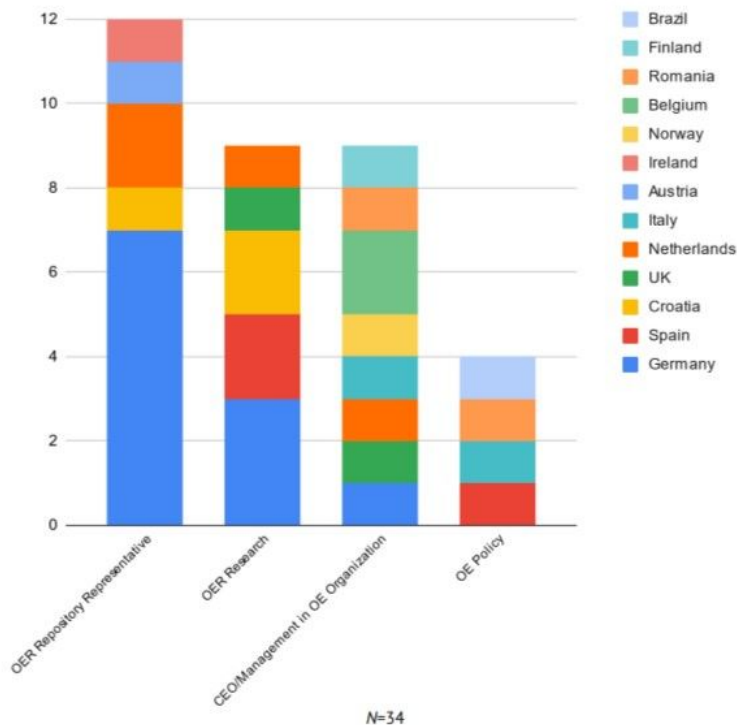
Quality Theme

Quality Transparency
Framework



Quality Transparency Framework

Participants' distribution of country of origin and profession/respective field of expertise



Diana Andone:

Director of the eLearning Center and Associate Professor at the Politehnica University of Timisoara in the area of multimedia, interactive and web technologies.



Paola Corti:

Open Education Community Manager for the European Network of Open Education Librarians (ENOEL), SPARC Europe



Fabio Nascimbeni:

Senior Fellow of the European Distance and eLearning Network (EDEN) & European Training Foundation (ETF)

Quality Transparency Framework



Quality Theme

Views and Opinions on the
QTF from Piloting
Activities

Dai Griffiths, UNIR

Stefania Aceto, UNIR



Quality Theme

Hybrid Delphi Study



Hybrid Delphi Study

Quality of OER: Harmonising Diverse Quality Metrics & Creating Transparency

“In 2030, a shift from orientation on quality metrics to developing transparency schemes will have taken place, which enable users to map their needs to OER quality. while much work is done today in defining quality criteria, in 2030, the focus will be stronger on describing them in understandable, easy to use and transparent ways.”



The Future of Quality of OER



State of the Art Report on OER Quality



- Concluding report on quality of OER
 - the most recent OER quality concepts
- be published very soon on the ENCORE+ website



encore+ ENCORE+ Website:
to the research and reports



European Network for Catalysing
Open Resources in Education

Thank you for your time and engagement!

Project partners:



INTERNATIONAL
COUNCIL FOR OPEN AND
DISTANCE EDUCATION



Fondazione
Politecnica
di Milano





European Network for Catalysing
Open Resources in Education

Website

For further and updated information
about this project please see:

www.encoreproject.eu

Contacts

Ulf-Daniel Ehlers, DHBW,
ulf-daniel.ehlers@dhbw-karlsruhe.de

Lena Sperle, DHBW,
lana.sperle@dhbw-karlsruhe.de

info@encoreproject.eu

Project partners:



INTERNATIONAL
COUNCIL FOR OPEN AND
DISTANCE EDUCATION



Fondazione
Politecnica
di Milano

