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European Network for Catalysing  
Open Resources in Education

# ENCORE+ OER Innovation Showcase



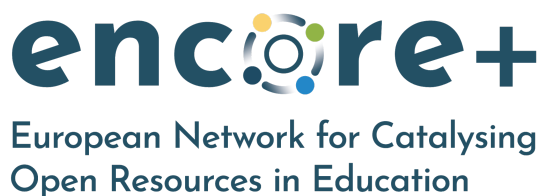
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# ENCORE+ OER Innovation Showcase

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**Coordinator of this work:**  
The Open University (UK)

**Participants:**  
Knowledge 4 All (UK)  
The Open University (UK)

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## Introduction

This document provides a conceptual framework for the evaluation of examples of innovation which uses the affordances of open educational resources (OER). OER are teaching and learning materials that are either in the public domain or published on an open licence which permits various forms of redistribution, reuse and repurposing. Many organisations and higher education institutions around the world are using such resources, and anecdotally many believe this is supporting innovations in practice. However, there is scant research into how such innovations should be understood or evaluated conceptually.

In the ENCORE+ project we developed a framework for understanding innovation with OER and used this as the basis of a stakeholder survey. There were two goals for this activity. Firstly, to generate brief but useful case studies which illustrate a range of different instances of OER. These provide concrete examples of implementing OER in different circumstances and reflections from project leads on their experiences and lessons learned. The second goal was to validate the framework being used to evaluate the cases. The goal of this evaluation was not to judge different instances as superior or inferior to one another but to provide a new set of concepts and language for thinking about the relationship between OER and innovation.

The framework and its rationale can be found below, and the complete survey (which is free to reuse or adapt) is available after the case studies. We hope that this collection illustrates the diversity, ingenuity and geographical distribution of OER projects and serves to provide further inspiration to educators and learners.

## Rationale

This report presents two key outputs from the ENCORE+ work stream on OER innovation and business models. The first is to act as a showcase for “a collection of examples of innovation with and through OER that act as ‘lighthouse’ projects (a model project that has a signal effect for other initiatives as they look towards it for inspiration and guidance) for other stakeholders and demonstrates the potential of OER to support innovation”. The cases assembled here are described according to a consistent evaluation rubric that includes relevant technological, pedagogical, institutional and marketplace factors. This framework is also incorporated into the report, but can be downloaded separately from the ENCORE+ website (D6.4). This report is integrated with other outputs from the ENCORE+ work package. A companion

report (D6.1) analyses OER innovation using desk research while this showcase (D6.3) has a more empirical foundation. The evaluation rubric allows stakeholders to repeat the evaluation of innovation while the showcase provides points of comparison from across the OER ecosystem as a source of inspiration and possible refinement of the value proposition(s) of an instance of OER implementation.

## Method

In order to evaluate and describe instances of innovation consistently and identify outstanding examples of innovation, a rubric for evaluating innovation through OER was produced. This rubric was used to create an online survey that collected data from people currently using OER to innovate their practice. The survey was open from 11 September 2022 to 28th February 2023 across three different collectors.

Originally, 57 responses were received, with 49 cases eligible for inclusion in the analysis following quality review. These 49 cases provide the basis for the statistical claims made below, although 5 of these did not meet the editorial threshold for being included in the showcase. It should be noted that the number of responses to specific items may vary in relation to the total number of cases. As it can be observed in Figure 1, the survey had a wide geographical spread including Argentina, Australia, Canada, China, Colombia, UK, Germany, Greece, Hungary, India, Ireland, Kenya, the Netherlands, Norway, Scotland, Slovenia, South Africa, Spain, Taiwan, US, and Zanzibar. Contributors were given several weeks to review the presentation of their case and respond to queries before publication.

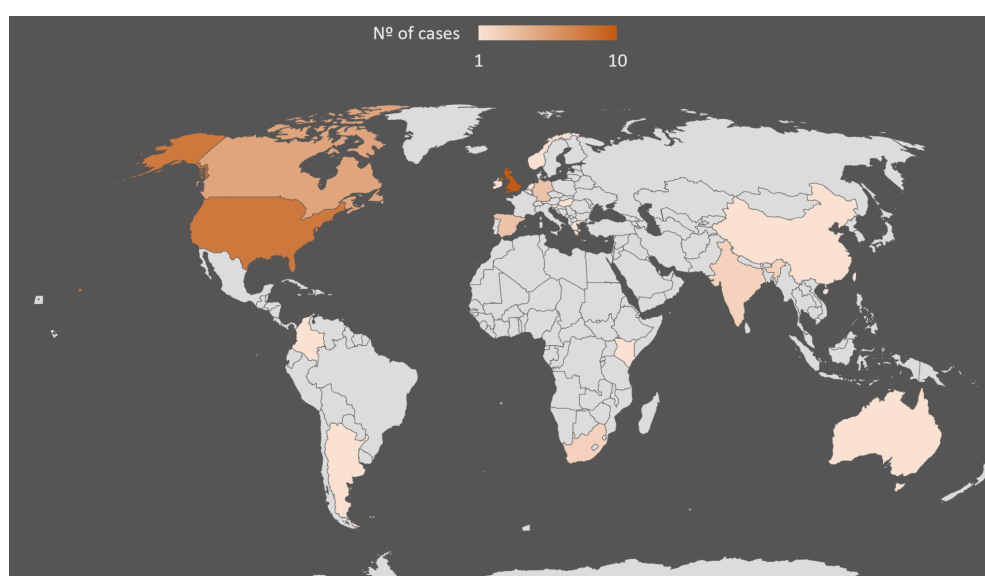


Figure 1: Geographical spread of the cases

## Conceptual Foundation

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 (Q3) 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 & Jacquemin (2015); Ubachs & Konings (2016); and Farrow (2019). The list of learning technologies is derived from Orr et al. (2018).

The stakeholder value proposition and impact matrices combine categories from Rogers (2003) and the Cabinet Office 'UPIG' or 'CPIG' stakeholder model (no citation). This is a simple yet versatile stakeholder model which was chosen because of its ability to accommodate a wide range of implementation scenarios. ENCORE+ is focused on the OER ecosystem as a whole but others using the framework may prefer to use a localised understanding of stakeholders.



## List of contributors

The ENCORE+ project is grateful to the following contributors as well as those who preferred to remain anonymous.

Alan Levine (Independent Education Consultant / Open Education Global)  
 Anja Lorenz (Technische Hochschule Lübeck, Germany)  
 Beck Pitt (The Open University, UK)  
 Connie Blomgren (Athabasca University, Canada)  
 Dan McGuire (SABIER, USA)  
 Danielle Dubien (Independent Scholar / Saskatchewan Polytechnic, Canada)  
 Elena Barcena (Universidad Nacional de Educación a Distancia, Spain)  
 Enrique Facundo Ruiz Blanco (Universidad del Aconcagua, Argentina)  
 Francisco Iniesto (The Open University, UK)  
 Fereshte Goshtasbpour (The Open University, UK)  
 Flavio Azevedo (Framework for Open and Reproducible Research Training, FORRT, NL)  
 Gábor Kismihók (TIB Leibniz Information Centre for Science and Technology, Germany)  
 Glenda Jayne Cox (University of Cape Town, South Africa)  
 Helen Moore (University of Sheffield, UK)  
 Jasmine Hoover (Cape Breton University, Canada)  
 Jorge Arús Hita (Universidad Complutense Madrid, Spain)  
 Judith Galla (die Berater, Austria)  
 Kate Borthwick (University of Southampton, UK)  
 Kathy Essmiller (Oklahoma State University, USA)  
 Kelly Smith (Eastern Kentucky University, USA)  
 Laura Henderson (Frontiers Media SA, Switzerland)  
 Lauren Rosen (University of Wisconsin-Madison, USA)  
 Lesley Boyd (Independent Researcher / The Open University, UK)  
 Leticia Micheli (FORRT / Universiteit Leiden, the Netherlands)  
 Flavio Azevedo (FORRT / Groningen University, the Netherlands)  
 Liliana Paez (Universidad CES, Colombia)  
 Lorna M. Campbell (University of Edinburgh, UK)  
 Margreta Tveisme (Norwegian Digital Learning Arena)  
 Knut Inge Skifjeld (Norwegian Digital Learning Arena)  
 Maria Mawson (University of Sheffield, UK)  
 Nikoloas Mitrou (National Technical University of Athens, Greece)  
 Patrina Law (The Open University, UK)  
 Richard Heller (People's Open Access Education Initiative (Peoples-uni), UK)  
 Steel Wagstaff (Pressbooks, Canada)

Sushumna Rao (Justwrite, India)

Thiru Vandeyar (University of Pretoria, South Africa)

Tranum Kaur (University of Windsor, Canada)

## Description of the Data

The 44 cases presented below were constructed from data collected by survey. The survey opened on 11 September 2022 and closed on 28 February 2023. This section offers a brief description of the dataset in order to contextualise the individual cases. This showcase offers information about a range of different styles of OER implementation. Table 1 summarises the types of cases included, showing the majority of those contributed information about their case are working on a time-bound project or initiative that uses and/or creates OER.

Type of Case	Frequency
Business	1
Initiative	12
Institution	7
Project	19
Other	5

Table 1: OER Implementation across the Showcase

Respondents were also asked about the size of their operation and the audiences or markets they orient themselves toward. As Table 2 shows, most of the data came from those whose operational focus is international, though all categories were represented.

Area of Focus / Market	Frequency
International	23
Macro (National)	7
Meso (Regional / Federal)	5
Micro (Institutional / Local)	9

Table 2: Market/Audience Focus

OER activities can reflect short term interventions as well as long term initiatives. Table 3 shows the length of existing implementation for the cases. Half of the sample came from organisations that have been active for more than 5 years. Some cases were relatively new when data was collected. The cases show examples of how OER can be used to innovate practice at different levels of maturity.

Implementation Timeframe	Frequency
0-3 months	3
6-12 months	3
1-2 years	8
3-5 years	8
5+ years	22

Table 3: Timeframe

The Evaluation Framework encourages reflection on the strategies for using OER, using an organizational strategy typology (Miles & Snow, 1978). For key strategic areas approaches can be aligned to a ‘defender’ or ‘prospector’ mindset. Defenders focus on core aspects, emphasizing stable growth and market penetration. Prospectors are change-oriented, exploring new and flexible delivery. As Figure 2 shows, most of the cases are directed towards traditional markets but exploring alternative approaches - particularly around their competitive advantage and the way they communicate value to their stakeholders.

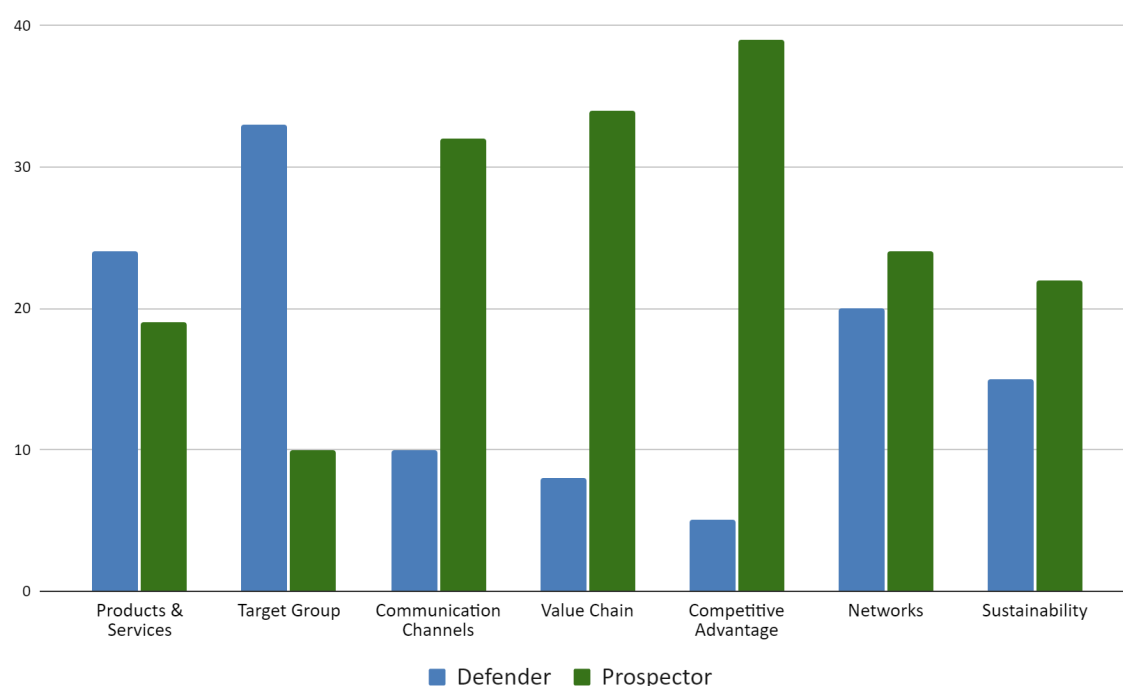


Figure 2: Organizational Strategies

The framework also invites reflection on assumptions about business models. Survey respondents were asked to align their business model to one of those provided (Farrow, 2023). Most receive their revenue from institutional or external grants, which are more traditional models for OER. We also observe a growing number of community-led OER initiatives as well as online offerings by traditional institutions. Table 5 summarises the revenue models of the cases.

Category	Business Model	Description	Frequency
Externally funded	<i>Donations Model</i>	Funding from donations or grants, e.g., foundations, society, industry, non-governmental agencies	10
	<i>Governmental Model</i>	National and international governmental agencies providing funding for OER	7
	<i>Sponsorship / Advertising Model</i>	Generating revenue by exposing learners to commercial messages	
Internally funded	<i>Institutional Model</i>	Higher education providers setting aside some part of their budget for OER programmes	15
	<i>Substitutions Model</i>	Cost savings from redundant services (e.g. obsolete systems) are redirected towards OER programmes	
	<i>Author pays Model</i>	Publishers generate revenue by charging content creators	
Community funded	<i>Community based</i>	Members of a community or network collaboratively create and use OER, generating revenue through services and/or infrastructure	4
	<i>Membership Model</i>	The Membership model relies on organizations contributing money, services and/or goods	
	<i>Platformization</i>	Organises stakeholders around a digital ecosystem, facilitating interaction and generating insights	1
Higher Education Service Models	<i>Data Exploitation Model</i>	Generates revenue by selling analytic data from a virtual learning environment	
	<i>Dual-Mode University</i>	Use of OER in an online course (e.g. Massive Open Online Course) to develop a distance learning or virtual university operation	2
	<i>Freemium</i>	Educational materials are offered for free and	

		sustainability is derived from subsequent income streams offered alongside this (e.g. assessment or access to a larger curriculum)	
	<i>Online Programme</i>	Extending presence-based education to online or blended courses	3
	<i>Segmentation Model</i>	Commercializing a service relating to OER (such as printing open textbooks; providing assessment or certification of learning)	

Table 5: Business Models

In conjunction with the [stakeholder model](#), these aspects form the basis for thinking about the value propositions made to different members of the OER ecosystem. As identified by Ehlers & Kunze (2021), value propositions are primarily directed at the educational sector, often overlooking the business one. However, a growing number of initiatives are already adopting the strategies used in the business sector (Farrel et al., 2022), which needs to address new stakeholders that are beyond those commonly associated with educational contexts. Given these new trends and the great variety of stakeholders, both acknowledged and potential, that can take part in OER-related processes, the ENCORE Network has made efforts to propose a model (UPIG model) to represent these stakeholder communities from a comprehensive and inclusive approach. This way, respondents explained their value propositions considering the four top semantic categories developed, namely: Users, Providers, Influencers, and Governance. Data was also collected around patterns of OER use to see whether these related to different business models. The SAMR framework (Puentedura, 2006) was employed to conceptualise OER related practices. Figure 3 summarises the relation between these variables, showing that more diverse business models are associated with more transformative uses of OER.

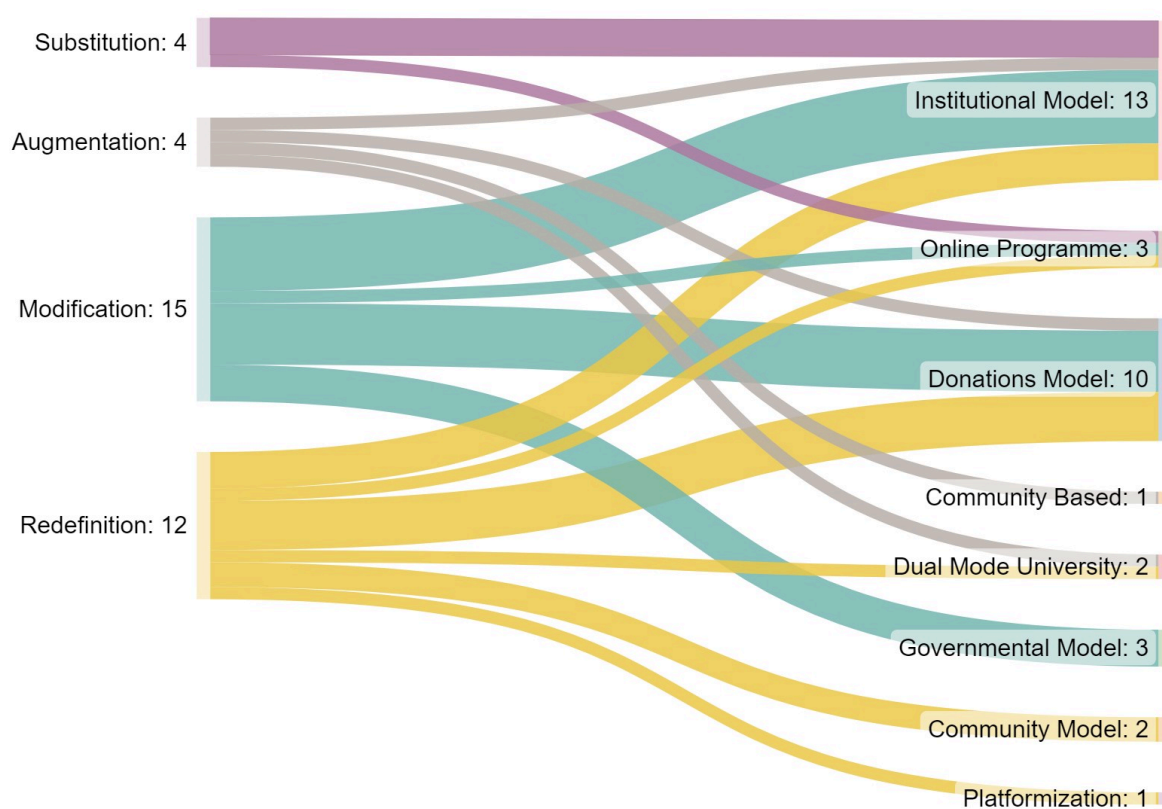


Figure 3: OER Use Model vs OER Business Model (n=35)

It is noteworthy that almost half of the cases were already thinking about how to meet the needs of traditional and non-traditional stakeholders, so proposing value propositions for all the groups put forward. It is also interesting to note that value propositions were mainly addressed to users and providers (so still linked to more traditional target audiences) followed by governance, and influencers. Although almost half of the sample suggested propositions for the latter, the other half explained that this category was not applicable to their implementation or was not understood, referring to the role of influencers in the case.

Perceived attributes of value propositions/impact in terms of innovation can ascertain their rate of diffusion. According to Rogers (2003) innovations should possess the qualities of relative advantage, compatibility, complexity, trialability and observability. This aspect was also reported by respondents, who reflected on effective routes of impact to their different stakeholders. Table 6 includes information on attributes' effects on the size of the implementation. The most representative were: observability, simplicity, and compatibility, and this mostly applied equally to all sizes. The relative advantage is slightly less common, but still relevant at all levels except for macro. Lastly, trialability is considerably less common and this affects the total sample.

<b>Innovation Qualities</b>	<b>Effects at size level</b>
Observability - of benefits to potential adopters	Almost equally perceived at all size levels
Simplicity - of adoption	Equally perceived at international, macro, and micro levels
Compatibility - with existing practice	Equally perceived at international, meso and micro levels
Relative advantage - how an offer is distinguished	Not perceived at the macro level
Trialability - how easily the innovation can be explored	Slightly perceived at all levels

Table 7: Innovation Qualities by Size

Looking across the sample as a whole it is possible to discern the key vectors which are understood to influence OER innovation. These are summarised in Figure 4.





Figure 4: Qualities of OER Value Propositions

## Limitations

While some patterns emerge from considering the collection of cases as a whole, the information conveyed in this report is intended as an illustrative snapshot of showcase projects rather than a general guide to OER implementation. Caution should be taken when reviewing the trends seen in this report, as patterns may not be generalisable beyond the original context of application. However, it is hoped that these examples demonstrate a range of innovation possibilities and can act as inspiration for further activity.

# OER Innovation Evaluation Framework

This evaluation framework, which was used to identify and describe the examples from the showcase, is available as a separate output from ENCORE+ (D6.4 ENCORE+ Innovation Evaluation Toolkit).

## Basic Information

You can begin the process of completing the framework by recording basic information about your case, including the size and scale of your operation, your user base, and key challenges faced.

<b>Case Name:</b>		<b>What is your offer?</b>  <b>Key Challenges:</b> 1. 2. 3.
<b>Organisation:</b>		
<b>URL:</b>		
<b>User base (size):</b>		
<b>Scale of operation:</b>	(Micro/Meso/Macro/International)	

## Strategic Focus

This prompt invites reflection on a series of binaries which can be thought to define a strategic approach. Thinking about each of the categories can facilitate understanding of how and where the approach is innovative and different (as opposed to more traditional). This is not to imply that more ‘innovative’ approaches are always preferable since a highly targeted approach in one or two areas might be more successful.

Products & Services	Target Group(s)	Advantage of approach
Core provision <b>or</b> Complementary / Alternative	Traditional <b>or</b> Non-traditional	Traditional competence <b>or</b> Emergent, innovative approaches
Sustainability & Revenue	Network	Communication Channels
Efficiencies, cost-cutting <b>or</b> new revenue processes	Traditional, institutional <b>or</b> non-traditional, dynamic	Traditional <b>or</b> new/virtual channels
Value Added		

Legacy/traditional knowledge **or** New, innovative approaches

## Business Model(s) & Sustainability

A range of business models have been proposed for OER. The ENCORE+ project has rationalised these into 14 types organised into 4 categories below. In practice models are often combined, but it can be helpful to think about how efforts can be focused.

Category	Business Model	Description
Externally funded	<i>Donations Model</i>	Funding from donations or grants, e.g., foundations, society, industry, non-governmental agencies
	<i>Governmental Model</i>	National and international governmental agencies providing funding for OER
	<i>Sponsorship / Advertising Model</i>	Generating revenue by exposing learners to commercial messages
Internally funded	<i>Institutional Model</i>	Higher education providers setting aside some part of their budget for OER programmes
	<i>Substitutions Model</i>	Cost savings from redundant services (e.g. obsolete systems) are redirected towards OER programmes
	<i>Author pays Model</i>	Publishers generate revenue by charging content creators
Community funded	<i>Community based</i>	Members of a community or network collaboratively create and use OER, generating revenue through services and/or infrastructure
	<i>Membership Model</i>	The Membership model relies on organizations contributing to the OER provider with money, services and/or goods
	<i>Platformization</i>	Organises stakeholders around a digital ecosystem, facilitating interaction and generating insights
Higher Education Service Models	<i>Data Exploitation Model</i>	Generates revenue by selling analytic data about the activities of those using a learning environment
	<i>Dual-Mode University</i>	Use of OER in an online course (e.g. Massive Open Online Course) to develop a distance learning or virtual university operation
	<i>Freemium</i>	Educational materials are offered for free and sustainability is derived from subsequent income streams offered alongside this (e.g. assessment or access to a larger curriculum)
	<i>Online Programme</i>	Extending presence-based education to online or blended courses
	<i>Segmentation Model</i>	Commercializing a service relating to OER (such as printing open textbooks; providing assessment or certification of learning)

## Pedagogy & Technology

A range of different ways to organise teaching and learning using OER have been proposed. This section encourages reflection on the specific ways you're approaching or understanding this. What difference is OER making to your practice?

Pedagogy	Technologies
What kind of pedagogy (theory of learning) informs your practice relating to OER?	How are you using technologies to innovate or enhance the offer to your stakeholders?

## 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

## Stakeholders

ENCORE+ embraces an understanding of the relevant stakeholders that is ecosystem wide, incorporating perspectives from education and business. The following table, which uses the UPIG categories, summarises a possible view of this ecosystem. UPIG (users, providers, influencers, governance) is a simple stakeholder model which can accommodate a wide range of types and use cases. The presentation here also describes differences of scale (macro, meso, micro). The ENCORE+ stakeholder map was validated through feedback from various groups of relevance at workshops, presentations and online events. (See the ENCORE+ website for more details.) This forms the basis for understanding how the findings relate (or can be applied to) concrete groups/ Not all factors are relevant to all OER implementations, but a range of possibility and relation to a wider ecosystem is indicated.

	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	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				Copyright/Data Officers Higher Educational Institution decision makers Student Governments

Figure 7: ENCORE+ OER Stakeholder Model

## Value Proposition & Impact

How would you describe the value proposition you make to different stakeholders regarding the use of OER? What has been the impact of your work on your stakeholders so far?

	Value Proposition	Impact
USERS		
PROVIDERS		
INFLUENCERS		
GOVERNANCE		

## Barriers and Enablers

It can be helpful to think about factors which facilitate or impede your OER activity, supporting or preventing you from realising your goals and innovating in the desired direction. Here a range of generic types are presented (your own context may involve other factors).

Category	Factor	Barrier	Enabler
<i>Practitioner (e.g. educator, manager, librarian, etc.)</i>	Attitude		
	Skills		
	Personal characteristics		
	Decision processes		
	Culture		
	Awareness of issues		
<i>Organization (e.g. school, university, business, initiative)</i>	Capacity, resources & finance		
	Management structure/processes		
	Organizational culture		
	Leadership		

	Open educational practices		
	Policy change (internal)		
<i>Evidence Base</i>	Existence of evidence		
	Accessibility of evidence		
	Relevance & applicability		
	Quality of evidence		
	Research-practice links		
	Other evidence factors		
<i>Technology &amp; Infrastructure</i>	Internet access		
	Open source software		
	Proprietary software		
	Virtual Learning Environment(s)		
	Other infrastructure		
<i>Community</i>	Social context		
	Stakeholder relationships		
	Responding to authentic learner needs		
	Regulatory environment		
	Policy change (external)		
<i>Other factors</i>	Other		

## Diffusion of Innovations

Innovations spread because people understand the difference they can make. The following grid (based on Rogers, 2003) encourages reflection on specific innovation vectors. Which factors are relevant to the uptake of OER and innovative approaches for your stakeholders? (You can use the UPIG model here or substitute your own.)

	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS					
PROVIDERS					
INFLUENCERS					
GOVERNANCE					

## Concluding Reflections

Having completed the above sections, you are encouraged to reflect on your innovation trajectory as a whole. Not every aspect of activity needs to be radical and transformational, but cultivating an innovation 'mindset' can highlight opportunities and strategies for the future.

Think about your key challenges, your business model, your use of OER, how technology supports this, what kinds of barriers and enablers might have relevance, and what actions could be taken to support innovation with (or through) OER in your context.

[END OF FRAMEWORK]



## OER Innovation Case Studies

In the sections that follow you can review examples of the completed framework for a range of cases, presented as a showcase of innovative examples of OER use. The only part of the evaluation framework we don't reproduce here is the range of answers provided to the prompt about barriers and enablers of OER innovation. This is primarily a matter of length and readability for the case studies, but also reflects that some of this could be considered sensitive information. The editorial choice was made to omit this from this particular presentation, but can be found in the anonymised version of the dataset that is available through the ENCORE+ website.

## 5 years of Open Educational Resources at The University of Edinburgh

<https://open.ed.ac.uk/>

The University of Edinburgh

Edinburgh, Scotland

Timeframe: 5 years+

User base: 500,000

Scale: International

Open for Good is an initiative for open course development to promote open learning opportunities. It considers OERs as critical contributors to the achievement of the Sustainable Development Goals ([SDG](#)). The Open Education Policy underpins their approach to online course design and development by the adaption of working practices to embed open content. The spirit of “open” is also applied to marketing assets, and credit OER as a brand in its own right. Online course production team work along with course teams to manage the workflow and champion the use of OER. The University of Edinburgh supports the creation of own online materials by sharing free, open licensed, and downloadable resources content, as well as it develops open media that is shared by CC licence at the Open Media Bank channel.

### OER Implementation:

Modification (OER use allowed for significant redesign of tasks or functions associated with teaching/learning)

### Key Challenges:

- Building awareness
- Changing culture/practices
- Communication issues

**Advice:** Just do it!

**Commentary:** Open for Good: OER at The University of Edinburgh tells the story of five years of support for OER and open knowledge at The University of Edinburgh. The brochure includes information about our award-winning open policies, our outreach activities, and our commitment to the United Nations Sustainable Development Goals. It also features case studies of student engagement and OER in the curriculum from across the University, along with a timeline of significant open education developments and events.

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Institutional Model: Higher education providers setting aside some part of their budget for OER programmes
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
All 'pedagogies'	Blogging / Microblogging, Digital Badging, E-portfolios, Learning Management System (LMS), Massive Open Online Course (MOOC), Microcredentials, Mobile Learning, Online Assessment(s), Open Educational Practices (OEP), Open Educational Resources (OER), Open Pedagogy, Social Media, Virtual Learning Environment (VLE), Webinars, Wikis

	Value Proposition	Impact
USERS	Digital literacy	Access to learning materials
PROVIDERS	Corporate social responsibility	Corporate social responsibility metrics
INFLUENCERS	Corporate social responsibility	Corporate social responsibility metrics
GOVERNANCE	Research reach and global impact	Impact and reach

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓				
PROVIDERS	✓				
INFLUENCERS	✓				
GOVERNANCE	✓				

## Alternative Textbook Grant

<https://libguides.eku.edu/oer>

Eastern Kentucky University

Richmond, KY, USA

Timeframe: 3-5 years

User base: 14000

Scale: Micro (Institutional / Local)

The Alternative Textbook Grant Program supports students' success by reducing the financial burdens of buying traditional textbooks. Instructors may replace commercial textbooks with openly licensed equivalents and/or library-licensed resources for students to have free access to essential learning materials. Key multidisciplinary stakeholders in teaching and learning at the University inform the Advisory Board and facilitate the implementation of the Program in different areas such as Humanities and STEM, among others. Grants are allocated according to the targeted actions (i.e. adoption, adaption, creation and multi-section conversion). The Program supports educators by providing comprehensive guidance to educators on open course redesign and organising dedicated Open Access & Open Education weeks.

### OER Implementation:

Modification (OER use allowed for significant redesign of tasks or functions associated with teaching/learning)

### Key Challenges:

- Skills development
- Changing culture/practices
- Technological implementation

**Advice:** Teach OER authors to write accessible content from the beginning. Going back and fixing PDFs is a nightmare!

**Commentary:** The university's Board of Regents provided \$75k in OER textbook incentive grants to expand OER adoption at Eastern Kentucky University (EKU). There were 22 grant recipients between 2020-22 with a further round of funding in 2023. Grant recipients are listed on this page: <https://libguides.eku.edu/oer/faculty>. They are in varying stages of publication, adoption. One condition of the grant was that faculty had to attend a professional learning community, which increased engagement with faculty.

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Institutional Model: Higher education providers setting aside some part of their budget for OER programmes
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	Cost cutting and efficiencies	Traditional institutional or cultural	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
There were 22 projects between 2020-22.. Some faculty adopted; some wrote new textbooks. Some are including student works in their OER. There's a broad range depending on the discipline / faculty member.	Open Educational Practices (OEP), Open Educational Resources (OER)

	Value Proposition	Impact
USERS	OER that is more relevant to our local context can be selected	Students have been receptive to OER and appreciative of faculty who use them.
PROVIDERS	OER give faculty flexibility, agency, and creative freedom.	Faculty who have participated in this project have differed - some have been overwhelmed and had difficulties, others have enthusiastically completed their OER and started teaching in new ways.
INFLUENCERS	We are saving taxpayer money by investing in our knowledge workers instead of out of state publishers.	Unsure
GOVERNANCE	University currently pays for textbooks for all undergraduates. If more faculty adopt OER, they can use those funds for other purposes.	The Board of Regents was thrilled with this idea.

<b>Diffusion of Innovations</b>	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓	✓	✓	✓	✓
PROVIDERS		✓	✓		
INFLUENCERS	✓	✓			
GOVERNANCE	✓	✓		✓	✓

## Basics of Gardening for sustainable health and society

[https://youtube.com/playlist?list=PLWqf-70jbA8RqGyvke\\_o58eq5RjH6ZV-M](https://youtube.com/playlist?list=PLWqf-70jbA8RqGyvke_o58eq5RjH6ZV-M)

UNESCO OE4BW

India

Timeframe: 0-3 months

User base: Learners

Scale: International

This Massive Open Online Course (MOOC) was developed under the UNESCO [OE4BW](#) program which provides an innovative approach to building OER through connecting developers of educational materials with experts volunteering as mentors. The program aims to build capacities in open education while producing concrete educational materials with the potential for social impact and specifically aligned with SDGs. The MOOC is targeted at nature lovers who want to learn about the basics of gardening and is available in Hindi and English on Canvas. It offers OER in the form of videos, ppts, and text using Creative Commons licences.

### OER Implementation:

Modification (OER use allowed for significant redesign of tasks or functions associated with teaching/learning)

### Key Challenges:

- Budget & finance
- Time pressure
- Building awareness

**Advice:** Institutional support was important in overcoming challenges. Be excited about developing OER!

**Commentary:** This was a project under UNESCO OE4BW program. I want to make people aware of basics of Gardening and it's benefits, so I developed OER's in the form of videos, ppts and text. It is all under creative commons licence. The project was presented at Eduscope 2022 to raise its profile.

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Online Programme: Extending presence-based education to online or blended courses
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	Cost cutting and efficiencies	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
It was learner centric pedagogy. This was a four week MOOC. Platform used was Canvas.	Learning Management System (LMS), Massive Open Online Course (MOOC), Mobile Learning, Online Assessment(s), Open Educational Resources (OER), Social Media, Videoconferencing

	Value Proposition	Impact
USERS	Because most of the learners are from rural background and students	Learners were happy with this MOOC
PROVIDERS		
INFLUENCERS	Educational institutions can use this OER for teaching gardening to achieve sustainable development goals.	
GOVERNANCE		

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS					✓
PROVIDERS					
INFLUENCERS					
GOVERNANCE					



## BMELTET

<http://doi.org/10.14705/rpnet.2019.36.955>

Coventry University

Coventry University UK

Timeframe: 5 years+

User base: 30 per year

Scale: International

The BMELTET project reports on how the MOOC: “Becoming a Better Teacher” (FutureLearn) was blended into English Language Teaching (ELT) university programs in conjunction with telecollaboration. The integration of the MOOC into the existing curriculum offered the opportunity for students to reflect on their professional development with a worldwide community of practice. The main outcomes of the project reinforce the use of open content in formal learning and are reflected in [related scholarly publications](#)

### OER Implementation:

Redefinition (using OER allowed for new ways of conceiving teaching and/or learning)

### Key Challenges:

- Changing culture/practices
- Project Management
- Skills development

**Advice:** Be organised, find good partners, implement change through action research

**Commentary:** BMELTET is intended to enhance the learning experience of MA students on English teacher education courses and their global citizenship skillsMooc/ve/f2f blend. Existing MOOCs were repurposed for the benefit of learners. Testimonials from students indicate that they are happy with the experience. Coventry University is a FutureLearn partner but this is a separate concern.

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Online Programme: Extending presence-based education to online or blended courses
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners		Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
Telecollaboration, Blended Learning	Flipped Learning, Learning Management System (LMS), Massive Open Online Course (MOOC), Mobile Learning, Open Educational Practices (OEP), Open Educational Resources (OER), Open Pedagogy, Videoconferencing, Virtual Learning Environment (VLE), Other (Mooc/ve/f2f blend)

	Value Proposition	Impact
USERS	Added value of and extra resource that provides access to a global community of practice	Positive feedback
PROVIDERS	Useful and fruitful collaborations	As above
INFLUENCERS		
GOVERNANCE		Recognition of innovative practice

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓				✓
PROVIDERS					
INFLUENCERS					
GOVERNANCE					

## Clinical Cases

<https://uwindsor.icampus21.com/wordpress/clinicalcases/>

UwiINDSOR

University of Windsor, Canada

Timeframe: 0-3 months

User base: Learners, Stakeholders

Scale: International

The Medical Case Study Repository is an online learning tool for professionals and students of any science discipline and is made up of OER which contain clinical cases. It is funded by the P.E.A.R.L.S grant funding which promotes experiential, active, and research-based learning in Science. PEARL is a community of practice which offers opportunities for participants to discuss innovative, evidence-based models of Experiential and Active learning, leading to the investigation of curricular initiatives that are of broad applicability to Science teaching. The project compiles real world clinical scenarios from multiple sources to be used by any science faculty for supplementing their teaching and learning. The initiative is supported by the work of the Department of Chemistry & Biochemistry, the Office of Open Learning, and graduate students at the University of Windsor.

### OER Implementation:

Substitution (OER replacing proprietary content with no functional change)

### Key Challenges:

- Risk management
- Technological implementation
- Building awareness

**Advice:** There are tons of resources out there, there is no need to reinvent the wheel again. The sky's the limit!

**Commentary:** The Medical Case Study Repository is an online learning tool for professionals and students of any science discipline, tailored to individual needs.

Products & Services	Value Added	Advantage	Business Model
Focus on provision which is complementary or alternative	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Institutional Model: Higher education providers setting aside some part of their budget for OER programmes
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
	Bring Your Own Device (BYOD), Digital Badging, Online Assessment(s), Open Educational Resources (OER), Open Pedagogy

	Value Proposition	Impact
USERS	Tailored to need	Tailored
PROVIDERS	Flexible tools/resources	Flexible tools
INFLUENCERS	Maximise reach	Maximise reach
GOVERNANCE	Increased enrollment	Increased enrollment

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS		✓	✓		✓
PROVIDERS		✓	✓		✓
INFLUENCERS					✓
GOVERNANCE		✓	✓		

## Critical Curation and Collaboration in Learning (Cur8)

<https://lxp.cur8learning.online>

Apricot, die Berater, Cur8 Consortium  
UK, EU

Timeframe: 1-2 years

User base: ca. 200/month

Scale: International

Critical content curation offers the opportunity to source learning content in dynamic, learner-centered, and socially interactive ways in order to support an inquiry-based pedagogy. It supports the uptake of innovative approaches and digital technologies for learning, training, and skills development. It is relevant to both Educators AND learners who, through the Cur8 project, are encouraged to become digital curators who not only consume information that they find on the internet but also evaluate and synthesise it to meet learning needs.

The Erasmus+ project Cur8 focuses on the development of the specific competencies of: (1) critically curating, creating and sharing digital learning resources, (2) managing and orchestrating collaborative and self-directed learning, and (3) empowering and actively engaging learners. The project aims to foster efficient, effective, inclusive and collaborative learning strategies for adult learners.

### OER Implementation:

Modification (OER use allowed for significant redesign of tasks or functions associated with teaching/learning)

### Key Challenges:

- Skills development
- Time pressure
- Regulatory or policy environment

**Advice:** Consider OER right from the beginning to make sure the concept can be fully integrated in your project.

**Commentary:** Critical content curation offers the opportunity to source learning content in dynamic, learner-centered, and socially interactive ways in order to support an inquiry-based pedagogy. It is relevant to both educators and learners who, through the Cur8 project, are encouraged to become digital curators who not only consume information that they find on the internet but also evaluate and synthesize it to meet learning needs.

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners		Traditional institutional or cultural	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
	Blogging / Microblogging, Open Educational Resources (OER), Virtual Learning Environment (VLE)

## Curso 0

Not yet available

Universidad Complutense de Madrid (UCM, Spain)

MiríadaX

Timeframe: 0-3 months

User base: Emergent

Scale: Macro (National)

The project is adapting “Curso 0” (on-site modality) to the MOOC format as part of a teaching innovation project. The course works on writing, ICT and information management skills, and introduces the Faculty of Philology to the students. The main objectives of the project are to update and adapt the existing teaching resources into OER and decide on the steps to follow for a successful integration in the curriculum plan. This project is supported by management, teaching and administrative staff, and ICT interns who will be trained in the design of the MOOC resources by a series of workshops.

### OER Implementation:

Augmentation (substitution of OER for proprietary content with functional change or task redesign)

### Key Challenges:

- Regulatory or policy environment
- Changing culture/practices
- Technological implementation

**Advice:** Make sure your institutional support is firm, then open the work done at universities to the world!

**Commentary:** Curso shows a way to transform what was an in-house to an open course. The initiative is hosted on <https://miriadax.net/>.

Products & Services	Value Added	Advantage	Business Model
Focus on provision which is complementary or alternative	Exploration of new approaches and innovation	Traditional competences (e.g., market knowledge, expertise, improvement of existing technology)	Community based: Members of a community or network collaboratively create and use OER, generating revenue through services and/or infrastructure
Target Group	Sustainability	Network	Communication Channels
New (or nontraditional) markets / learners	Cost cutting and efficiencies	Traditional institutional or cultural	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
Varies, but mostly video content and activities based around them.	Learning Management System (LMS), Massive Open Online Course (MOOC), Online Assessment(s), Open Educational Resources (OER), Virtual Learning Environment (VLE)

	Value Proposition	Impact
USERS	Ready access	
PROVIDERS	See their work open to the world	
INFLUENCERS		
GOVERNANCE		

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS		✓	✓		
PROVIDERS	✓				
INFLUENCERS					✓
GOVERNANCE					✓



## Developing a Library Service to support OER

<https://www.sheffield.ac.uk/library/open-access/open-educational-resources>

University of Sheffield, University Library

Timeframe: 1-2 years

User base: 30,000+ students and staff

Scale: Micro (Institutional / Local)

This University of Sheffield Library initiative focuses on the progression of the UNESCO recommendation areas of action and the UN SDGs. The initiative aims to increase awareness and understanding, build capacity and skills and create supportive infrastructure. Activities to date include the establishment of the Sheffield Pressbooks Network, offering small grants to support use and creation of OER, institutional policy development, and collaboration with the Universities of Leeds and York to develop an OER Toolkit. The University supports and encourages the re-use, re-purposing and adaptation of existing OER to support teaching and learning, which is consistent with the University vision for Education on contributing to an inclusive digital environment to enable students to engage effectively in their learning. The initiative widens the range of open materials available to educators and learners, and raises awareness of the scholarly publication and licensing landscape.

**OER Implementation:** Augmentation (substitution of OER for proprietary content with functional change or task redesign)

### Key Challenges:

- Changing culture/practices
- Building awareness
- Time pressure

**Advice:** Talk widely with stakeholders across your institution, taking every opportunity. Consider working on several areas simultaneously, for example talk to teachers / content creators whilst also engaging senior leadership in policy discussions. Be brave. Persistence is key: our work is ongoing, and although we've made a lot of progress there is still a lot to do to increase involvement and engagement across the institution

**Commentary:** The Library initiative focuses on the progression of the UNESCO recommendation areas of action and the UN SDGs. The initiative aims to increase awareness and understanding, build capacity and skills and create supportive infrastructure. Activities to date include the establishment of the Sheffield Pressbooks Network, offering small grants to support use and creation of OER, institutional policy development, and collaboration with the Universities of Leeds and York to develop an OER Toolkit. The University Library Content Strategy embodies the principles of open, sustainable, inclusive and ethical content. One of the aims is to support open content.  
<https://www.sheffield.ac.uk/library/about/content-strategy>

Products & Services	Value Added	Advantage	Business Model
Focus on provision which is complementary or alternative	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Institutional Model: Higher education providers setting aside some part of their budget for OER programmes
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners		Traditional institutional or cultural	Traditional

Pedagogy	Technologies Used
We are still in the early stages of developing the service. We are aware of some use of existing OER in modules, and are supporting new OER.	Bring Your Own Device (BYOD), Mobile Learning, Open Educational Resources (OER), Virtual Learning Environment (VLE), Webinars

	Value Proposition	Impact
USERS	Easy access to key reading, removes any pressure on students to buy textbooks. Also, for educators, increased visibility of teaching outputs (leads to reward and recognition) and academic freedom in being able to select the most appropriate material to support their teaching.	Too early to say regarding student achievement. We are developing support mechanisms, infrastructure, and policy but it's too early to assess the impact.
PROVIDERS	Diversifies the publishing environment	
INFLUENCERS		
GOVERNANCE	Supports the University mission around quality, inclusivity and sustainability. Also increases the visibility of teaching outputs and supports the learning community beyond the institution.	

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓		✓	✓	✓
PROVIDERS	✓			✓	✓
INFLUENCERS					
GOVERNANCE	✓				✓

## Digital Education for Universities in Kenya

<https://iet.open.ac.uk/projects/skills-for-prosperity-kenya>

The Open University (UK)

Kenya (Online)

Timeframe: 1-2 years

User base: 330 higher education staff/learners

Scale: Macro (National)

*Skills for Prosperity Kenya* is a programme funded by The Open University (UK) to strengthen existing digital education capacity in HEIs. It aimed to introduce HE staff to principles of effective, inclusive and accessible online education and to strengthen their skills and capabilities for delivering quality digital education. The project reused and localised open course content, which had been previously successfully utilised within a variety of contexts.

### OER Implementation:

Modification (OER use allowed for significant redesign of tasks or functions associated with teaching/learning)

### Key Challenges:

- Time pressure
- Budget & finance
- Changing culture/practices

**Advice:** - Don't underestimate the amount of resistance to a new idea due to contextual difficulties/differences. Know the dominant working/learning culture of the context of OER development.

**Commentary:** *Skills for Prosperity Kenya* aims to introduce HE staff to principles of effective, inclusive and accessible online education and to strengthen their skills and capabilities for delivering quality digital education.

Products & Services	Value Added	Advantage	Business Model
Focus on provision which is complementary or alternative	Making the most of traditional/legacy knowledge	Traditional competences (e.g., market knowledge, expertise, improvement of existing technology)	Governmental Model: National and international governmental agencies providing funding for OER
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Traditional institutional or cultural	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
Supported Open Learning. For more info, see <a href="https://www.open.edu/openlearncreate/course/index.php?categoryid=500">https://www.open.edu/openlearncreate/course/index.php?categoryid=500</a>	Blogging / Microblogging, Digital Badging, Microcredentials, Mobile Learning, Online Assessment(s), Open Educational Resources (OER), Social Media, Videoconferencing, Virtual Learning Environment (VLE), Webinars

	Value Proposition	Impact
USERS	Re-usability of the OER: Since the project works on a trainer of trainers model, they can use the OER to train more colleagues within their institutions.	Increased awareness and confidence in offering, supporting and managing digital education
PROVIDERS	Re-usability	A freely available source/course to train staff
INFLUENCERS		
GOVERNANCE	The OER/legacy piece can be used by the funder and users for other low and middle income countries which have to address the same issue of filling the gap in digital education expertise in HE	

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS			✓	✓	
PROVIDERS			✓	✓	
INFLUENCERS			✓		✓
GOVERNANCE	✓			✓	✓

## Digital Open Textbooks for Development (DOT4D)

[www.dot4d.uct.ac.za](http://www.dot4d.uct.ac.za)

University of Cape Town

University of Cape Town

Timeframe: 3-5 years

User base: Learners and academics

Scale: Micro (Institutional / Local)

The DOT4D initiative adopts an inherent social justice approach to its understanding and promotion of digital open textbooks, aiming for more equitable access to teaching and learning resources across Africa. Open textbooks are here understood as a compelling solution to addressing issues of social justice in the classroom, especially related to curriculum transformation, decolonisation and accessibility resulting from the high cost of proprietary learning resources. The project takes a wide perspective and acknowledges a set of operational criteria constituting digital open textbooks in the context of South Africa and the Global South. Research outcomes explain the nature and extent of open textbook production at UCT to be able to articulate sustainable models of open textbook production. Research agenda has now an explicit focus on student co-creation and on how successful OER have been used by students and/or colleagues. Its principal investigator (Glenda Cox) holds the UNESCO Chair in Open Education and Social Justice and the project also involves publishing, implementation, and research experts.

### OER Implementation:

Redefinition (using OER allowed for new ways of conceiving teaching and/or learning)

### Key Challenges:

- Building awareness
- Time pressure
- Budget & finance

**Advice:** Open textbooks we created transformed the curriculum, decolonising texts and offering students a voice.

**Commentary:** This initiative was externally funded for three years by the IDRC. Now it is an initiative with 3 staff members who work on this part time. Ultimately we aim for more equitable access to teaching and learning resources across South Africa. At present our focus is a small subset of South African universities. The initiative aims to establish a national network and to find ways to extend to other universities in Africa.

Products & Services	Value Added	Advantage	Business Model
Focus on provision which is complementary or alternative	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Institutional Model: Higher education providers setting aside some part of their budget for OER programmes
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	Cost cutting and efficiencies	Traditional institutional or cultural	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
Social Justice theory as articulated by Nancy Fraser. Also Social Realism and the work of Margaret Archer.	Open Educational Practices (OEP), Open Educational Resources (OER), Open Pedagogy

	Value Proposition	Impact
USERS	Open Textbooks save money are culturally relevant and give voice to students	
PROVIDERS		
INFLUENCERS		
GOVERNANCE		

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓				
PROVIDERS					
INFLUENCERS					
GOVERNANCE					

## eDoer

<http://edoer.eu/>

TIB Leibniz Information Centre for Science and Technology

Germany/Global

Timeframe: 1-2 years

User base: around 600 registered users (and growing)

Scale: International

eDoer is an Open, AI driven learning recommender platform supported by several European projects (<https://zenodo.org/record/6684246>). It is a prototype that exploits labour market intelligence (LMI) with OER recommendations to scaffold learners' study activities by modelling personal needs, defining individual learning objectives, generating personalised and dynamic curricula, recommending open and transparent learning content, and implementing continuous monitoring and feedback mechanisms through Learning Analytics (LA). eDoer is a community based application, meaning that it is available for a very wide range of learners globally and the source code and the algorithms are available as open source software.

### OER Implementation:

Redefinition (using OER allowed for new ways of conceiving teaching and/or learning)

### Key Challenges:

- Building awareness
- Budget & finance
- Communication issues

**Advice:** Lots of funding may be needed!

**Commentary:** eDoer is aiming at empowering learners through open, personalised learning and curriculum recommendations, on the basis of up to date labour market information and freely available online Open Educational Resources (OERs). In order to meet this objective, eDoer utilizes cutting edge AI technology. eDoer is being built on open science principles, and it is one of the few new generation learning environments, which 1) empower learners to take control and responsibility for their own skill development, 2) improve skills on the basis of labour market information and personalised OER recommendations, and 3) foster the uptake/reuse of OERs through a systematic quality control mechanism.

Products & Services	Value Added	Advantage	Business Model
Focus on provision which is complementary or alternative	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Donations Model: Funding from donations or grants, e.g., foundations, society, industry, non-governmental agencies

Target Group	Sustainability	Network	Communication Channels
New (or nontraditional) markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	Traditional

Pedagogy	Technologies Used
Learners in eDoer interact with a learning content recommender through a dashboard and receive relevant OER recommendations accordingly. During their learning process, learners can also rate their satisfaction with recommendations, and update their learning preferences. This strategy detects changes in learner profiles, and fine tune the precision of recommendations.	Artificial Intelligence, Learning Analytics, Virtual Learning Environment (VLE)

	Value Proposition	Impact
USERS	Free content, personal learning pathways	Personalised, free education
PROVIDERS	Reusability of content	Resusability of learning content
INFLUENCERS	Adaptable solution to large number of learning context	Adaptability to different learning contexts
GOVERNANCE	Efficiency of education, inclusivity	Effective investment to inclusive education

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓	✓	✓	✓	
PROVIDERS	✓	✓	✓	✓	
INFLUENCERS			✓	✓	✓
GOVERNANCE	✓				✓



## Form and Function(s): Sustainable Design Meets Computational Thinking

[https://bolt.athabascau.ca/index.php/oer-projects/sustainable\\_computation/may-20-2021-update/](https://bolt.athabascau.ca/index.php/oer-projects/sustainable_computation/may-20-2021-update/)

Athabasca University

<https://www.oercommons.org/courseware/lesson/77325/overview>

AND

<https://www.youtube.com/watch?v=qVgZWp5FPZA>

Timeframe: 1-2 years

User base: 100+ learners

Scale: Meso (Regional / Federal)

This OER marries sustainable architectural design to computational thinking. The various stages of project development required imagination and teamwork to pull together a unique curricular support for high school teachers in Alberta, Canada and beyond through [Callysto – Building Tomorrows Digital Leaders](#). The main output from this multidisciplinary project were animations covering evolutionary biology, maths modelling, and genetic algorithms applied to designing a community of buildings balancing costs, energy needs, and aesthetics. The project won the 2021 Canadian Network for Innovation Award of Merit for the Excellence and Innovation in the Integration of Technology.

### OER Implementation:

Modification (OER use allowed for significant redesign of tasks or functions associated with teaching/learning)

### Key Challenges:

- Risk management
- Building awareness
- Changing culture/practices

**Advice:** Be realistic in your hopes for uptake of the OER; it is like a seed that needs to fall in ready ground.

**Commentary:** The OER marries sustainable architectural design to computational thinking. The various stages of project development required imagination and teamwork to pull together a unique curricular support for high school teachers in Alberta, Canada and beyond through Callysto.ca The OER are digital and available and the animation is being repurposed in a micro-credential. The OER animation was used in a micro-credential course developed by Athabasca University's architecture department. Covid-19 influenced the launch - a blended approach had been anticipated and the effects of pandemic on the K-12 sector are still being felt and understood. The animation and the supporting materials (lesson plans and learning activities) have a CC BY license to encourage the improvement, adaptation, and remix of these OER for teachers and learners.

Products & Services	Value Added	Advantage	Business Model
Focus on provision which is complementary or alternative	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Donations Model: Funding from donations or grants, e.g., foundations, society, industry, non-governmental agencies
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Traditional institutional or cultural	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
Open Pedagogy ( <a href="#">Hegarty, 2015</a> )	Blogging / Microblogging, Open Educational Practices (OEP), Open Educational Resources (OER), Open Pedagogy, Videoconferencing

	Value Proposition	Impact
USERS	Transdisciplinary thinking is uncommon in Higher ed & K-12; education publishers are not innovators; solving wicked problems requires transdisciplinary thinking	Unique approach to learning about computational thinking, genetic algorithms, transdisciplinary thinking
PROVIDERS	Quality content is necessary for education that is transformative	Unique approach to teaching about computational thinking, genetic algorithms, transdisciplinary thinking
INFLUENCERS	OER are about supporting the commons - influencers who are about the health of the commons benefit from OER health	Unique approach to teaching and learning about computational thinking, genetic algorithms, transdisciplinary thinking - animation won an award
GOVERNANCE	OER are flexible, contextual etc & support what governance is suppose to support (i.e. educators & learners); a cyclical relationship	

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓				
PROVIDERS			✓		
INFLUENCERS					
GOVERNANCE					

## Framework for Open and Reproducible Research Training (FORRT)

<https://forrt.org/>

FORRT

Worldwide

Timeframe: 5 years

User base: 5000+ (120 visits/day)

Scale: International

FORRT is a voluntary (non-profit) organisation where early-career scholars come together to work on the development of Open Educational Resources aiming to facilitate the implementation of Open Scholarship into teaching, mentoring and research. FORRT aims to integrate diversity, equity, inclusion and accessibility into open education, and at increasing openness, integrity and reproducibility of scientific research. FORRT is developing several OERs simultaneously, which are overseen by responsible project leaders (<https://forrt.org/nexus/>).

### OER Implementation:

Redefinition (using OER allowed for new ways of conceiving teaching and/or learning)

### Key Challenges:

- Project Management
- Budget & finance
- Technological implementation

**Advice:** This initiative is carried out with the volunteer work of (mostly) early career scholars.. We have been trying to acquire funds for the current projects via grants and awards.

**Commentary:** Open Educational resources are openly shared in FORRT's website. FORRT manage an interdisciplinary knowledge community, applying diversity, equity, inclusion and accessibility goals as a prerequisite for open science and open scholarship. All members of the academic community are welcome to contribute to the project and the resulting OERs are posted online to be used for free.

Products & Services	Value Added	Advantage	Business Model
Focus on provision which is complementary or alternative	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Donations Model: Funding from donations or grants, e.g., foundations, society, industry, non-governmental agencies
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	Cost cutting and efficiencies	Traditional institutional or cultural	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
Varied. This is often project specific, depending on the needs of the project and on the project leader.	Flipped Learning, Massive Open Online Course (MOOC), Open Educational Resources (OER), Open Pedagogy

	Value Proposition	Impact
USERS	Our Open Educational Resources aim to facilitate the work of researchers and educators in implementing Open Scholarship into their teaching, mentoring and research. It also helps those unfamiliar with Open Scholarship to learn about it in a more efficient way.	Access to open educational materials that facilitate learning and make it easier to implement open scholarship in teaching and mentoring.
PROVIDERS	We provide a community for those interested in learning more about Open scholarship and contributing to advance the field. All contributions are formally recognized.	A community where people can network and work together with other scholars with the same goals.
INFLUENCERS	We also advocate for greater support and institutional recognition of the value in teaching and mentoring via grants, awards and acknowledgement in hiring/promotion committees.	
GOVERNANCE	FORRT advocates for the societal relevance of teaching about open scholarship in higher educations.	<a href="#">Awards</a> for Open Science advocacy, including the UKRN Dorothy Bishop Prize, NASA Success Story, Hidden-REF, and JISC Community Champion. We are also cited in UNESCO's OS toolkit and the UK Parliament's Reproducibility and Research Integrity Report.

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS			✓		
PROVIDERS			✓		
INFLUENCERS					✓
GOVERNANCE					

## Frontiers for Young Minds

<https://kids.frontiersin.org/>

Frontiers (Media SA)

Timeframe: 5 years+

User base: 14M+ global users online; 35M views and downloads in 230 countries

Scale: International

Frontiers for Young Minds is an award-winning, non-profit, open-access, scientific journal for kids that publishes articles written by leading researchers and peer reviewed by children aged 8-15. The initiative empowers the next generation of scientists by publishing accessible and engaging cutting-edge research across the whole of STEM, and through its unique science-engagement review process, directly empowers its Young Reviewers with understanding of the scientific process and critical thinking skills. Now a global leader in science communication, the journal has 1250+ original articles online (and downloadable) under CC-BY licence, with over 35 million views and downloads worldwide. This includes a flagship collection of articles all by Nobel Prize winners, now in its third volume:

<https://kids.frontiersin.org/collections/58611/the-nobel-collection-volume-3>. The journal is part of Frontiers' commitment to the United Nations Sustainable Development Goals and Goal 4 – Quality Education, in particular.

### OER Implementation:

Modification (OER use allowed for significant redesign of tasks or functions associated with teaching/learning)

### Key Challenges:

- Building awareness
- Budget & finance
- Project Management

**Advice:** Engage directly with your target audience - the applicability of your output will be hugely enhanced if users inform you how to make OER ideal for them.

**Commentary:** In their unique process, each article is peer reviewed by young students aged 8-15 who gain lifelong critical thinking skills in an open pedagogy structure and ensure every publication is not only understandable but also engaging for their peers. Teachers can view and download the articles for free, redistribute or recommend for homework reading. The project increases global accessibility by incorporating new global languages, and also to expand the content types to better support educators. Participants in the project are diverse: from young reviewers and science mentors to associate editors and other contributing organisations.

Products & Services	Value Added	Advantage	Business Model
Focus on provision which is complementary or alternative	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Donations Model: Funding from donations or grants, e.g., foundations, society, industry, NGOs
Target Group	Sustainability	Network	Communication Channels
New (or nontraditional) markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
We prioritise Connectivism in our approach - believing that students learn best if they are taught to navigate and create social networks via technology and use these networks to learn. In reading and sharing our articles, and even more in our peer review process, young students can use our open-access science platform to learn in a connected, technology-based way.	Open Educational Resources (OER), Open Pedagogy, Social Media

	Value Proposition	Impact
USERS	Easy, online access to all articles for anyone with an internet browser	Young learners, teachers and others keen to understand science have found our articles a much-needed resource and our usage worldwide has exploded particularly in the past 2 years. CC-BY licencing has enabled use and re-use in many different ways, and social media has enabled easy dissemination and sharing.
PROVIDERS	Teachers can freely use all our resources in classrooms or for homework learning.	Teachers and other educators have 2 different channels for engagement with Frontiers for Young Minds - either to use our freely available OERs in their classrooms, or to engage directly for their class to become Young Reviewers for our journal. Impacts are therefore very varied in this group but feedback has been universally extremely positive from educators.
INFLUENCERS	Very strong views and downloads worldwide makes us an attractive partner for donors, institutions, and media pick-ups	Our regional funders/sponsors for language translations (Hebrew and Arabic) gain excellent brand exposure and corporate social recognition for their work with us, highlighted on every article and in social media outreach.



GOVERNANCE	CC-BY licence and top international partners makes our resource easy to recommend / re-use	Our project has very limited direct contact with regulatory bodies, operating under a very open licence and on a user-led basis online, rather than directly disseminating to classroom environments. We are working with expert partners to expand our content into structured Educators' Resources, which will be easily adaptable to classrooms and curricula worldwide.
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<b>Diffusion of Innovations</b>	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓		✓	✓	✓
PROVIDERS	✓		✓	✓	
INFLUENCERS	✓				✓
GOVERNANCE	✓		✓		

## Future of Learning

<https://oktataskepzes.tka.hu/en/future-of-learning-initiative>

Tempus Public Foundation

Budapest - Online

Timeframe: 3-5 years

User base: 10000

Scale: International

The Tempus Public Foundation (TPF) is a non-profit organisation established by the Hungarian Government for the management of international cooperation programmes, including the Future of Learning initiative. TPF believes that pedagogy will become more effective by educators' thinking along with digital tools, which is confirmed by all major international research as well as policy recommendations. The concept of the Future of Learning Initiative (FLI) is about supporting everyday pedagogical practice with digital tools and collaborative learning for teachers. In this space, teachers collaborate with other teachers, learn from one another and reflect on their own practices together. For this process, the organisation provides a collaborative environment.

### OER Implementation:

Redefinition (using OER allowed for new ways of conceiving teaching and/or learning)

### Key Challenges:

- Budget & finance
- Project Management
- Building awareness

**Advice:** Make the best of what you have and you can have good results.

**Commentary:** *Future of Learning* helps bring technology closer to teachers by creating platforms and opportunities for knowledge sharing and knowledge management.

The initiative includes the "Future of Learning MOOC", which is the biggest advanced study program for teachers in the Carpathian Basin.

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Governmental Model: National and international governmental agencies providing funding for OER
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	Cost cutting and efficiencies	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
	Bring Your Own Device (BYOD), Digital Badging, E-portfolios, Flipped Learning, Learning Management System (LMS), Massive Open Online Course (MOOC), Mobile Learning, Online Assessment(s), Open Educational Practices (OEP), Open Educational Resources (OER), Open Pedagogy, Social Media, Videoconferencing, Virtual Learning Environment (VLE), Webinars

	Value Proposition	Impact
USERS	Our teachers don't have money to pay for resources, they need open, free resources.	Teachers get inspired and learn and try new innovative teaching methods.
PROVIDERS		Educators and trainers also take part in sharing knowledge and profit from shared ideas.
INFLUENCERS		
GOVERNANCE	Knowledge management is a cost effective way of sharing knowledge and training.	

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓		✓	✓	
PROVIDERS	✓		✓	✓	
INFLUENCERS					
GOVERNANCE					

## h5pcatalogue

<https://h5pcatalogue.in/>

Justwrite

Timeframe: 6-12 months

User base: 30-50

Scale: Macro (National)

The h5pcatalogue is a platform developed to create and share H5P interactive content with CC License. H5P is a free open source collaborative content framework based on Javascript which facilitates the creation, participation, and reuse of interactive content in HTML allowing the creation of images, presentations, timelines, etc. Our mission is to create a collaborative teaching learning environment so that the knowledge is co-created and distributed openly. Mrs. Sushumna Rao Tadinada started exploring and using H5P for creating content, and developed the idea to create a platform offering training to teachers on CC Licenses following the 5Rs of OER, especially suitable for Indian teaching learning environments. Their vision is to play an inspiring role in academics, students and content creation enthusiasts on creating high quality OER and Open Education Practices.

### OER Implementation:

Modification (OER use allowed for significant redesign of tasks or functions associated with teaching/learning)

### Key Challenges:

- Budget & finance
- Building awareness
- Skills development

**Advice:** Better first have a clear understanding of OER for stakeholders

**Commentary:** H5P catalogue's mission is to create a collaborative teaching learning environment so that the knowledge is co-created and distributed openly. It is supported by Justwrite, MERLOT, Skillscommon, H5P Initiative, and the Digital Education Consulting Group (DEC), and powered by Drupal. It is currently supporting faculty staff and students who want to explore OER and Open Education. This way, users create and publish interactive OER which are also used in their teaching-learning processes and within their own LMS.

Products & Services	Value Added	Advantage	Business Model
Focus on provision which is complementary or alternative	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	Cost cutting and efficiencies	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
	Bring Your Own Device (BYOD), Flipped Learning, Mobile Learning, Online Assessment(s), Open Educational Practices (OEP), Open Educational Resources (OER), Open Pedagogy, Virtual Learning Environment (VLE)

	Value Proposition	Impact
USERS	They will have a platform to share	Reaching the otherwise unreachable
PROVIDERS		
INFLUENCERS		
GOVERNANCE		

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓		✓	✓	
PROVIDERS	✓		✓	✓	
INFLUENCERS					
GOVERNANCE					

## Institute for Interactive Systems

<https://www.th-luebeck.de/isy>

<https://futureskills-sh.de/>

Technische Hochschule Lübeck

Lübeck, Germany

Timeframe: 5 years+

User base: 600

Scale: Meso (Regional / Federal)

The Institute works for the sustainable development of platforms and content for multiple target groups, especially for higher education members, but also beyond. They rely on open source technologies and systems to develop smart and connected platform services for digital learning and working. The platform provides online courses for students in Schleswig-Holstein. Courses are developed from earlier projects, and new ones are created as OER and offered as free courses (FutureLearnLab). This enables the courses to be used by university teachers, and potentially start-ups and individuals.

### OER Implementation:

Redefinition (using OER allowed for new ways of conceiving teaching and/or learning)

### Key Challenges:

- Changing culture/practices
- Budget & finance
- Communication issues

**Advice:** We are a small university of applied sciences in Germany, however, we have become very well known because of OERs and MOOCs.

**Commentary:** The institute advocates for the further use of their results through OER, especially in publicly funded projects. They call for the commitment of public authorities, as has been the case with their project

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Institutional Model: Higher education providers setting aside some part of their budget for OER programmes
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Traditional institutional or cultural	Traditional

Pedagogy	Technologies Used
All courses are based on the Constructive Alignment approach. We start with a concept of instructional and digital media and focus a lot on the careful definition of learning outcomes. In the courses themselves, different approaches are followed.	Artificial Intelligence, Blogging / Microblogging, Digital Badging, Flipped Learning, Learning Analytics, Learning Management System (LMS), Massive Open Online Course (MOOC), Microcredentials, Mobile Learning, Online Assessment(s), Open Educational Practices (OEP), Open Educational Resources (OER), Social Media, Videoconferencing, Webinars

	Value Proposition	Impact
USERS	Facilitated access and use of the content beyond higher education boundaries, enabling active engagement with the learning resources	Open access to a lot of learning resources
PROVIDERS	Easy to use even beyond project contexts, e.g. in one's own teaching or fee-based continuing education courses.	Recognition beyond institutional level
INFLUENCERS	Simplified sharing, marketing and science communication	Recognition via multiple channels
GOVERNANCE	Simplified use of project results beyond the project terms, good arguments for sustainability of projects	External feedback

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS					✓
PROVIDERS					
INFLUENCERS					
GOVERNANCE					

## LibreTexts

<https://libretexts.org/>

LibreTexts

Davis, CA, USA

Timeframe: 5 years+

User base: > 52,000 accounts

Scale: International

Libretexts is a multi-institutional collaborative venture to develop the next generation of open-access texts to improve postsecondary education at all levels of higher learning. LibreTexts is a non-profit organisation committed to freeing the textbook from the limitations and costs of traditional books. Its mission is to unite students, faculty and scholars in a cooperative effort to develop an easy-to-use online platform for the construction, customisation, and dissemination of OER. Libretexts provides dynamic courseware and technologies that facilitate education, and has a powerful OER repository with a centralised hub of libraries classified by topics. Each library holds digital bookshelves that enable bringing in workflows of OER materials. The resources are formatted to facilitate curation, customization and remixing, and placed on digital bookshelves for everyone to use. LibreTexts provides authoring permissions to any faculty member at HEIs and retains and makes their contributions available online with the sole condition that the material must carry a CC licence.

### OER Implementation:

Modification (OER use allowed for significant redesign of tasks or functions associated with teaching/learning)

### Key Challenges:

- Budget & finance
- Project Management
- Building awareness

**Advice:** OER projects should be embedded in discipline instructors. The need to cover the salaries of multiple people who only work on the project limits them elsewhere.

**Commentary:** LibreTexts is a powerful OER repository with a centralised hub of libraries classified by topics. Each library holds digital bookshelves that enables bringing in workflows of OER materials. The resources are formatted to facilitate curation, customization and remixing, and placed on digital bookshelves for everyone to use.

As an evolving ecosystem of OER content extending beyond textbooks across the entire curriculum. LibreTexts includes such enhancements as a homework system, an OER project management app, accessibility tools and more. All LibreTexts materials are available free of charge to members of the public, and LibreTexts is now a public benefit corporation.



Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Making the most of traditional/legacy knowledge	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Donations Model: Funding from donations or grants, e.g., foundations, society, industry, non-governmental agencies
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Traditional institutional or cultural	Traditional

Pedagogy	Technologies Used
LibreTexts provides instructors tools that they need to customize their instructional materials for their students. LibreTexts helps instructors choose their textbooks providing not only the textbooks but other support, including homework systems, annotation (through hypothes.is), project management, and more.	Learning Analytics, Online Assessment(s), Open Educational Resources (OER)

	Value Proposition	Impact
USERS	<p>LibreTexts provides textbooks and other educational materials which are comparable to commercial texts. Because of the malleability of OER LibreTexts allows customization by instructors to meet the needs of their students.</p> <p>LibreTexts provides free access to all texts online. A bookstore provides printed copies at cost. Our Adapt homework system will carries a low charge to maintain and curate the system</p>	About 60% of our over 900 million pageviews are from outside English speaking North America.
PROVIDERS	<p>Because LibreTexts have uniform formatting, drag and drop customization of texts by instructors is simple and fast. There is never a cost to an instructor to build their own custom book. This also simplifies training. LibreTexts hold a yearly workshop to Train the Trainers.</p>	LibreTexts supports faculty with workshops/office hours/ and forums. To date roughly 1000 custom books have been published with many more in progress. Instructors can submit requests for materials to be brought into the central repository and there is a team doing that. These are used directly by the instructors or integrated into their custom books
INFLUENCERS	LibreTexts offers high value and low cost to institutions even as compared to other OER (and low costs) providers.	
GOVERNANCE	LibreTexts is a collaboration of higher education faculty dedicated to OER providing their students the resources they need.	

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓	✓	✓	✓	
PROVIDERS	✓	✓	✓		
INFLUENCERS		✓	✓	✓	
GOVERNANCE	✓	✓	✓	✓	

## MOOC programme, UoS

<https://www.southampton.ac.uk/courses/free-online-learning.page>

University of Southampton, UK

Timeframe: 5 years+

User base: 1 million learners

Scale: International

The University of Southampton's (UoS) "MOOC programme" is an initiative for the development of massive open online courses at UoS. Strategically, it is intended that MOOCs, as open online courses, support the progress of core University activities: research, education, and enterprise / knowledge exchange. The programme also aims to understand the role of open education within the University sector and how this understanding needs to tolerate flexibility and change. UoS considers it essential to engage with the role of open education within business models in order to develop metrics around knowledge exchange and civic engagement, and aside from mere income generation. UoS MOOCs include a range of resources for teaching and learning, from videos, texts, audios, articles, interactive tasks etc. They work with FutureLearn and OERs are available within the course structure. Learners can access resources in any order they wish and these can be downloaded for free. The current strategy around our MOOC development is to see our courses supporting and progressing core University activities: research, education, enterprise/knowledge exchange. Open online courses are a vehicle for this. At the outset of the project we integrated a range of tools e.g. Padlet, Zeemap, etc. that was innovative at the time, as well as

### OER Implementation:

Redefinition (using OER allowed for new ways of conceiving teaching and/or learning)

### Key Challenges:

- Budget & finance
- Vision and setting objectives
- Building awareness

**Advice:** Be very strategic and focussed from the beginning, with MOOCs you create. Stand hard on the openness aspect - it is this that gives rise to further enterprise opportunities and reach. See MOOCs as a useful vehicle to achieve other strategic aims - and be ruthless on that focus.

**Commentary:** This project altered its aims and strategy in response to the progression of MOOC activities. This led to unforeseen outcomes, including increased digital capabilities and increased consideration of online education in a campus-based university. The current aim is to contextualise MOOCs in knowledge exchange and the relevance of this to the university is expected to result in the ongoing renewal of the programme.

linking courses to social media campaigns and campus-based events.	
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Products & Services	Value Added	Advantage	Business Model
Focus on provision which is complementary or alternative	Making the most of traditional/legacy knowledge	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Dual-Mode University: Use of OER in an online course (e.g. Massive Open Online Course) to develop a distance learning or virtual university operation
Target Group	Sustainability	Network	Communication Channels
New (or nontraditional) markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
Futurelearn's platform has an embedded pedagogy around social, dialogic learning. We aim to exploit this to the full in the design of our courses by inviting learner contribution throughout, either in comments, contribution of content (e.g. links/other resources) or in discovery-reporting activities. In this respect, we take a social constructivist approach, with at times other approaches like task-based learning or problem-based learning.	Learning Analytics, Massive Open Online Course (MOOC), Microcredentials, Mobile Learning, Open Educational Resources (OER), Webinars

	Value Proposition	Impact
USERS	Free, barrier-free access to high quality education inspired by the latest research.	We have high positive feedback ratings across our courses and many positive feedback comments from learners. Courses recruit well.
PROVIDERS	A large amount of reach and impact can be demonstrated by a small amount of central resource coordinating teams of MOOC creators and working collaboratively.	There has been an impact in UoS on MOOC creators. Staff were upskilled in digital resource creation and delivery; students gained experience in engaging with non-specialist audiences in a transnational context.
INFLUENCERS	The programme promotes our work to diverse, international audiences. It generates other enterprise opportunities (further research funding, public engagement, encouragement to study on campus).	As a founder partner of Futurelearn, we have played a role in shaping the platform and the education/business models.
GOVERNANCE	The MOOC programme responds directly to key elements of overall University strategy in support and development. A small amount of resource devoted to this can be impactful.	We have trialled different ways of using MOOCs that have shed light on what good online education looks like and also online short courses might support other University objectives. The model of central collaboration with Faculties (hub and spoke) has been useful in understanding how to maximise value.

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS			✓		✓
PROVIDERS	✓		✓	✓	✓
INFLUENCERS	✓				
GOVERNANCE	✓		✓	✓	✓

## MOOC Puertas Abiertas: Curso de Español para necesidades inmediatas

<https://moonliteproject.eu/>

Universidad Nacional de Educación a Distancia (UNED)

[https://iedra.uned.es/courses/course-v1:UNED+PuertasAbiertasI\\_003+2022/about](https://iedra.uned.es/courses/course-v1:UNED+PuertasAbiertasI_003+2022/about)

Timeframe: 6-12 months

User base: 2000

Scale: International

This MOOC was one of the outputs of the MOONLITE Project (European Commission), which harnessed the potential of MOOCs for refugees and migrants to build their language competences and entrepreneurial skills for employment, higher education and social inclusion. MOONLITE aimed to develop cross-national cooperation services to explore large-scale uptake of MOOCs in Europe and contribute to the further improvement of educational offerings to refugees both by HEIs and in cross-regional collaboration.

### OER Implementation:

Redefinition (using OER allowed for new ways of conceiving teaching and/or learning)

### Key Challenges:

- Regulatory or policy environment
- Risk management
- Technological implementation

**Advice:** Work in a team.

**Commentary:** The MOOC is a basic course in Spanish, which provides the most frequent communicative situations that a migrant/refugee encounters when arriving in the host country. The project considered working closely with all the stakeholders involved: NGOs, voluntary workers, and refugees and migrants. The project supports the consolidation of a more coherent approach to credentialization of open education and, therefore, to improve accessibility to higher education for marginalised students.

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Governmental Model: National and international governmental agencies providing funding for OER
Target Group	Sustainability	Network	Communication Channels
New (or nontraditional) markets / learners	Cost cutting and efficiencies	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
Design-based approach	Flipped Learning, Massive Open Online Course (MOOC), Microcredentials, Mobile Learning, Online Assessment(s), Open Educational Practices (OEP), Open Educational Resources (OER), Virtual Learning Environment (VLE)

	Value Proposition	Impact
USERS	It provides quality resources for free.	Discrete
PROVIDERS	It favours reuse, remix, repurposing.	Almost non-existent
INFLUENCERS	It contributes to the democratization of education.	None
GOVERNANCE	It is sustainable.	Almost non-existent

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS		✓			
PROVIDERS					
INFLUENCERS					
GOVERNANCE					

## MoodleNet

<https://moodle.net>

Timeframe: 6-12 months

User base: 500,000

Scale: International

MoodleNet is an open source federated platform for educators, focused on OER. MoodleNet is built on the philosophy of a quality education for all, and it is designed to work as a social network. It follows Moodle's values of openness, respect, integrity, and innovation. It sustainably empowers communities of educators to share, curate, and learn from each other to improve the quality of education. OERs are provided by external contributors, licensed, categorised and may be curated into collections by anyone. MoodleNet has the support of Moodle's leadership and stakeholders.

### OER Implementation:

Augmentation (substitution of OER for proprietary content with functional change or task redesign)

### Key Challenges:

- Budget & finance
- Building awareness
- Time pressure

**Commentary:** MoodleNet provides a place for selected collections of OER which are organised to facilitate finding resources suitable for any course. It is fully integrated with Moodle LMS and resources contained on any federated MoodleNet instance have the potential to be easily used in any of the numerous Moodle LMS courses, as well as to be downloaded or referenced.

Products & Services	Value Added	Advantage	Business Model
Focus on provision which is complementary or alternative	Exploration of new approaches and innovation	Traditional competences (e.g., market knowledge, expertise, improvement of existing technology)	Donations Model: Funding from donations or grants, e.g., foundations, society, industry, non-governmental agencies
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	Cost cutting and efficiencies	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)



Pedagogy	Technologies Used
We adopted ISCED categorisation and Creative Commons as standards to ensure relevance and fairness.	E-portfolios, Flipped Learning, Learning Management System (LMS), Mobile Learning, Open Educational Practices (OEP), Open Educational Resources (OER), Virtual Learning Environment (VLE)

	Value Proposition	Impact
USERS	Find the resources you need to learn from the highest rated subject matter experts.	
PROVIDERS	Provide learners globally access to your quality resources for quality education in the world.	
INFLUENCERS	This open source software, designed with UNESCO's Sustainable Development Goal 4: Quality Education in mind, is free and open to all from an established and trusted sustainable edtech provider. Content may be federated for no single point of failure.	
GOVERNANCE	This open source software, designed with UNESCO's Sustainable Development Goal 4: Quality Education in mind, is free and open to all from an established and trusted sustainable edtech provider. Content may be federated for no single point of failure.	

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS			✓	✓	
PROVIDERS	✓	✓	✓	✓	✓
INFLUENCERS			✓	✓	✓
GOVERNANCE	✓	✓	✓	✓	

## MOONLITE

<https://moonliteproject.eu/>

UNED

UNED Abierta

Timeframe: 3-5 years

User base: learners

Scale: International

A series of two MOOCs were built for displaced people arriving in Spain, such as migrants and refugees. The courses dealt with Spanish for immediate needs. The intention is to carry on developing tools with an innovative component in the context of research projects trying to make an impact in vulnerable communities. The MOOCs developed provided all the support and extra scaffolding required by these highly vulnerable groups (microvideos, strategic use of email, Facebook group, etc.).

**OER Implementation:** Augmentation (substitution of OER for proprietary content with functional change or task redesign)

### Key Challenges:

- Budget & finance
- Regulatory or policy environment
- Building awareness

**Advice:** Try and find out about the support for technological and methodological innovation and dissemination that can be expected at institutional level.

**Commentary:** The design for these MOOCs followed the participatory action research approach and has been reported to be useful and used by NGOs and other support centres. The project team adjusted the project to match the available budget and emphasised self-sufficiency. A key output from the project are guidelines on designing learning for refugees.

Products & Services	Value Added	Advantage	Business Model
Focus on provision which is complementary or alternative	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Institutional Model: Higher education providers setting aside some part of their budget for OER programmes
Target Group	Sustainability	Network	Communication Channels
New (or nontraditional) markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Traditional institutional or cultural	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
Design Thinking, Participatory Action Research	Bring Your Own Device (BYOD), Flipped Learning, Massive Open Online Course (MOOC), Online Assessment(s), Open Educational Resources (OER), Social Media

	Value Proposition	Impact
USERS	They cannot afford mainstream education	Yes
PROVIDERS	There doesn't appear to be a flow of information and collaboration between these parties	In the standard ways of expert knowledge dissemination in academia
INFLUENCERS	There doesn't appear to be a flow of information and collaboration between these parties	None
GOVERNANCE	The government of the institution is ambivalent about their support and attitude towards OERs	None

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS				✓	
PROVIDERS	✓				
INFLUENCERS	✓				
GOVERNANCE	✓				

## Norwegian Digital Learning Arena (NDLA)

[www.ndla.no](http://www.ndla.no)

<https://om.ndla.no/about-ndla/>

Norwegian Digital Learning Arena

Norway

Timeframe: 5 years+

User base: 50 000 visitors / day

Scale: Macro (National)

The Norwegian Digital Learning Arena (NDLA) is a cross-county enterprise offering open digital learning assets for upper secondary education. In addition to being a compilation of open educational resources (OER), NDLA provides a range of other online tools for sharing and cooperation. NDLA is an open, free platform funded and owned by the Norwegian counties. The platform covers a range of subjects, and offering textual resources, films, interactive resources (H5P), podcasts, and a range of different types of activities. Teachers can choose to use our resources as their preferred learning material, or combine them with textbooks etc.

### OER Implementation:

Modification (OER use allowed for significant redesign of tasks or functions associated with teaching/learning)

### Key Challenges:

- Changing culture/practices
- Building awareness
- Risk management

**Advice:** Follow open standards and learn from similar ventures. Build a sound technological framework with taxonomy and metadata in place as early as possible. This makes it possible to incrementally improve and handle big volumes. Cooperate with others on providing open source platforms for production of OER.

**Commentary:** NDLA are using yearly funding to finance the development of an open source code production platform where teacher based staff create learning resources and review what is produced in user interviews for incremental development.

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Governmental Model: National and international governmental agencies providing funding for OER.
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	Cost cutting and efficiencies	Traditional institutional or cultural	Traditional

Pedagogy	Technologies Used
We are aligned with the new framework for K-12 in Norway, supporting active learning through engaging activities, encouraging exploration and in-depth learning, as well as cross curricular approaches. We have a socio-cultural view of learning as our platform.	Blogging / Microblogging, Flipped Learning, Learning Analytics, Mobile Learning, Open Educational Resources (OER), Social Media

	Value Proposition	Impact
USERS	Free, open, accessible, multimodal, interactive, meeting all requirements in the relevant Norwegian curriculum.	More varied resources, accessible all day, free for all
PROVIDERS	Giving teachers a way of developing skills and expertise by engaging them for a period of time, giving them the opportunity to create learning resources in their field.	collaborating with and buying services from other content creators, Ed-tech and IT-companies By contracting teachers we also provide a digital competence boost in the schools they belong to.
INFLUENCERS		
GOVERNANCE	A cost-effective way of providing digital learning resources for the Norwegian counties. Contribution to teacher development and school development by providing a multitude of digital learning resources.	Resources in more subjects, also smaller subjects that has no commercial interest, cost-effective development, a tool for implementing learning reforms

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS		✓	✓		
PROVIDERS		✓			✓
INFLUENCERS					
GOVERNANCE	✓				

## OER Committee, Cape Breton

<https://libguides.cbu.ca/c.php?g=710356>

CBU

Cape Breton, Nova Scotia

Timeframe: 1-2 years

User base: 5000

Scale: Meso (Regional / Federal)

The OER Committee focuses on advancing the Council of Atlantic Academic Libraries' (CAAL-CBPA) strategic goals in relation to OER, and coordinating related activities. It aimed to identify, analyse, and facilitate OER innovations, strategies, and trends. Part of its work is precisely proposing OER initiatives as well as communicating with library consortiums regarding OER issues and developments. ng, and spark creativity and innovation. OER Committee provides training and facilitation across campus at zero cost, supporting OERs developed at CBU and across Atlantic

Canada:

<https://atlanticoer-relatlantique.ca/>

### OER Implementation:

Substitution (OER replacing proprietary content with no functional change)

### Key Challenges:

- Budget & finance
- Building awareness
- Regulatory or policy environment

### Advice: Do it!

**Commentary:** The OER Committee's mission is to leverage community and collaboration to advance scholarship, innovation, diversity and accessibility in teaching, learning, research, and student experiences. They envision the creation of a rich and diverse learning and research ecosystem of libraries employing collaborative solutions to inspire learning. Their activities include integration of learning and teaching activities into Moodle; a grant programme for OER creation; and an outreach committee.

Products & Services	Value Added	Advantage	Business Model
Focus on provision which is complementary or alternative	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Institutional Model: Higher education providers setting aside some part of their budget for OER programmes We get around 50k a year for grants, training and support
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	New processes to generate revenues, or	Traditional institutional or cultural	New or innovative channels (physical or virtual)

	cost-cutting in existing processes		
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Pedagogy	Technologies Used
Left to the author's choice	Learning Management System (LMS), Online Assessment(s), Open Educational Resources (OER), Open Pedagogy

	Value Proposition	Impact
USERS	Definitely the reason we support OER is to support students financial needs	We've saved students about half a million dollars by using OER here on campus
PROVIDERS	We have Pressbooks which is great for the people creating OER, and grants for them to create.	We support the educators financially and with training and support
INFLUENCERS		We gather info and ask for support to admin
GOVERNANCE	It's good marketing	We formed a working group with library, faculty, teaching and learning and students

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS					✓
PROVIDERS				✓	
INFLUENCERS				✓	
GOVERNANCE					

## Oklahoma State University, OpenOKState

<https://info.library.okstate.edu/open>

Oklahoma State University

Stillwater, Oklahoma, USA

Timeframe: 5 years+

User base: University enrollment of 24,000

Scale: Micro (Institutional / Local)

The OpenOKState OER program contributes to the collaborative success of Oklahoma State University (OSU) students, faculty, and the state of Oklahoma by facilitating open, customisable access to meaningful teaching, learning, and research resources and experiences. OSU's libraries created the 'OpenOKState' OER program to provide a comprehensive overview of the institution's plan to support awareness and growth of OER initiatives across campus, in response to the documented impact that the high cost of commercial textbooks has on the personal lives and academic progress of university students. The expected results relate to the increase of affordability and access to educational experiences and encourage faculty experimentation and innovation. This initiative engages with different stakeholders across campus to help shift campus culture and procure additional funding. Through these efforts, OSU can improve student success, support innovative pedagogy and research, and improve metrics related to performance-based funding.

### OER Implementation:

Augmentation (substitution of OER for proprietary content with functional change or task redesign)

### Key Challenges:

- Communication issues
- Building awareness
- Regulatory or policy environment

**Advice:** Read, listen, figure out where on your campus it is already happening. Acknowledge that these practices aren't necessarily new; educators and scholars have shared with each other already. Keeping things 'messy' can be good: once we automate collection of metrics, it is awfully easy to start valuing what we can measure rather than doing the difficult, relationship centered work of measuring what we value.

**Commentary:** The OpenOKState OER program contributes to the collaborative success of OSU students, faculty, and the state of Oklahoma by facilitating open, customizable access to meaningful teaching, learning, and research resources and experiences. It is a well consolidated program at the university and encourages campus-wide advocacy and support for course integration of OER through formal recommendations from the Faculty Council and the Graduate and Professional Student Government Association. The program focuses on building infrastructure and alliances across campus, outreach and communication strategies to achieve goals, and assessment of OER plans.



Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Making the most of traditional/legacy knowledge	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Institutional Model: Higher education providers setting aside some part of their budget for OER programmes
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners		Traditional institutional or cultural	Traditional

Pedagogy	Technologies Used
The overall OpenOKState program is designed through the lens of diffusion of innovation theory (learning heavily on the portions regarding communication channels and compatibility); strategies enacted are attentive to scholarship influenced by critical feminist theory.	Learning Management System (LMS), Open Educational Practices (OEP), Open Educational Resources (OER), Open Pedagogy, Social Media

	Value Proposition	Impact
USERS	Financial savings, representation, customized resources, instructional design modified to address community goals	Recent course markings reflect 34 courses across five colleges on two campuses. Over 4,500 students will be in classes using OER/open practices Spring 2023. Our entire first year comp program (Comp I and II), technical writing program, introduction to speech program are using OER
PROVIDERS	Center faculty expertise, students have resources before first day of class, OER as complementary/extension of research	Letters of thanks, support and acknowledgement of impact on each faculty/instructor's field are sent from the Library administration for use in retention and promotion dossier. Our English department has specifically included OER in their promotion documents.

INFLUENCERS	The benefits of OER and open practices align with our institutions stated priorities	The OpenOKState program has informed statewide OER adoption and support strategies.
GOVERNANCE	Highlight and increase visibility of our scholars' research and pedagogy	

<b>Diffusion of Innovations</b>	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓	✓	✓		✓
PROVIDERS	✓	✓	✓	✓	✓
INFLUENCERS		✓			✓
GOVERNANCE	✓	✓	✓		✓

## Open Academic e-textbooks KALLIPOS

<https://www.kallipos.gr/en/>

National Technical University of Athens  
GREECE

Timeframe: 5 years+

User base: 300.000 (all undergraduate and postgraduate students as well as University Teachers in Greece and Cyprus)

Scale: Macro (National)

KALLIPOS is a large-scale project for developing high quality digital academic textbooks and making them available through open licenses. It has shaped the OER landscape in Greece through the first comprehensive effort to introduce electronic interactive, multimedia textbooks in HE. It targets the organised creation, storage, distribution and long-term preservation of open-access textbooks and learning objects for the academic and research community.

Starting from the original material delivered by the authors in MS word or Latex, we use three publishing methods: (a) producing high-quality pdf directly; (b) using a commercial editing tool, like InDesign; (c) using DocBook, an XML-based book description. The third is the most promising one, due to its versatility in producing various output formats and the ease in making revisions, a very desirable feature for content preservation and updating. Funding comes from the National Program of Public Investments. We publish open calls for submitting book authoring Proposals, then the Project's Scientific (Steering) Committee evaluates the submitted Proposals through the support of external experts.

### OER Implementation:

Augmentation (substitution of OER for proprietary content with functional change or task redesign)

### Key Challenges:

- Budget & finance
- Project Management
- Building awareness

**Commentary:** Kallipos aims to produce more than 1500 open, high-quality textbooks within the upcoming years for undergraduate and postgraduate courses while covering as many different fields of education as possible. The Project has been developed in two phases. In the first phase (2013-2015) it was co-funded by the EU and the Greek State and had the impressive outcome of 520 undergraduate textbooks, written in Greek. In the current, second phase (2020-2023), named KALLIPOS+, an even bigger objective has been set: to develop more than 700 academic textbooks of a broader scope and type, which are expected to become available at the end of this phase (2023) through the project's repository

(<https://repository.kallipos.gr/>). A Central Support Team including linguistic and technical editors is responsible for every step of the workflow.

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Making the most of traditional/legacy knowledge	Traditional competences (e.g., market knowledge, expertise, improvement of existing technology)	Governmental Model: National and international governmental agencies providing funding for OER
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	Traditional

Pedagogy	Technologies Used
The books created by KALLIPOS are closely related to undergraduate courses taught by the Greek Universities. This relation is reflected to the criteria used for the evaluation of the Proposals. As a minimum requirement we have set that any proposed book should cover at least one semester course of the Study Program of at least one University Department.	Open Educational Resources (OER)

	Value Proposition	Impact
USERS	Educational material (textbooks) are freely available to everyone, without any geographical, time and economic constraints.	
PROVIDERS	Educators can find adequate high-quality material to choose from and propose to students for their studies.	
INFLUENCERS		
GOVERNANCE	Offering open material is a cost-effective alternative to paying for commercial textbooks. Until now the Greek Government pays a lot of money every year to cover the cost of one printed book per student for each semester course in his/her Study Program. This corresponds to about 1500€ per student for the entire undergraduate study Program.	

## Open Education for a Better World

<http://oe4bw.org>

Jozef Stefan Institute

<https://oe4bw.miteam.si/asset/vffW5faFhrdQ3NFKQ>

Timeframe: 5 years+

User base: 500

Scale: International

Open Education for a Better World (OE4BW) is an international online mentoring programme that has been developed to unlock the potential of open education in achieving the UN Sustainable Development Goals. The programme provides an innovative approach to building Open Educational Resources, connecting developers of educational materials with experts volunteering as mentors. OE4BW supports the development and implementation of freely accessible modules and resources for online education on topics with social impact according to the UN Sustainable Development Goals (SDGs). Proposals for the projects of OER development are collected with a global call. Accepted proposals are selected based on (1) their compatibility with SDGs, (2) social impact, (3) maturity of the idea, and (4) capacity and commitment of the applicant to make the idea come true. In the future, the initiative aims for more people to be involved in the program to learn and raise awareness about open education and open educational resources as well as producing high quality OERs.

### OER Implementation:

Redefinition (using OER allowed for new ways of conceiving teaching and/or learning)

### Key Challenges:

- Budget & finance
- Communication issues
- Technological implementation

**Commentary:** An international online mentoring programme Open Education for a Better World (OE4BW) has been developed to unlock the potential of open education in achieving the UN Sustainable Development Goals. The programme provides an innovative approach to building Open Educational Resources, connecting developers of educational materials with experts volunteering as mentors. The model of the OE4BW mentorship programme has been carefully designed and tested in five subsequent years. Results have proved the model to be useful for building capacities in open education, while producing concrete educational materials with great potential for social impact.

<b>Products &amp; Services</b>	<b>Value Added</b>	<b>Advantage</b>	<b>Business Model</b>
Focus on provision which is complementary or alternative	Making the most of traditional/legacy knowledge	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Donations Model: Funding from donations or grants, e.g., foundations, society, industry, non-governmental agencies
<b>Target Group</b>	<b>Sustainability</b>	<b>Network</b>	<b>Communication Channels</b>
New (or nontraditional) markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)

<b>Pedagogy</b>	<b>Technologies Used</b>
The OE4BW Model development process had the following steps: (1) designing a model, (2) testing the model through the first implementation, (3) analysing the results of the first implementation and improve the model, (4) testing the improved model with the second implementation, (5) analysing the results of the second implementation and adapting the model to be suitable for a long-term functioning on a global scale. In steps (3) and (5), feedback was collected with two different questionnaires sent to the developers and to the mentors, respectively.	Artificial Intelligence, Massive Open Online Course (MOOC), Open Educational Resources (OER), Virtual Learning Environment (VLE), Webinars

	Value Proposition	Impact
USERS	The mentorship model enables developers of OER to learn how to produce an OER.	In scope of the OE4BW program developers learn how to design and implement an OER.
PROVIDERS	The providers can learn how to produce an open educational resource.	New, innovative OERs are produced in the scope of the OE4BW program and have the influence on providers. On the other side people learn how to produce OERs with help of their mentors.
INFLUENCERS	The model should have influence on influences through a bottom up perspective.	The people who are part of our program become knowledgeable about OERs and may have influence on influencers in their countries.
GOVERNANCE	The model should have influence on the governance through a bottom-up perspective.	The people who are part of our program become knowledgeable about OERs and may have influence on governance in their countries.

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓				
PROVIDERS	✓				
INFLUENCERS		✓			
GOVERNANCE		✓			

## Open Library 'Maktaba Huria'

Shiabu Foundation

Zanzibar

Timeframe: 5 years+

User base: 10,225+

Scale: Macro (National)

Open library "Maktaba Huria as in Swahili" is an initiative aiming to give the general public access to library services anywhere, at any time, 24/7 through online platforms and offline (that is physical books) through our affiliated partners. Users enjoy access to all library services (affiliated institutions) by registering from Pemba Public Library. Through this initiative, users get improved services such as those who seek assistance from the expert concerning the information they are looking for. For example: students/users might go to the health library at public hospitals to get books and associated materials and get professional consultations from experts in the medical arena. By using one registration from Pemba Public Library, users will be able to enjoy the accessibility to all library services to all libraries (affiliated institutions).

### OER Implementation:

Modification (OER use allowed for significant redesign of tasks or functions associated with teaching/learning)

### Key Challenges:

- Budget & finance

**Advice:** We often think of Education as inventing totally new ideas, but they also impact existing business. Since they think differently, they can come up with innovative ways to expand and develop the existing enterprises.

**Commentary:** Open library "Maktaba Huria as in Swahili" is an initiative aiming to give access to the public in general to access the library services anywhere, at any time, 24/7 through online platforms and offline (physical books) through affiliated partners. Through this initiative, the users (public) will access the service and get professional information from professionals and experts in their field.

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision		Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Donations Model: Funding from donations or grants, e.g., foundations, society, industry, non-governmental agencies
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	Cost cutting and efficiencies	Traditional institutional or cultural	New or innovative channels (physical or virtual)



Pedagogy	Technologies Used
	Blogging / Microblogging, Bring Your Own Device (BYOD), Learning Management System (LMS), Massive Open Online Course (MOOC), Mobile Learning, Online Assessment(s), Open Educational Practices (OEP), Open Educational Resources (OER), Videoconferencing, Virtual Learning Environment (VLE), Webinars

## Open Resources Campus NRW (ORCA.nrw)

<https://www.orca.nrw/>

North Rhine-Westphalia, Germany

Timeframe: 1-2 years

User base: Teachers and students in Higher Education Institutions in Germany, especially in North Rhine-Westphalia (NRW)

Scale: Meso (Regional / Federal)

[ORCA.nrw](https://www.orca.nrw/) is a free online platform for digitally supported teaching and learning at universities in North Rhine Westphalia (NRW), organised under the umbrella of the [Digitale Hochschule NRW](#) and funded by the Ministry of Culture and Science of NRW. Connecting 37 Higher Education Institutions in North Rhine-Westphalia, ORCA.nrw is one of the largest initiatives of its kind in Germany. The main target group consists of teachers and students in German Higher Education Institutions, especially from NRW. Via ORCA.nrw, reusable OER content ("CC BY-SA 4.0", "CC BY" or "CC 0") is provided for subsequent reuse by others ). Across the whole OER life cycle, ORCA.nrw and its partners provide support for OER authors

**OER Implementation:** Augmentation (substitution of OER for proprietary content with functional change or task redesign)

### Key Challenges:

- Building awareness
- Changing culture/practices
- Technological implementation

**Advice:** When providing OER materials, it can be helpful to illustrate how they address current and relevant challenges in the respective subject areas.

**Commentary:** One of ORCA.nrw's core tasks is to provide a comprehensive pool of Open Educational Resources for as many subject areas as possible. In various funding programs, the Ministry of Culture and Science of NRW supports the creation and long term use of OER as well as the provision of these materials via ORCA.nrw.

For example: In the latest round of the funding line "OER-Content.nrw", the conception and development of subject-specific or interdisciplinary teaching and learning materials (e.g. online courses or online self-assessments that can be used as self-learning materials or as a support for regular courses) are funded.

ORCA.nrw is connected to other OER-Repositories via the Open Educational Resources Search Index [OERSI](#). Hereby, OER-materials from ORCA.nrw can also be found in other institutions/contexts.

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision		Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Governmental Model: National and international governmental agencies providing funding for OER
Target Group	Sustainability	Network	Communication Channels
		Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	

Pedagogy	Technologies Used
	Bloggig / Microblogging, Learning Management System (LMS), Online Assessment(s), Open Educational Practices (OEP), Open Educational Resources (OER), Other (please describe)

	Value Proposition	Impact
USERS	Students can also use materials from ORCA.nrw for self-study (assessments, courses, serious games, videos and audios).	
PROVIDERS	For teachers, ORCA.nrw creates incentives for the use, creation and dissemination of OER by providing a comprehensive pool of teaching and learning materials, by implementing a technical infrastructure dedicated to OER, and by offering various support services as well as opportunities for exchange, collaboration and networking.	
INFLUENCERS		
GOVERNANCE		

## Open.Ed - The University of Edinburgh's OER Service

<https://open.ed.ac.uk/>

University of Edinburgh

Edinburgh, Scotland

Timeframe: 5 years+

User base: 65,000 staff and students

Scale: Micro (Institutional / Local)

Open educational resources play an important role in supporting the University of Edinburgh's vision, purpose and values; to discover knowledge and make the world a better place. The university has an OER Policy, supported by an OER Service. The OER Service provides advice and guidance on creating and using OER and runs a digital skills programme to develop digital and copyright literacy and upskills staff and students engaging with OER. The service supports schools and colleges to embed open education and co-creation in the curriculum through OER creation assignments and student engagement projects. Rather than having a single dedicated OER repository, the university uses a wide range of platforms to manage and share OER. These are collated on Open.Ed a one-stop shop that provides access to OER created by staff and students. The OER Service student intern programme encourages students to engage with open education and knowledge activism.

### OER Implementation:

Modification (OER use allowed for significant redesign of tasks or functions associated with teaching/learning)

### Key Challenges:

- Building awareness
- Skills development
- Time pressure

**Advice:** Embed open education and OER in curriculum transformation and place OER at the heart of the sustainability agenda. Focus on the value proposition of OER for your institution, develop digital skills and copyright literacy for staff and students, normalise the use of open licences and make it easy to add open licences in institutional systems, develop a robust policy environment, demonstrate and clearly communicate the benefits for students, work in partnership with students and co-create learning opportunities and resources.

**Commentary:** [This paper](#) provides an overview of OER and open education in the curriculum at the University of Edinburgh.

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Making the most of traditional/legacy knowledge	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Institutional Model: Higher education providers setting aside some part of their budget for OER programmes

Target Group	Sustainability	Network	Communication Channels
Existing markets / learners		Traditional institutional or cultural	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
Staff and students adopt a wide range of pedagogical models and theoretical approaches to create open educational resources. Co-creation is widespread.	Blogging / Microblogging, Massive Open Online Course (MOOC), Open Educational Practices (OEP), Open Educational Resources (OER), Open Pedagogy, Social Media, Webinars, Wikis

	Value Proposition	Impact
USERS	Engaging with open education, OER and open knowledge through curriculum assignments can help learners develop a wide range of core disciplinary competencies and transferable attributes including: Digital, data and copyright literacy skills; understanding how knowledge and information is created shared and contested online; collaborative working and collective knowledge creation; information synthesis; critical thinking and source evaluation; writing as public outreach.	
PROVIDERS		
INFLUENCERS	Supporting the adoption of open licences and improving copyright literacy and digital skills minimises the risk of breaching copyright. Having clear policies and processes ensures all rights holders are aware of where their rights and responsibilities lie.	
GOVERNANCE	Supporting engagement with open education helps the University to achieve its institutional mission and vision to share knowledge.	

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS					
PROVIDERS					
INFLUENCERS	✓				✓
GOVERNANCE	✓				✓

## OpenLearn

<http://openlearn.com>

The Open University (UK)

Timeframe: 5 years+

User base: >10m / year

Scale: International

OpenLearn is a free learning platform delivered by The Open University as part of its Royal Charter commitment to the support of the wellbeing of the community. It also generates new student enquiries for The Open University as learners engage with OER and want to take their learning further. The vision of The Open University (UK) is to break down barriers to education by reaching millions of learners each year. OER are core to their social mission and serve to remove barriers to starting education such as access, lack of confidence, and cost. OpenLearn pays for itself in terms of new student registrations. Because much of the content is modified from the taught curriculum, production costs can be low. OpenLearn OER is also published to multiple social networks and channels to extend reach. The majority of the content is in English, with a strong and growing body of OER in Welsh (funded by the Welsh gov't), followed by Ukrainian.

### OER Implementation:

Modification (OER use allowed for significant redesign of tasks or functions associated with teaching/learning)

### Key Challenges:

- Building awareness
- Changing culture/practices
- Technological implementation

**Advice:** Work out your business model carefully.

**Commentary:** OpenLearn is a trailblazer for the provision of high quality OER at scale and breadth, for free and accessible to all. The OpenLearn team plan, commission and develop content that unites faculty and University priorities with areas of topical and general interest. As well as serving the public, this supports their own student population in their academic, skills and career and personal development endeavours, delivering quality assets openly available for teaching and learning.

Products & Services	Value Added	Advantage	Business Model
Focus on provision which is complementary or alternative	Making the most of traditional/legacy knowledge	Traditional competences (e.g., market knowledge, expertise, improvement of existing technology)	Institutional Model: Higher education providers setting aside some part of their budget for OER programmes

Target Group	Sustainability	Network	Communication Channels
New (or nontraditional) markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
OpenLearn courses adapted from the formal curriculum follow the standard learning design approach adopted for formal teaching but are embellished for online consumption. Non-curriculum derived content (courses, videos, interactives and articles) are grounded in rich media, interactivity and are often to engage learners in topical content..	Digital Badging, E-portfolios, Learning Analytics, Learning Management System (LMS), Online Assessment(s), Open Educational Practices (OEP), Open Educational Resources (OER), Social Media, Virtual Learning Environment (VLE)

	Value Proposition	Impact
USERS	Free to access, no start or finish times, robust platform, good UX. Courses are available in multiple formats to allow for reuse.	Highly impactful in a positive way.
PROVIDERS	Existing academic staff write for the platform.	OpenLearn enables academics to publish via a different means and to gain access to a large audience and the data associated with that activity.
INFLUENCERS	Relationship with the Development Office enables grants to fund additional platform development work.	OpenLearn is regularly used to support bids across the faculties as a sign that the university is committed to social good.
GOVERNANCE	QA is aligned with formal content production standards ensuring high quality educational material is published. Governance is internal with stakeholders from all four UK nations.	Core to business, OER delivery via OpenLearn also supports a range of projects and initiatives in other areas of the university.

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS		✓			
PROVIDERS					✓
INFLUENCERS		✓			
GOVERNANCE			✓		



## Peoples-uni

<http://peoples-uni.org>

People's Open Access Education Initiative (Peoples-uni)

Online but HQ in the UK

Timeframe: 5 years+

User base: 6000

Scale: International

Peoples-uni was established in the UK as an educational charity to build Public Health capacity in low to middle-income countries through online learning. The initiative used open source software, OER and volunteer tutors. It prioritised accredited awards for their programs by strategic partnerships with The UK Royal Society for Public Health, Manchester Metropolitan University (UK), and the Euclid University. Hosted in Moodle, courses were developed for Masters and continuing professional development. Peoples-uni has now closed, but its courses and curriculum are published under CC licences, and have been adopted by four other educational providers.

### OER Implementation:

Redefinition (using OER allowed for new ways of conceiving teaching and/or learning)

### Key Challenges:

- Skills development
- Budget & finance
- Changing culture/practices

**Advice:** Go for it. Availability of OER and OEP is expanding rapidly.

**Commentary:** The Peoples-uni project's experience demonstrated that it is possible to develop and run an online program outside the traditional higher education system, using volunteer faculty and open source materials and infrastructure, leading to validated university awards and positive student outcomes. Success was determined by the availability of the internet and the existence of an open access educational delivery platform and educational materials. A small charge was made to students for registration and certification.

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Community based: Members of a community or network collaboratively create and use OER, generating revenue through services and/or infrastructure
Target Group	Sustainability	Network	Communication Channels
New (or nontraditional) markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	

Pedagogy	Technologies Used
We have previously described the theoretical basis of our model of global learning as “[...] an extension of Connectivism to offer an innovative and practical approach to the enormous problem of global Public Health human resource shortages”	Learning Management System (LMS), Mobile Learning, Online Assessment(s), Open Educational Practices (OEP), Open Educational Resources (OER), Virtual Learning Environment (VLE)

	Value Proposition	Impact
USERS	No alternative	A number of successful <a href="#">outcomes</a> including university validated master’s level awards, continuing professional development, positive feedback from students, and the application by alumni of skills learned
PROVIDERS	Again, no alternative for our model	
INFLUENCERS		
GOVERNANCE	With no funding, OER were the only means to develop a programme	

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓				
PROVIDERS	✓				
INFLUENCERS					
GOVERNANCE					

## Pressbooks

<https://pressbooks.com>

<https://pressbooks.org>

Pressbooks

Canada

Timeframe: 5 years+

User base: 100,000+

Scale: International

Pressbooks makes open source book publishing software and provides a Software as a service (SaaS) offering for individuals and institutional clients that includes hosting, training, and support. Pressbooks Create & Pressbooks Results for LMS comprise dozens of plugins and themes that transform WordPress into a fully realised publishing tool capable of publishing books to the web, producing attractive EPUB/PDF exports, and connecting public or private content to various institutional platforms.

As our SaaS business has matured in the past 5 years, we have reduced the number of custom development contracts we've taken on and focused more on general product improvements designed to benefit our institutional and individual users. Pressbooks have built an API-based cloning routine that allows users to quickly and easily adapt openly licensed material published with our platform, and offer subsidised/free hosting for openly licensed projects that serve the public good. Pressbooks is an initiative motivated by the Cape Town Declaration and the UN declaration of human rights; especially the principles of free and accessible education for all.

### OER Implementation:

Modification (OER use allowed for significant redesign of tasks or functions associated with teaching/learning)

### Key Challenges:

- Technological implementation
- Budget & finance
- Vision and setting objectives

**Advice:** The licensing and sustainability of our OER infrastructure/platforms is a hugely important consideration. The past 20 years have produced a sizable graveyard of abandoned platforms/projects, both proprietary and openly licensed. Instead of founding yet another app/platform, begin with first principles, and consider contributing to/supporting an existing platform that [meets core objectives](#).

**Commentary:** Pressbooks has shown that it is possible to develop and maintain high-quality open publishing software capable of supporting many of the needs of educators who wish to publish OER. The Pressbooks Directory (<https://pressbooks.directory>) contains links to 4000+ open access books published using the Pressbooks platform. Pressbooks have long supported and encouraged sharing and the use of open copyright licenses.

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Institutional Model: Higher education providers setting aside some part of their budget for OER programmes
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	Cost cutting and efficiencies	Traditional institutional or cultural	Traditional

Pedagogy	Technologies Used
These are enormously varied.	Blogging / Microblogging, E-portfolios, Flipped Learning, Learning Analytics, Learning Management System (LMS), Mobile Learning, Online Assessment(s), Open Educational Practices (OEP), Open Educational Resources (OER), Open Pedagogy, Virtual Learning Environment (VLE), Webinars

	Value Proposition	Impact
USERS	It's easy to see value of 'free' for digital material -- it definitely helps ensure access to education for a larger chunk of the global population. The permissions of openly licensed content are also valuable to those learners who want to retain or revise/remix content (a smaller proportion, to be sure, but still significant)	They have a richer, broader variety of free and openly licensed material to learn from.
PROVIDERS	OER is (or can be) effective for this group largely because it freely grants permissions that are structurally significant to effective educational practices. The ability to personalize material for a learning context is fundamental to many educators' practices and OER makes it permissible not only to do this, but to share/redistribute those personalizations.	They can find open material to adopt/adapt (with Pressbooks Directory), can quickly clone, revise, or create OER (with Pressbooks Create), and can connect graded learning activities to their LMS/VLE (with Pressbooks Results for LMS) to better understand what learning is taking place when students engage with their OER content.

INFLUENCERS	For policymakers, it's important to increase the impact of initial spend. For public spending, ensuring that the public has free access to access & improve/reuse/revise products of public investment seems like an obvious benefit. There's some argument that open licenses for digital content can help content given away by 'influencers' increase social capital and potentially lead to increased sales of print material or other merchandise. Open licenses are certainly more conducive to virality without any legal encumbrances, though it's unknown whether this has practical business value.	N/A
GOVERNANCE	Money not spent on course materials can be used by learners for other educational objectives, like tuition. OER also decreases the withdrawal rate without harming achievement, which helps institutions who have graduation/retention goals. OER can enable higher-value pedagogical interventions, though this is not guaranteed.	They have tools for running an institutional publishing program and measuring/reporting on its impacts. Institutions can replace expensive proprietary solutions with something that costs students nothing and has a fixed/known annual institutional cost.

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓	✓	✓	✓	✓
PROVIDERS	✓	✓	✓	✓	✓
INFLUENCERS					
GOVERNANCE	✓		✓	✓	

## SABIER

<https://sabier.org/>

SABIER

Minneapolis, Minnesota, USA

Timeframe: 5 years+

User base: unknown

Scale: International

SABIER provides stipends for K-12 teachers working to create more equity in their materials and instruction. This initiative aims to enhance teachers' skills in modifying lessons using OER so learning is contextualised (Ghana), student's voices can be incorporated in the curriculum, all cultures are represented in the standard curriculum, and students can use digital tools and multiple types of media to do collaborative problem solving. All of SABIER's content projects are free, openly licensed courses that are designed for both distance learning and face-to-face learning to be used as a replacement of the curriculum or as a digital addition for existing ones.

### OER Implementation:

Modification (OER use allowed for significant redesign of tasks or functions associated with teaching/learning)

### Key Challenges:

- Changing culture/practices
- Building awareness
- Budget & finance

**Commentary:** SABIER's work enables philanthropy and foundation funding to go directly to supporting teachers and students to be able to use free openly licensed content that can be adapted to meet the needs of students via an LMS. They also create new innovative OER used with an LMS. The initiative has partnered with outstanding regional and global organisations such as Minitex, GeoGebra, eClass4Learning, University of Michigan's Center for Digital Curricula, California State University-Davis's Libretexts, The Minnesota Partnership for Collaborative Curriculum, and Iowa's Area Education Agencies PD Online.

Products & Services	Value Added	Advantage	Business Model
Focus on teacher teacher professional development	Increased skill of teachers	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Donations Model: Funding from donations or grants, e.g., foundations, society, industry, non-governmental agencies
Target Group	Sustainability	Network	Communication Channels
K-12, the group of learners that is at least 5 times as large as Higher Ed.	Ne Redirect current expenditures and actually educate everyone. We don't lack resources.	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture) Partnerships with existing professional development providers	Traditional, well, mostly Whatsapp and Zoom, BigBlueButton or Teams.

Pedagogy	Technologies Used
Using OER with an LMS	Bring Your Own Device (BYOD), Flipped Learning, Learning Analytics, Learning Management System (LMS), Mobile Learning, Digital F2F Assessment, Open Educational Resources (OER), Virtual Learning Environment (VLE)

	Value Proposition	Impact
USERS	Students can better see themselves in the content they're studying; student voices can be incorporated directly into the curriculum; all cultures can be represented in the standard curriculum; students are able to do collaborative problem solving using digital tools (in-person or remote;) students can use multiple types of media to create solutions to problems.	
PROVIDERS	Learning materials can be modified at the classroom level ensuring better fit for students and greater autonomy for educators.	
INFLUENCERS	Seen as responding to the needs of educators and students.	In progress
GOVERNANCE	reduced expenses	In progress

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓	✓	✓	✓	✓
PROVIDERS					
INFLUENCERS					
GOVERNANCE					

## Smith ScholarWorks

<https://scholarworks.smith.edu/oer/>

Smith College

Massachusetts, USA

Timeframe: 3-5 years

User base: Thousands

Scale: International

Smith ScholarWorks is an institutional digital repository that provides access to the Smith community's created OER. This advances scholarship and encourages the growth of scholarly communities through open access, quick discovery and wide dissemination of scholarly and creative content by Smith College faculty, students and staff. Submission, organisation, and maintenance activities of the repository are under the purview of the college libraries. The initiative complies with public research mandates from funders (State of California, the National Science Foundation, and the U.S. government) by disseminating research results and data publicly.

### OER Implementation:

Substitution (OER replacing proprietary content with no functional change)

### Key Challenges:

- Building awareness
- Changing culture/practices
- Budget & finance

**Advice:** Patience. Do the easy things, find people already interested before trying to convince naysayers.

**Commentary:** Smith ScholarWorks collection currently includes open textbooks, video courses, open labs, and tutorials allowing faculty the opportunity to produce, teach, and engage with free, customisable and openly-licensed materials. They aim to expand and build upon their open resource collections.

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Institutional Model: Higher education providers setting aside some part of their budget for OER programmes
Target Group	Sustainability	Network	Communication Channels
New (or nontraditional) markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)



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Pedagogy	Technologies Used
Currently working on plan to educate all stakeholders on all aspects of OER including open pedagogy	Flipped Learning, Massive Open Online Course (MOOC), Open Educational Practices (OEP), Open Educational Resources (OER), Open Pedagogy

	Value Proposition	Impact
USERS	Equity in access. Removing price barriers.	Hundreds of thousands
PROVIDERS	Use of a dynamic pedagogy	Some are doing it on their own. My next step is to communicate with the early adopters and let them help us on the library side to increase adoption and creation.
INFLUENCERS		We have an <a href="#">Open Access Policy (2015)</a>
GOVERNANCE	Conforms to stated equity and inclusion goals.	An OER Working Group was formed in 2023

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS		✓	✓		✓
PROVIDERS	✓				✓
INFLUENCERS					
GOVERNANCE	✓				✓

## SPLOTS

<https://splot.ca/>

Originally developed at Thompson Rivers University (TRU), BC, Canada but used around the world

Timeframe: 5 years+

User base: Unknown... 1000+

Scale: International

SPLIT permits creating simple, collaborative Wordpress sites for teaching. This project was not strictly designed as OER but to address specific issues: a need for simple to use, single purpose tools; a low barrier of entry; and facilitated content creation: achieved without the need for learners to create accounts or provide identifying information (unless they chose to). A main shift was creating systems for sharing content, media, writing in a public space where the choice to list authorship is on the author.

### OER Implementation:

Redefinition (using OER allowed for new ways of conceiving teaching and/or learning)

### Key Challenges:

- Changing culture/practices
- Building awareness
- Limited resources

**Advice:** If the development of the OER can fuel your own creative spirit, you are lucky!

**Commentary:** SPLIT was conceived as an exemplar of open technology. The first generation of educational resources were created as WordPress themes with all the functionality and options for an owner of a site to change/customise its capabilities. The ambition is that the project continues to grow at both the top down (institutional) and grass root (by individual innovators) levels. Initial development was supported by an institutional fellowship and a small fellowship from Reclaim Hosting. The WordPress SPLITS have features to enable required or user selected licenses to media shared. Many authoring and sharing features have been added based on the feedback from users.

Products & Services	Value Added	Advantage	Business Model
Focus on provision which is complementary or alternative	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Donations Model: Funding from donations or grants, e.g., foundations, society, industry, non-governmental agencies
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
	Blogging / Microblogging, Open Educational Resources (OER), Open Pedagogy, Social Media

	Value Proposition	Impact
USERS	No cost, flexible/ease of use, customized by faculty for their learning context	Hard to say, these are used by quite a number of educators for specific activities, for a powerful result see this post for what a student did from seeing her teacher use a SPLOT <a href="https://tdh.bergbuilds.domains/pedagogy/splot/">https://tdh.bergbuilds.domains/pedagogy/splot/</a>
PROVIDERS	Can be self managed, easily customized	This often provides innovative teachers the means to do activities that often are not possible in an LMS/VLE
INFLUENCERS		
GOVERNANCE	No major investment or cost needed, simple web hosting	

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓	✓	✓		✓
PROVIDERS	✓		✓	✓	✓
INFLUENCERS					✓
GOVERNANCE				✓	

## Technology-enabled organisational learning (ULTIMATE)

<https://oro.open.ac.uk/92841/>

<https://iet.open.ac.uk/study/lesley-boyd-shares-pride-as-ou-phd-has-crossed-many-boundaries>

Lesley Boyd / The Open University (UK)

Timeframe: 3-5 years

User base: 200

Scale: Micro (Institutional / Local)

The ULTIMATE (Using Learning Technology in Making Action based Transformative Enhancements) framework is a collaborative action-based research approach and conceptual framework, which can be applied to a variety of contexts. ULTIMATE can guide and flexibly support working groups in a collaborative and technology-enabled problem-identification and problem-solving process. The approach has demonstrated improvements to the student experience and other impacts, within a challenging and complex learning design and delivery situation, by integrating the insights and voices of tutors, staff tutors, students, the module team, and the learning design unit.

### OER Implementation:

Modification (OER use allowed for significant redesign of tasks or functions associated with teaching/learning)

### Key Challenges:

- Budget & finance
- Changing culture/practices
- Building awareness

**Advice:** Try ULTIMATE when faced with a complex and fragmented problem situation, which needs an integration of disparate and possibly geographically separated practitioner voices. Be prepared to focus on an emergent, sustained and unfolding organisational learning process.

### Commentary:

The rigorous theory-building approach can be used to collaboratively extend and transfer the ULTIMATE framework to other contexts. The ULTIMATE framework with initial practical guidance is available as an [OER under a CC BY-NC-SA 4.0 licence](#).

Products & Services	Value Added	Advantage	Business Model
Focus on provision which is complementary or alternative	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Community based: Members of a community or network collaboratively create and use OER, generating revenue through services and/or infrastructure
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
The methodology is technology-enabled collaborative action research underpinned by Grounded Theory Method (GTM) to iteratively conceptualise the unfolding process.	Learning Analytics, Learning Management System (LMS), Open Educational Resources (OER), Virtual Learning Environment (VLE), any open discussion technology with log in could be used

	Value Proposition	Impact
USERS	Improvements to the learner experience based on integration of feedback, collaborative learning about challenging issues and empowerment of participants to take action and evaluate..	In the initial distance learning context, remote tutors felt listened to and pleased to be involved. Interventions developed by tutors were described by students as 'helps immeasurably' and 'a lifesaver'.Lessons learned have been integrated into future module re-design.
PROVIDERS	Providers can achieve significant benefits from adapting the approach to their own contexts.	Practical improvement outcomes and developmental impacts can be achieved in previously intractable, complex or fragmented challenging situations. ULTIMATE provides a theoretically rigorous and emergent problem solving and improvement process.
INFLUENCERS	.Influencers may become interested if more implementations are established due to the value propositions and possible achievable impacts.	Possible integrated virtual problem solving and improvement mechanism in societal, educational and Sustainable Development Goals contexts.
GOVERNANCE	The project approach is documented in institutional repositories and could be transferred or extended elsewhere.	The approach has the potential to provide mutually-owned institutional quality enhancements and address hard-to-resolve organisational or inter-organisational challenges.

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS		✓		✓	✓
PROVIDERS		✓		✓	✓
INFLUENCERS				✓	
GOVERNANCE				✓	

## Transformation by Innovation in Distance Education (TIDE)

<https://www.open.edu/openlearncreate/courses/index.php?categoryid=479>

The Open University (UK)

Myanmar

Timeframe: 3-5 years

User base: 500+ staff at all Myanmar Arts and Science Universities

Scale: Macro (National)

The Transformation by Innovation in Distance Education (TIDE) was a 3.5 year project consortium of UK and Myanmar partners working in Myanmar to improve the quality of distance learning in higher education. TIDE built the capacity of staff at 40 Arts and Sciences Higher Education Institutions (HEIs) across Myanmar, with the primary ambition of benefitting distance education students and resulting in more informed and employable graduates. By enhancing programmes of study, (focusing on environmental studies) TIDE also strengthened national systems and structures that support these institutions.

### OER Implementation:

Modification (OER use allowed for significant redesign of tasks or functions associated with teaching/learning)

### Key Challenges:

- Changing culture/practices
- Building awareness
- Skills development

**Commentary:** "The Transformation by Innovation in Distance Education (TIDE) was a 3.5 year project consortium of UK and Myanmar partners working in Myanmar to improve the quality of distance learning in higher education. TIDE built the capacity of staff at 40 Arts and Sciences Higher Education Institutions (HEIs) across Myanmar, with the primary ambition of benefitting distance education students and resulting in more informed and employable graduates. TIDE became a catalyst for further improvements across the Higher Education (HE) sector, helping to support strategy and leadership for the future of the sector in Myanmar and its contribution to sustainable development.

(<https://www.open.ac.uk/about/international-development/projects-and-programmes/tide-transformation-innovation-distance-education>).

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Governmental Model: National and international governmental agencies providing funding for OER

Target Group	Sustainability	Network	Communication Channels
Existing markets / learners		Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
Co-design, collaborative remixing	Learning Management System (LMS), Open Educational Practices (OEP), Open Educational Resources (OER), Open Pedagogy, Social Media, Videoconferencing, Webinars

	Value Proposition	Impact
USERS	Training and OER creation activities embedded into capacity development cycle. Opportunity for co-production of OER.	TIDE developed and provided OER for a range of staff and students. Up-to-date training and material shared with participants. Training often cascaded and shared with colleagues at institutions. Reuse, localisation and development of OER.
PROVIDERS	Training and OER creation activities embedded into capacity development cycle. Opportunity for co-production of OER.	TIDE developed and provided OER for a range of staff and students. Up-to-date training and material shared with participants. Training often cascaded and shared with colleagues at institutions. Reuse, localisation and development of OER.
INFLUENCERS	Potential for OER utilisation.	Training often cascaded and shared by participants at their respective institutions. OER available for potential future use.
GOVERNANCE		

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS		✓		✓	✓

PROVIDERS		✓			
INFLUENCERS					
GOVERNANCE					

## Universidad del Aconcagua

<https://www.uda.edu.ar/>

Universidad del Aconcagua

Mendoza, Argentina

Timeframe: 5 years+

User base: 9000

Scale: International

At Universidad del Aconcagua OER are used to enrich offerings. Methodologically, lessons are divided into teaching materials and application exercises which are made up of multiple resources, including OER and according to the learning objectives.

### OER Implementation:

Augmentation (substitution of OER for proprietary content with functional change or task redesign)

### Key Challenges:

- Changing culture/practices
- Budget & finance
- Vision and setting objectives

**Advice:** Think of OERs as tools that amplify teaching abilities (McLuhan)

**Commentary:** The mission of the university is to update teaching, encourage research, strengthen extension, stimulate knowledge transfer, and integrate and promote support systems open to the needs and demands of the community.

Products & Services	Value Added	Advantage	Business Model
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Focus on provision which is complementary or alternative	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Dual-Mode University: Use of OER in an online course (e.g. Massive Open Online Course) to develop a distance learning or virtual university operation
<b>Target Group</b>	<b>Sustainability</b>	<b>Network</b>	<b>Communication Channels</b>
Existing markets / learners	Cost cutting and efficiencies	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)

<b>Pedagogy</b>	<b>Technologies Used</b>
Mayer's Multimedia Learning, Cognitive Architecture Theory (Sweller, Merriënboer, Paas and others), Bruner's Scaffolding Theory, Ausubel Meaningful Learning Theory and Vygotsky's Social Constructivism	Artificial Intelligence, E-portfolios, Flipped Learning, Learning Analytics, Learning Management System (LMS), Mobile Learning, Online Assessment(s), Videoconferencing, Virtual Learning Environment (VLE)

	<b>Value Proposition</b>	<b>Impact</b>
USERS	Multimedia learning improves understanding of study material. In turn, the diversity of resources allows the development of multiple cognitive abilities.	When the OER is relevant and meaningful, students appreciate and celebrate the efforts of their teachers. Conversely, when it's just added for effect, students are annoyed.
PROVIDERS	Educators are highly motivated to use open resources for teaching in their courses.	Educators feel empowered when they can synthesize their ideas with assertive and easy-to-use OERs.
INFLUENCERS	They have little to no effect in the decision-making process.	
GOVERNANCE	OER materials can be easily reused.	

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓				
PROVIDERS					
INFLUENCERS					✓
GOVERNANCE					✓

## Universidad CES

<https://virtual.ces.edu.co/my/>

Universidad CES

Timeframe: 5 years+

User base: 6000

Scale: Meso (Regional / Federal)

Universidad CES is a private higher education institution which is committed to the training of undergraduate and postgraduate professionals in all areas of knowledge. H5P has been incorporated into the institution's educational platform (Moodle as LMS). Multimedia resources created by the teachers for humanising digital resources are used here. this system permits personalised support for teachers, the adaptation of the different resources to training needs, the provision of a permanent consultation space, and the design of a bank of examples accompanied by guiding video tutorials.

### OER Implementation:

Redefinition (using OER allowed for new ways of conceiving teaching and/or learning)

### Key Challenges:

- Budget & finance
- Changing culture/practices
- Skills development

**Commentary:** Universidad CES aims to design and implement resources that empower teachers' development of classes, content design and activities supported by gamification. The approach emphasizes use of multimedia and personalised support for educators.

Products & Services	Value Added	Advantage	Business Model
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Focus on core institutional educational provision	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Institutional Model: Higher education providers setting aside some part of their budget for OER programmes
<b>Target Group</b>	<b>Sustainability</b>	<b>Network</b>	<b>Communication Channels</b>
Existing markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)

<b>Pedagogy</b>	<b>Technologies Used</b>
Flipped classroom; Logs; Access to content built in various formats (different learning styles benefit); Collaborative construction of knowledge; 24/7 access to the LMS	Artificial Intelligence, Digital Badging, E-portfolios, Flipped Learning, Learning Analytics, Learning Management System (LMS), Massive Open Online Course (MOOC), Microcredentials, Mobile Learning, Online Assessment(s), Open Educational Resources (OER), Videoconferencing, Virtual Learning Environment (VLE), Webinars

	<b>Value Proposition</b>	<b>Impact</b>
USERS	They encourage access to training processes and expand the educational scope to communities in other places.	They enjoy the content and that motivates them to continue.
PROVIDERS	Recognize that they must facilitate access to the scope of resources with generous free versions, to later contemplate the purchase of licences.	They must allow users to learn about their products, exploring their benefits, before making a purchase decision.
INFLUENCERS	They must be aware of and recognize the changes that are being experienced in society and the demands, giving the relevance that this area deserves.	They must recognize good practices and give them continuity or support their improvement.
GOVERNANCE	They must be aware of and recognize the changes that are being experienced in society and the demands, giving the relevance that this area deserves.	They must recognize good practices and give them continuity or support their improvement.

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS		✓			
PROVIDERS				✓	
INFLUENCERS		✓			
GOVERNANCE		✓			

## University of Wisconsin Collaborative Language Program

<http://uwclp.org>

Collaborative Language Program

Wisconsin (public university)

Timeframe: 5 years+

User base: 400

Scale: Micro (Institutional / Local)

The collaborative language program was established to provide critical language instruction to university campuses otherwise unable to support these offerings. It aimed to spread the wealth of language instruction to adult learners by creating collaborative programs, using technology for distance learning as a pedagogically sound option, and focusing on strategically important critical languages, primarily Arabic, Chinese, Hmong, Japanese and Russian. During the programs, some of the teachers employed OER in the form of textbooks and content was created using H5P content (concept checks and practice activities) within Canvas LMS for a variety of learning activities.

### OER Implementation:

Modification (OER use allowed for significant redesign of tasks or functions associated with teaching/learning)

### Key Challenges:

- Building awareness
- Budget & finance
- Changing culture/practices

**Advice:** It may take a bit more work to fill in what you feel is missing but the cost and flexibility makes it worthwhile. Once you put the time in the first time around, the amount of time and energy required in future years is much less as the material can be reused.

**Commentary:** The program is committed to increasing access for all students regardless of location, socio-economic status, and life challenges by expanding the arrays of languages taught. It fosters a sustainable professional community of language educators sharing expertise, who develop lifelong learners that value and embrace linguistic and cultural diversity, making positive contributions to their professions and local and global communities.

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Institutional Model: Higher education providers setting aside some part of their budget for OER programmes
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	Cost cutting and efficiencies	Traditional institutional or cultural	Traditional

Pedagogy	Technologies Used
Flipped learning Differentiation for learners	Blogging / Microblogging, Bring Your Own Device (BYOD), Digital Badging, E-portfolios, Flipped Learning, Learning Analytics, Microcredentials, Mobile Learning, Online Assessment(s), Open Educational Practices (OEP), Open Educational Resources (OER), Open Pedagogy, Social Media, Virtual Learning Environment (VLE), Wikis

	Value Proposition	Impact
USERS	Free to learners	Helps them know what they don't know so they ask better questions
PROVIDERS	Accessible and easy to adapt content to meet needs	Helps them know what students do and don't know to prepare lessons that specifically address misconceptions.
INFLUENCERS	Lower cost	Case studies demonstrate success to garner continued financial support.
GOVERNANCE	Lower cost	Little to no impact outside of budget approval

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓	✓	✓	✓	✓
PROVIDERS	✓	✓	✓	✓	✓

INFLUENCERS			✓	✓	✓
GOVERNANCE			✓		✓

## Using Google Docs for Open Blended Learning

[https://docs.google.com/document/d/1FsYaX\\_hjcJ3KlIfgXiwLPLOsPXrZRkI\\_7OunIn5xNLU/edit](https://docs.google.com/document/d/1FsYaX_hjcJ3KlIfgXiwLPLOsPXrZRkI_7OunIn5xNLU/edit)

South East Technological University - Carlow  
- Ireland

[https://docs.google.com/document/d/1aG9JL-H4XXJ\\_W3WwV6LAEEuguN8ivYpAXHDHBffegmk/edit](https://docs.google.com/document/d/1aG9JL-H4XXJ_W3WwV6LAEEuguN8ivYpAXHDHBffegmk/edit)

Timeframe: 5 years+

User base: 300 learners

Scale: Micro (Institutional / Local)

Using Google Docs for Open Blended Learning is an initiative aimed at teaching staff of the university interested in blended learning, the development of reusable, shareable and maintainable OER, and the use of digital tools on the cloud for their teaching practices. This approach provides a platform for the easy updating of open source course material on the fly (e.g. during class) by anyone, enables students to contribute to the teaching material synchronously and asynchronously, using tools that have the highest level of usability, (including mobile clients) and create a community of practice across course deliveries.

### OER Implementation:

Substitution (OER replacing proprietary content with no functional change)

### Key Challenges:

- Building awareness
- Changing culture/practices
- Time pressure

**Advice:** One of the advantages of using Google Docs for blended Learning is that it can reconcile synchronous and asynchronous teaching by facilitating students participation via contextualised commenting.

**Commentary:** Provides a platform for the easy updating of open sourced course material on the fly (e.g. during class) by anyone, allow students to contribute to the teaching material synchronously and asynchronously, using tools that have the highest level of usability, including from mobile clients and create a community of practice including across course delivery. Resulting teaching plans and the tutorial guiding teachers are CC Licensed. This project shows how the reach of an individual educator can be augmented through open practice.

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Online Programme: Extending presence-based education to online or blended courses
Target Group	Sustainability	Network	Communication Channels
Existing markets / learners	Cost cutting and efficiencies	Traditional institutional or cultural	New or innovative channels (physical or virtual)

Pedagogy	Technologies Used
Increasing student engagement; Constructivism; continual and instantaneous updating of material	Mobile Learning, Online Assessment(s), Open Educational Practices (OEP), Open Educational Resources (OER), Open Pedagogy

	Value Proposition	Impact
USERS	Ability to question the/contribute to material	Can work asynchronously, can engage meaningfully with the course with each other
PROVIDERS	Reuse, modify, enhance	Free to use
INFLUENCERS		
GOVERNANCE		

Diffusion of Innovations	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
USERS	✓	✓	✓	✓	✓
PROVIDERS	✓	✓	✓	✓	✓

INFLUENCERS					✓
GOVERNANCE			✓	✓	✓

## WIHEA #knowhow project

<https://sites.google.com/site/lamodification/home?authuser=0>

University of Warwick

[https://warwick.ac.uk/fac/cross\\_fac/academy/funding/2016-17fundedprojects/knowhow/](https://warwick.ac.uk/fac/cross_fac/academy/funding/2016-17fundedprojects/knowhow/)

Timeframe: 5 years+

User base: Hundreds of interactions online

Scale: International

The #knowhow project fosters knowledge on the open web through OEP. It started in response to an open call for learning and teaching projects from the Warwick International Higher Education Academy, and familiarises staff, students and the wider public with digital skills necessary to create/use “little” OER and raise awareness of open practice, to get a deeper understanding of the importance of making learning accessible to all, and facilitate engagement with the possibilities of “little” OER and open practice. [Outputs for practitioners are available here.](#)

### OER Implementation:

Redefinition (using OER allowed for new ways of conceiving teaching and/or learning)

### Key Challenges:

- Time pressure
- Changing culture/practices
- Building awareness

**Advice:** Just do it!

**Commentary:** This project aimed to familiarise staff, students and the wider public with digital skills necessary to create/use little OER and raise awareness of open practice. The core team worked independently in Mahara (eportfolio) and then learned about sharing through experience of sharing their outputs with each other and then the wider world. This provided an important conceptual experience which they communicated using a “wildflower” metaphor <https://youtu.be/Nc986o3bOgQ/>.

The following slides explain the process: <https://docs.google.com/presentation/d/1Ync7AOmtevLA1rARbaltLT2FF9DbecOUOZt1h1qXOJk/edit?usp=sharing>.

Products & Services	Value Added	Advantage	Business Model
Focus on core institutional educational provision	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies,	Platformization: Organises stakeholders around a digital ecosystem,



		innovation in working practices)	facilitating interaction and generating insights
<b>Target Group</b>	<b>Sustainability</b>	<b>Network</b>	<b>Communication Channels</b>
Existing markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	New or innovative channels (physical or virtual)

<b>Pedagogy</b>	<b>Technologies Used</b>
<p>Connectivist learning approach to evaluate, curate and create OER enabling students and staff to understand and access the learning opportunities available through open and connected practice</p> <p>Heutagogy was explicit in the design of the project, participants were able to follow their interests and investigate them through an open lens</p>	<p>Blogging / Microblogging, Bring Your Own Device (BYOD), Digital Badging, E-portfolios, Flipped Learning, Microcredentials, Mobile Learning, Open Educational Practices (OEP), Open Educational Resources (OER), Open Pedagogy, Social Media, Teleconferencing, Videoconferencing, Webinars</p>

	<b>Value Proposition</b>	<b>Impact</b>
USERS	Understanding IP online and widening a network of support for learners using digital tools	Those who engaged wanted to know more and experiments led to further digital innovation
PROVIDERS	Creation of little OER which use CC licences helps those who do the work get recognition for their contribution to learning	Increased digital skills of practitioners who engaged which was useful given the pandemic.
INFLUENCERS	Empowering participants to get involved in decision making processes which currently have a negative effect upon the common good	Warmly welcomed when disseminated at Association of Learning Technology OER conference
GOVERNANCE	Challenging the siloed model of operation, revealing the benefits of cross fertilisation of ideas through collaboration and co-creation	

<b>Diffusion of Innovations</b>	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
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USERS		✓	✓		
PROVIDERS		✓	✓		
INFLUENCERS					
GOVERNANCE					

## YourMOOC4all

[https://oro.open.ac.uk/55912/1/LWMOOCs%20Final%20v3\\_Finalv2.pdf](https://oro.open.ac.uk/55912/1/LWMOOCs%20Final%20v3_Finalv2.pdf)

<https://youtu.be/8XktBK1XGkQ>

The Open University

UNED repository

<http://yourmooc4all.lsi.uned.es/>

Timeframe: 1-2 years

User base: Pilot study

Scale: Micro (Institutional / Local)

YourMOOC4all is a pilot research project to collect feedback requests regarding accessible design for Massive Open Online Courses (MOOCs). YourMOOC4all is a recommender system which gathers valuable information directly from learners to improve aspects such as the quality, accessibility and usability of this online learning environment. The final objective of collecting user's feedback is to advise MOOC providers about the missing means for meeting learner needs. YourMOOC4all is designed with the objective of developing expert learners who are able to recognize the tools and resources that help them to learn and evaluate the design of MOOCs they take.

### OER Implementation:

Redefinition (using OER allowed for new ways of conceiving teaching and/or learning)

### Key Challenges:

- Budget & finance
- Technological implementation
- Regulatory or policy environment

**Advice:** Move from MOOCs to real OERs

**Commentary:** YourMOOC4all offers opportunities for the inclusion of inclusive OER recommender systems where aspects including the accessibility of the resources are addressed. The project is a programmed prototype hosting more than 700 MOOCs for testing. The website is multi-language and enables learners to search by free text, enabling them to refine the search by course title, theme or related course information. It is possible to order the results by title, institution, platform, and average score obtained in previous evaluations. YourMOOC4all also has potential for providing useful information to content designers and platforms.

Products & Services	Value Added	Advantage	Business Model
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Focus on provision which is complementary or alternative	Exploration of new approaches and innovation	Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	Community based: Members of a community or network collaboratively create and use OER, generating revenue through services and/or infrastructure
<b>Target Group</b>	<b>Sustainability</b>	<b>Network</b>	<b>Communication Channels</b>
Existing markets / learners	New processes to generate revenues, or cost-cutting in existing processes	Traditional institutional or cultural	New or innovative channels (physical or virtual)

<b>Pedagogy</b>	<b>Technologies Used</b>
The most important framework used Universal Design for Learning (UDL), which in this project offers a framework to evaluate MOOCs design and determine improvements at their early stage of development. UDL considers how to design learning environments to develop expert learners, as resourceful, strategic and motivated	Artificial Intelligence, Massive Open Online Course (MOOC), Social Media, Other (evaluation tools)

	<b>Value Proposition</b>	<b>Impact</b>
USERS	Best for them since they get accessible resources rated by other students and linked to their educational needs	Students use YourMOOC4all in a third year module at UNED, general indication was that using UDL is not straightforward and the framework proposed needs simplification, but in general they liked the idea
PROVIDERS	Same as above	Not applicable at this stage
INFLUENCERS	Same as above	It would have been great to get more data since getting information regarding accessibility could have been very supportive providing feedback to developers\designers
GOVERNANCE	Accessibility evaluation is expensive and would get information regarding users trying their courses	Not applicable at this stage

<b>Diffusion of Innovations</b>	Relative advantage	Compatibility with existing practice	Simplicity of use	Trialability	Observability of results
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USERS		✓			✓
PROVIDERS					
INFLUENCERS					
GOVERNANCE	✓				

## Tools for Evaluating OER Innovation

### OER Innovation Survey Tool

Below you can find a copy of the survey instrument used to collect data for the case studies in OER innovation. These questions are openly licensed [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/) so you are free to reuse them with attribution. (You can find a suggested attribution on the first page of this document.)

Good practice for survey research includes the following elements:

- Providing information about the purpose of the survey
- Making it clear who should complete the survey
- Explaining what will happen with the data, particularly if it will be publicly available
- Explaining how one can withdraw from the research or request the destruction of their data.

In the presentation below these elements have been removed, but they were present in the original distribution.

# ENCORE+ OER Innovation Survey

## Basic Information

This section collects information about your case example. A 'case' may be a business, project or other kind of initiative.

- a. Name of your case:
- b. Type of case (drop down):
  - Project
  - Institution
  - Initiative
  - Business
  - Other (please describe)
- c. Location (your town, city or region):
- d. Country (drop down):
- e. URL of your project/institution/initiative/business:
- f. What is the approximate size of your user base (e.g. learners, customers and/or other stakeholders)
- g. How would you describe the scale of your implementation case (select one):
  - Micro (Institutional / Local)
  - Meso (Regional / Federal)
  - Macro (National)
  - International
- h. Your name:
- i. Your role:
- j. Your organisation:
- k. Your email (this won't be published):
- l. Stay informed about this study? (selected by default)

## Strategic Approach

- a. Please select one box per line to indicate either Defender-like approach (focused on existing, established markets/strategies) or Prospector-like approach (focused on new markets/strategies)

Core aspects	Defender-like approach		Prospector-like approach	
<i>Products and services</i>	Focus on core institutional educational provision		Focus on provision which is complementary or alternative	
<i>Target group</i>	Existing markets / learners		New (or nontraditional) markets / learners	
<i>Communication channels</i>	Traditional		New or innovative channels (physical or virtual)	
<i>Legacy or new value chain</i>	Making the most of legacy knowledge		Exploration of new approaches and innovation	
<i>Competitive advantage</i>	Traditional competences (e.g., market knowledge, expertise, improvement of existing technology)		Newer, unfamiliar, competences (e.g., new or emerging technologies, innovation in working practices)	
<i>Networks</i>	Traditional institutional or cultural		Nontraditional or (dynamic) networks (e.g., alliance, joint-venture)	
<i>Profitability and sustainability</i>	Cost cutting and efficiencies		New processes to generate revenues, or cost-cutting in existing processes	

- b. Please provide a short statement which describes the activities and/or mission for your OER implementation case. (Free text, limit 100 words)

## Innovation Aspects

- a. This section collects information about the ways in which the case is innovative. Please choose **one** of the following 4 options that best describes your OER implementation in relation to the use of educational or training materials. You can use the notes field to explain or provide more detail.

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

- b. What do you see as the barriers and enablers for your case? Select as many as relevant (Please add notes to explain where appropriate)

Category	Factor	Barrier	Enabler	Notes
<i>Practitioner (e.g. educator, manager, librarian, etc.)</i>	Attitude			
	Skills			
	Personal characteristics			
	Decision processes			
	Culture			
	Awareness of issues			
<i>Organization (e.g. school, university, business, initiative)</i>	Capacity, resources & finance			
	Management structure/processes			
	Organizational culture			
	Leadership			

	Open educational practices			
	Policy change (internal)			
<i>Evidence Base</i>	Existence of evidence			
	Accessibility of evidence			
	Relevance & applicability			
	Quality of evidence			
	Research-practice links			
	Other evidence factors (please describe in notes)			
<i>Technology &amp; Infrastructure</i>	Internet access			
	Open source software			
	Proprietary software			
	Virtual Learning Environment(s)			
	Other infrastructure (please detail in notes)			
<i>Community</i>	Social context			
	Stakeholder relationships			
	Responding to authentic learner needs			
	Regulatory environment			
	Policy change (external)			
<i>Other factors</i>	Other (please detail in notes)			



## Business Model

- a. Which of the following best describes your business model? (Select **one** and add details if needed)

Category	Business Model	Description	Selection	Notes
Externally funded	<i>Donations Model</i>	Funding from donations or grants, e.g., foundations, society, industry, non-governmental agencies		
	<i>Governmental Model</i>	National and international governmental agencies providing funding for OER		
	<i>Sponsorship / Advertising Model</i>	Generating revenue by exposing learners to commercial messages		
Internally funded	<i>Institutional Model</i>	Higher education providers setting aside some part of their budget for OER programmes		
	<i>Substitutions Model</i>	Cost savings from redundant services (e.g. obsolete systems) are redirected towards OER programmes		
	<i>Author pays Model</i>	Publishers generate revenue by charging content creators		
Community funded	<i>Community based</i>	Members of a community or network collaboratively create and use OER, generating revenue through services and/or infrastructure		
	<i>Membership Model</i>	The Membership model relies on organizations contributing to the OER provider with money, services and/or goods		
	<i>Platformization</i>	Organises stakeholders around a digital ecosystem, facilitating interaction and generating insights		
Higher Education Service Models	<i>Data Exploitation Model</i>	Generates revenue by selling analytic data about the activities of those using a learning environment		
	<i>Dual-Mode University</i>	Use of OER in an online course (e.g. Massive Open Online Course) to develop a distance learning or virtual university operation		
	<i>Freemium</i>	Educational materials are offered for free and sustainability is derived from subsequent income streams offered alongside this (e.g. assessment or access to a larger curriculum)		
	<i>Online Programme</i>	Extending presence-based education to online or blended courses		
	<i>Segmentation Model</i>	Commercializing a service relating to OER (such		

		as printing open textbooks; providing assessment or certification of learning)		
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## OER Value Proposition

How would you describe the basic value proposition to your stakeholders in this case of OER implementation? (These could include things like convenience, improved experiences, reliability, efficiency, productivity, reduced risk, preferential terms, building trust, improved functionality, enhanced services, price competition,

Complete for each relevant stakeholder group (free text)

- a. Users (Learners or customers)
- b. Governance (management, steering groups, regulators, etc.)
- c. Influencers (policymakers, investors, media, trade unions, etc.)
- d. Providers (educators, trainers, suppliers, infrastructure, vendors, etc.)

## Technical Aspects

- a. Select all technologies that apply to this case in the development and/or use of OER
  - Artificial Intelligence
  - Blogging / Microblogging
  - Bring Your Own Device (BYOD)
  - Digital Badging
  - E-portfolios
  - Flipped Learning
  - Learning Analytics
  - Learning Management System (LMS)
  - Massive Open Online Course (MOOC)
  - Microcredentials
  - Mobile Learning
  - Online Assessment(s)
  - Open Educational Practices (OEP)
  - Open Educational Resources (OER)
  - Open Pedagogy
  - Social Media
  - Teleconferencing
  - Videoconferencing
  - Virtual Learning Environment (VLE)
  - Webinars

- Wikis
  - Other (please describe)
- b. Please use this section to describe any important or innovative technological aspects of the OER implementation - what did you do differently? (free text)

## Teaching, Learning & Training

- a. Please provide a textual description of the case, including details about the OERs being used and how they are implemented (300 words max, free text):
- b. Please use this section to describe the pedagogies or theoretical approaches used in the design of the OER and/or in the implementation (200 words max, free text):
- c. What were the top three challenges that had to be overcome in the implementation of OER in this case? (select up to 3, ranked in order of importance)
- Budget & finance
  - Building awareness
  - Changing culture/practices
  - Communication Issues
  - Interpersonal relationships
  - Project Management
  - Regulatory or policy environment
  - Risk management
  - Scope Creep
  - Skills development
  - Technological implementation
  - Time pressure
  - Vision and setting objectives
  - Other (please detail)
- d. What was your approach to overcoming these challenges? Did you find a new approach that addressed your issues? (free text)

## Culture and Processes

Thinking about your organisation, please indicate your agreement with the following statements by selecting an option per line.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Leadership provide clear guidance on innovation strategy					
Innovation is clearly aligned to our organisational strategies					
Management provide the time and space needed to develop and implement ideas					
Our decision making is top-down					
Our decision making is middle-out					
Our decision making is bottom-up					
My organisation is open to new and innovative approaches					
Innovation activity is a part of daily activity and tasks in this organization					
Our staff are empowered to develop their capacity for innovation					
Our leaders recognise the innovation achievements of our staff					
Our organisation has clearly identified innovation champions					
Our organisation captures, documents and shares ideas from diverse roles					
We apply agile approaches to meet challenges					
We apply best practices to the flow of information within our organization					
We have a management system for tracking innovation					
We have systems in place to recognise and reward innovation behaviours					
Key performance indicators (KPIs) are used to track and analyse innovation behaviours					
Our organisation is committed to a continuing and meaningful evaluation of best practices					
Our organisation responds quickly to adopt/adapt new ideas and approaches					

## Impact and Diffusion

Please use this section to describe the impact of the OER implementation for your stakeholders (free text per category)

- a.
  - i. Users (Learners or customers)
  - ii. Governance (management, steering groups, regulators, etc.)
  - iii. Influencers (policymakers, investors, media, trade unions, etc.)
  - iv. Providers (educators, trainers, suppliers, vendors, etc.)
- b. Please add a tick/check to any parts of the grid to indicate where you believe the project had effective routes to impact.

	<b>Relative advantage</b> (perceived as better than competition)	<b>Compatibility</b> (Understood in relation to existing practice)	<b>Simplicity</b> (Easy to pick up the new service or product)	<b>Trialability</b> (Ease with which target markets can try service or product)	<b>Observability</b> (Results are visible or noticeable)
<b>Users</b> (Learners or customers)					
<b>Governance</b> (management, steering groups, regulators, etc.)					
<b>Influencers</b> (policymakers, investors, media, trade unions, etc.)					
<b>Providers</b> (educators, trainers, suppliers, vendors, etc.)					

- c. Do you feel that your OER implementation met its aims? (YES/NO/PARTLY + comments)
- d. Were there any unexpected outcomes from the implementation of OER in this case? (free text)

- e. What advice would you have for someone else who was considering moving in a similar direction with OER? (free text)
- f. What are your future aspirations for OER? (free text)

[SURVEY END]

# Business Model Canvas

The Business Model Canvas is a tool for documenting and developing business models. It highlights a range of key considerations and can be used for collaborative work. It's made available on a CC BY SA licence. You can download the template from <https://www.strategyzer.com/>.

## The Business Model Canvas

Designed for:

Designed by:

Date:

Version:

<b>Key Partners</b> <small>Who are our key partners? Who are our key suppliers? Which Key Resources are we acquiring from partners? Which Key Activities do partners perform?</small> <small>KEY PARTNERS FOR PARTNERSHIPS</small> <small>Outsourcing and co-sourcing Acquisition of risk and uncertainty Acquisition of particular resources and activities</small>	<b>Key Activities</b> <small>What Key Activities do our Value Propositions require? Our Distribution Channels? Customer Relationship? Revenue streams?</small> <small>CATEGORIES</small> <small>Production Problem Solving Platform/Network</small>	<b>Value Propositions</b> <small>What value do we deliver to the customer? Which one of our customer's problems are we helping to solve? What bundles of products and services are we offering to each customer segment? Which customer needs are we satisfying?</small> <small>CUSTOMER BENEFITS</small> <small>Reliability Performance Customization Convenience "Getting it in the Zone" Design Brand/Status Price Self-Realization Risk Reduction Accessibility Convenience/Accessibility</small>	<b>Customer Relationships</b> <small>What type of relationship does each of our Customer Segments expect us to establish and maintain with them? Which ones have we established? How do they integrate with the rest of our business model? How costly are they?</small> <small>RELATIONSHIP TYPES</small> <small>Personal assistance Self-Service Automated Services Communities Co-creation</small>	<b>Customer Segments</b> <small>For whom are we creating value? Who are our most important customers?</small> <small>MARKET SEGMENTS</small> <small>Mass Market Niche Market Segmented Diversified Multi-Sided Platform</small>
<b>Key Resources</b> <small>What Key Resources do our Value Propositions require? Our Distribution Channels? Customer Relationship? Revenue Streams?</small> <small>TYPES OF RESOURCES</small> <small>Physical Intellectual (brand, patents, copyrights, data) Human Financial</small>		<b>Channels</b> <small>Through which Channels do our Customer Segments want to be reached? How are we reaching them now? How are our Channels integrated? Which ones work best? Which ones are most cost-efficient? How are we integrating them with customer routines?</small> <small>CHANNEL TYPES</small> <small>1. Direct sales 2. Indirect sales 3. Resellers 4. Partners 5. Retailers 6. Delivery 7. Other sales 8. Other sales</small>		
<b>Cost Structure</b> <small>What are the most important costs inherent in our business model? Which Key Resources are most expensive? Which Key Activities are most expensive?</small> <small>BY THEIR NATURE</small> <small>Cost of Goods Sold (COGS) Fixed Costs (Fixed in value creation, production, value proposition) Variable Costs (Variable in value creation, production, value proposition) Fixed Costs (Fixed in value creation, production, value proposition) Variable Costs (Variable in value creation, production, value proposition) Fixed Costs (Fixed in value creation, production, value proposition) Variable Costs (Variable in value creation, production, value proposition)</small>		<b>Revenue Streams</b> <small>For what value are our customers really willing to pay? For what do they currently pay? How much are they willing to pay? How much does each Revenue Stream contribute to overall revenues?</small> <small>REVENUE TYPES</small> <small>Asset Sale Usage Fee Subscription Fee Licensing Advertising Other</small>		

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This template can be used to conceptualise, plan and strategise business activity around an OER implementation. See the following examples of where the Business Model Canvas has been used in open education contexts:

- OERu [https://wikieducator.org/images/5/58/OERu\\_Business\\_Model\\_Brochure.pdf](https://wikieducator.org/images/5/58/OERu_Business_Model_Brochure.pdf)
- Open Universiteit in the Netherlands  
[https://www.robertschuwer.nl/download/Trends\\_businessmodellen\\_EN.pdf](https://www.robertschuwer.nl/download/Trends_businessmodellen_EN.pdf)
- Lumen Learning  
<https://docs.google.com/drawings/d/1L-kSBcCCupbBGOvxZkRy3hQkcnqZuLTmeFuMmLC>
- Business Model Canvas for OER Programs  
<https://dt.athabascau.ca/jspui/bitstream/10791/306/5/SingerIsFreeMoreExpensiveThanCommercialJan2020.pdf> (p.134)

## Edupreneurship Business Models

The following table (taken from Darwish, 2019) shows how different uses or presentations of resources can be associated with different revenue models and operational considerations. It is mainly focused on institutional provision, but can still be a useful reflective tool.

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



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## Website

For further and updated information about this project please see:

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## Contacts

### Report coordinator

Robert Farrow, The Open University (UK)

[rob.farrow@open.ac.uk](mailto:rob.farrow@open.ac.uk)

### Project Coordinator

Juliane Granly, ICDE

[granly@icde.org](mailto:granly@icde.org)

### Contact us

[info@encoreproject.eu](mailto:info@encoreproject.eu)

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