# Open Research Online

# OPEN EDUCATION POLICIES

## Guidelines for co-creation

Open Education
Policy Lab

OPEN
EDUCATION
POLICY
HUB

Javiera Atenas
Leo Havemann
Jan Neumann
Cristina Stefanelli

This work has been made possible thanks to the invaluable contributions of the colleagues and friends who have acted as scientific committee.

# TABLE OF CONTENTS

# ABOUT US

**JAVIERA ATENAS** is an Information Scientist with a PhD in Education and a Senior Fellow of the Higher Education Academy - Advance HE. She is an associate researcher at the University of Barcelona and at the Latin American Initiative for Open Data. She is the co-founder of the OE Policy Lab and a researcher for the OE Policy Hub. She has worked in Europe, Latin America and the Middle East as academic and researcher and advising universities on policy and curriculum development in openness to education, science and data.

**LEO HAVEMANN** is a digital and open education specialist and researcher, a Digital Education Advisor at University College London, and a doctoral researcher at the Open University (UK) investigating policymaking for OE. He is a member of the Advisory Board of the OK Open Education Working Group, a co-ordinator of the M25 Learning Technology Group (the London local member group of the Association for Learning Technology), and is co-founder of the OE Policy Lab and a researcher for the OE Policy Hub. His previous roles have been in educational technology, libraries, and industry, as well as teaching in higher education.

**JAN NEUMANN** is working as Head of Legal Affairs and Organisation at the North Rhine-Westphalian Library Service Centre (HBZ) in Cologne, Germany. He studied law, economy and systems thinking and has more than 15 years of experience within international project management for different publishing houses and libraries. He is a member of the German Commission for UNESCO and its education expert committee. Since 2013 he has managed the William and Flora Hewlett Foundation-funded OER World Map project, including the OE Policy Hub.

**CRISTINA STEFANELLI** works at UNIMED, the Mediterranean Universities Union, as Project Manager, and she is involved in international projects in the field of technology-enhanced learning, teaching and learning technologies, open education and virtual exchange. She has experience in developing training programmes, policy roadmaps and guidance for Open Education to support HEIs to adopt Open Education Practices

The **OE Policy Lab** aims at supporting Higher Education Institutions and Governments in co-creating Open Education Policies using a solid evidence-based approach, to enable people with the skills needed to actively participate in the different stages of policymaking. https://oepolicylab.org/

The **OE Policy Hub**, based at the OER World Map, fosters collaborative policymaking by promoting good practices and high-quality resources, and bringing together experts, advocates and organisations from all over the world. www.oepolicyhub.org

# ACKNOWLEDGMENTS

# PREFACE

These guidelines aim to support institutions and governments in the development of open education policies promoting the adoption of open educational practices and resources, and the fostering of collaborations amongst social-educational actors which favour the democratisation of knowledge access and production.

With the publication of the 2019 Recommendation on Open Educational Resources (OER), UNESCO (2019)[1] has called for the development, through participatory processes, of supportive policies at national level to implement regulatory frameworks to develop OER, allocate resources for the implementation of policies, encourage the creation of communities of practice and foster recognition mechanisms for career progression. Also, the Recommendation addresses the importance of embedding OE and OER policies in wider policy frameworks such as those supporting Open Access, Open Data, Open Source Software and Open Science, while considering the highest standards for data protection when designing such policies. Furthermore, UNESCO highlights the importance of developing inclusive and equitable strategies to promote OE, as well as mechanisms to assess its impact, and to encourage further research in the field.

The purpose of this guide is to support policymakers, understood in a broad sense here to include a range of stakeholders, to design appropriate policies for their contexts and communities. Rather than the detail of policy, the focus of this guide is on the process of policymaking, through which the detail should emerge.

---

[1] UNESCO (2019). Recommendation on Open Educational Resources (OER)
http://portal.unesco.org/en/ev.php-URL_ID=49556&URL_DO=DO_TOPIC&URL_SECTION=201.html

Although policy might be often thought of as the work of managers, governments or experts that is then adopted, disseminated to the masses and implemented, we consider that, as 'openness policies' need to create public value, a transversal and democratic approach to policymaking is necessary. Furthermore, co-creation can be a factor in policy effectiveness, as the sense of co-ownership in a community can enhance the shared responsibility to achieve policy goals (Voorberg, Bekkers & Tummers, 2015; Bryson, Sancino, Benington & Sørensen, 2017).

These guidelines build on a range of sources drawn from research literature, Open Education (OE), Open Government and policy actors. Our particular focus in this guide is on the policymaking process. We promote the adoption of co-creation mechanisms in policy design in order to advance an open and collaborative culture and foster a paradigm of participation in policymaking. Co-creation, as a policy making technique, has become key in the development of Open Government commitments. It also has been used in participatory policymaking approaches in education, for example, in Brazil[2], Iceland[3], Malaysia[4] and the US[5], but as yet, remains quite uncommon or underutilised in the development of policies for Open Access, Open Science and OE at both at government and at institutional level. Our contention is that the adoption of this approach in OE policymaking can empower education communities by infusing policy with a sense of shared goals, responsibility and co-ownership.

Therefore, we aim with these guidelines to support policymakers and advocates from governments and academia at the national, regional and institutional levels, in adopting a co-creation approach across the policy cycle, toward development of OE policies, strategies, action plans and roadmaps. We also

---

[2] Open Government Partnership: Brazil: Digital Educational Resources (BR0089) https://www.opengovpartnership.org/members/brazil/commitments/BR0089/

[3] Icelandic Education Policy https://citizens.is/portfolio_page/education-policy/

[4] Towards National Policy Guidelines on Open Educational Resources in Malaysia http://oasis.col.org/bitstream/handle/11599/2739/2017_COL_Towards-National-Policy-OER-Malaysia.pdf

[5] Open Licensing Playbook https://2009-2017.state.gov/r/pa/prs/ps/2017/01/267125.htm

consider these guidelines should be relevant for other institutions or organisations seeking to foster OE, such as civil society, GLAM sector and non-profit organisations, and as well for the Open Science sector, as UNESCO (2020b) recommends[6] *promoting the use of Open Educational Resources to increase access to Open Science educational and research resources.*

This guide has been co-created in collaboration with the Mediterranean Universities Union (UNIMED) and is, in part, based on the *Recommendations from OpenMed to University leaders and policy makers for opening up Higher Education in the South-Mediterranean by 2030*[7], and follows the OGP Participation & Co-Creation Standards[8]. These recommendations have been co-authored, reviewed and edited by a group of policy and open education experts.

---

[6] UNESCO (2020) Recommendation on Open Science https://en.unesco.org/sites/default/files/en-unesco_osr_first_draft.pdf

[7] Recommendations from OpenMed to University leaders and policy makers for opening up Higher Education in the South-Mediterranean by 2030, https://openmedproject.eu/wp-content/uploads/OpenMed_Recommendations.pdf

[8] Open Government Partnership. Participation & Co-Creation Standards, https://www.opengovpartnership.org/wp-content/uploads/2019/07/OGP_Participation-Cocreation-Standards20170207.pdf

# OPEN EDUCATION POLICIES

# Guidelines for Co-creation

X

# 1.
## INTRODUCTION

Open Education (OE) is often understood as an approach to education that involves the creation and use of Open Educational Resources (OER), but is also increasingly defined more inclusively, as comprising a range of practices which act to open aspects of education in particular ways (Havemann, 2020). For example, according to Cronin (2017), Open Educational Practices (OEP) include the creation, use, and reuse of (OER) as well as open pedagogies and open sharing of teaching practices; for Rodés (2019), OER and OEP need to be conceived from an integral perspective as components of the same phenomenon within the framework of a continuum. We regard such inclusive definitions of OE as more productive in assisting policymakers to conceptualise the variable terrain of practices which act to 'open up' aspects of educational landscapes.

For Inamorato dos Santos & Punie (2016) of the European Commission's JRC, OE is

> *a way of carrying out education, often using digital technologies. Its aim is to widen access and participation to everyone by removing barriers and making learning accessible, abundant, and customisable for all. It offers multiple ways of teaching and learning, building and sharing knowledge. It also provides a variety of access routes to formal and non-formal education, and connects the two.*

Gonsales, Sebriam & Markun (2017) of the Brazilian Open Education Initiative, define OE as

> *an historic movement that today is identified with the tradition of sharing good ideas, common to educators, with an emerging digital culture based on collaboration and interactivity. The movement is associated with the promotion of the freedom to use, modify, combine and redistribute educational resources through the use of open technologies, prioritizing free and open software and open formats. It also involves principles of open pedagogy with a focus on inclusion, accessibility, equity and ubiquity.*

While the overarching vision of OE can undeniably be understood in a variety of ways, OER (including the capabilities, practices, and infrastructures which enable their creation and reuse) are consistently a discussed as a key component, and have particularly been championed by UNESCO (2019)[9], which defines them as

> *teaching, learning and research materials in any medium – digital or otherwise – that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions.*

Following many years of advocacy, including the 2012 Paris OER Declaration[10], the 2017 Ministerial Statement from the 2nd World OER Congress[11] and Ljubljana OER Action Plan[12], in November 2019 UNESCO adopted a Recommendation on OER which includes a series of guidelines which aim to support the creation, use and adaptation of inclusive and quality OER, and furthermore to facilitate international cooperation in this field by enabling the development and adoption of supportive OE policies[13].

In prior discussions of policymaking for OE, such policies have been defined in different ways, but usually with OER as a core focus. For Creative Commons,

---

[9] UNESCO (2019). *UNESCO Recommendation on OER* https://en.unesco.org/themes/building-knowledge-societies/oer/recommendation

[10] UNESCO (2012). Paris OER declaration. https://en.unesco.org/oer/paris-declaration

[11] UNESCO (2017) Ministerial Statement from the 2nd World OER Congress in https://en.unesco.org/sites/default/files/oer_congress_2017_ministerial_statement.pdf

[12] UNESCO (2017) Ljubljana OER Action Plan https://en.unesco.org/sites/default/files/ljubljana_oer_action_plan_2017.pdf

[13] UNESCO (2019). *UNESCO Recommendation on OER* https://en.unesco.org/themes/building-knowledge-societies/oer/recommendation

*OE policies are legislation, institutional policies, and/or funder mandates that lead to the creation, increased use, and/or support for improving OER, though they can also include elements of digital rights and widening participation[14].*

Two further definitions we have found helpful are those of Coolidge & Allen (2017), who describe OE policies as

*laws, rules and courses of action that facilitate the creation, use or improvement of openly licensed content*

and that of the authors of *7 Things You Should Know About Open Education: Policies* (Educause, 2018), who alternatively refer to

*formal regulations regarding support, funding, adoption, and use of Open Educational Resources (OER) and/or Open Educational Practices (OEP). Such policies are designed to support the creation, adoption, and sharing of OER and the design and integration of OEP into programs of study[15].*

In keeping with our inclusive understanding of OE and also our focus here on the *process of co-creation* of policy, we offer the following definition:

> ***Open Education policies are written or unwritten guidelines, regulations and strategies which seek to foster the development and implementation of Open Educational Practices, including the creation and use of Open Educational Resources. Through such policies, governments, institutions and other organisations allocate resources and orchestrate activities in order to increase access to educational opportunity, as well as promote educational quality, efficiency and innovation.***

UNESCO (2014)[16] and Inamorato dos Santos & Punie (2016) recommend to design a policy agenda at national level to facilitate the removal of barriers to access education, facilitating spaces for learners to up skill or re-skill in a flexible way, paving a route to modernise education, bridging formal and informal learning, and making

---

[14] Creative Commons: OER policy definition
https://wiki.creativecommons.org/index.php/OER_Policy_Registry

[15] 7 Things You Should Know About Open Education: Policies

https://library.educause.edu/resources/2018/8/7-things-you-should-know-about-open-education-policies

[16] UNESCO education strategy 2014-2021 https://unesdoc.unesco.org/ark:/48223/pf0000231288

it easier for HE institutions and other accredited institutions to recognise learning achievement. Thus, OE policies can work as a catalyst for enhancing teaching and learning innovation and provision. Inamorato dos Santos (2017) further recommends empowering all stakeholders through a collaborative and transversal approach to policymaking.

In order to foster such a transversal approach, we recommend implementing a co-creation process[17] such as is already often used in Open Government contexts. A fundamental principle of co-creation is participation, which requires fostering arenas for policy development in which every stakeholder has a place and a voice, in order to co-create a policy through dialogue and engagement across all phases of the policy cycle.

According to Corrall & Pinfield (2014),

> *there are both bottom-up pressures, from researchers, librarians, educationalists, and technologists creating open systems and making content openly available; and top-down forces, with policymakers and research funders encouraging or even mandating open approaches (p.293).*

These pressures are drivers for policy but not, in themselves, guarantees of policy emergence, coherence or success. This is especially significant when policymakers broaden their focus from access to openly licensed teaching materials to consider pedagogic innovation alongside this. Arguably, one of the most important aims for an OE policy is to foster the emergence of a cultural and organisational change which has to happen in the field of tension between top-down and bottom-up (Orr, Neumann & Muuß-Merholz, 2017).

For Stagg & Bossu (2016), it is also key that institutional OE policies also be driven by social justice, with a focus on social inclusion, equity and diversity, and student support. And Campbell (2020b) notes that while organisations in receipt of public funding to create resources should be mandated to make these freely and openly available to the public, institutional OE policies focusing on the educational

---

[17] Open Government Partnership Participation and Co-Creation Standards
https://www.opengovpartnership.org/ogp-participation-co-creation-standards/

practices of staff and students should be primarily permissive rather than mandatory, thereby empowering those engaged in learning and teaching to come to their own decisions about whether and how to engage with OEP.

In designing, adopting and implementing a policy, policymakers can create a much-needed framework to allocate resources, orchestrate activities, and clarify the position of educators and students as content authors, to support the mainstreaming of OE. Such policy change reflects and encourages evolution in educational practice, and therefore established approaches, tools and processes for policymaking likely also require adjustment. In the OE context, it seems particularly appropriate to take an approach which is likewise founded on the values of participation and learning. In these guidelines, we therefore describe how openness and participation can be embedded in OE policy development through a co-creation approach.

The aim of this guide is to provide advice to institutions and governments on how to co-create OE policy, taking into consideration a series of OE elements and co-creation techniques, and focusing on the work of a co-creation forum which is grounded in the participation principles[18]. We aspire to support the policy co-creation learning process, which can lead to a change of practices and cultures, reframing the roles of participating stakeholders (Voorberg, Bekkers, Timeus, Tonurist & Tummers, 2017) using an open innovation approach that combines different knowledge and expertise to generate sector competences (Raunio, Räsänen & Kautonen, 2016), and thereby enhancing the likelihood of transformative policy impact.

Governments seeking to produce inclusive policies and willing to adopt a co-creation approach should consider the principles of public innovation and participation (Alves, 2013) as this model has already been adopted successfully within the policy cultures of certain governments. For example, Open Government Partnership (OGP) member countries have experience in the co-creation of

---

[18] IAP2 Core Values for Public Participation  https://www.iap2.org/page/corevalues

commitments and sometimes decrees in the field of education[19] thanks to the open governance round tables (Voorberg, Bekkers, Flemig, Timeus, Tonurist, & Tummers, 2017; Huss & Keudel, 2020).

Adoption of a co-creation approach by an organisation benefits its own community, but furthermore also represents a move to embrace a sustainable development approach (Trencher, Yarime, McCormick, Doll & Kraines, 2014), which should ensure wider impact of the resulting outputs. Universities should not neglect to draw upon their own scholarship and body of experts to develop policy that connects different areas of knowledge, and in turn create opportunities for recognition and progression for those who participate in the co-creation process (Ellison & Eatman, 2008).

Thus, we consider that co-creation needs to occur across the whole spectrum of public participation[20] to help clarify the role of a community in the process of co-creation and in decision-making. This will include the provision of balanced and objective information to the community, consulting and obtaining feedback on analysis, alternatives and/or decisions, involving community members in the work throughout the process, collaborating through the decision-making process to identify solutions, and ultimately empowering the community by placing decision-making (or defined aspects of it) in their hands.

As McKercher (2020) argues,

> *when differences in power are unacknowledged and unaddressed, the people with the most power have the most influence over decisions, regardless of the quality of their knowledge or ideas (p.14).*

---

[19] Open Government Partnership Global Report: Education https://www.opengovpartnership.org/wp-content/uploads/2019/09/Global-Report_Education-.pdf

[20] International Association of Public Participation (IAP2). Spectrum of public participation https://cdn.ymaws.com/www.iap2.org/resource/resmgr/pillars/Spectrum_8.5x11_Print.pdf

This highlights the issue of an underlying tension present in participatory policymaking, and for the integrity of the process, decision-making stakeholders should disclose the scope of influence participants could potentially have, indicating the importance of preparatory intra-institutional discussions prior to opening up the game to participation.

# 2.

## UNDERSTANDING OPEN EDUCATION POLICIES

As well as existing as standalone policy or strategies, OE elements can be found embedded within a wider range of strategies and policies, any of which can potentially be co-created depending on context. The JRC (European Commission) report *Policy Approaches to Open Education - Case Studies from 28 EU Member States*, identifies four types of policies that can support the advancement of OE through the promotion of OER and OEP (Inamorato dos Santos, Nascimbeni, Bacsich, Atenas, Aceto, Burgos & Punie, 2017).

1. **Policies focusing specifically on opening up education through the promotion of open educational resources (OER) and open educational practices (OEP)** represent a large body of policies, which in the main tend to focus on the support to the production of OER which include for example open textbooks. This type of policy or strategy aims at supporting institutions into adopting openness in teaching and learning allowing knowledge producers to openly license the content they produce, some examples are the OER Policy from the Provincial Ministries of Education Sri Lanka[21], the US Office of the Superintendent of Public Instruction (OSPI) Copyright and Open License Policy[22], the

---

[21] E.g. OER Policy - Provincial Ministries of Education Sri Lanka
https://oerworldmap.org/resource/urn:uuid:8b55a677-40da-4db3-ba43-1e92b446f878

[22] Office of Superintendent of Public Instruction (OSPI) Copyright and Open License Policy
http://surveygizmolibrary.s3.amazonaws.com/library/68766/OSPICopyrightandOpenLicensingPolicy2016.pdf

UCL Open Education Road Map[23], and the Open Educational Resources Policy of the University of the South Pacific[24].

2. **Policies relating to general ICT (Information and Communication Technologies) for learning with some OE component**; these policies are normally national or institutional ICT, e-learning or distance learning policies or strategies in which a component of OE or OER is embedded, but OE is not the key element of the policy. Some examples of this kind of policies are the Strategy of Education, Science and Technology from Croatia[25], the Digital Strategy for Cyprus[26] and the Cyfrowa Szkoła, which is a national policy for Polish schools to raise ICT competences[27].

3. **Comprehensive strategic educational policies with some OE component**; These kind of policies refer normally to national and institutional strategies for the wider education system that have incorporated some elements of OEP or OER; examples include the Strategy for Education Policy until 2020 from Czech Republic[28], the National Lifelong Learning Strategy 2014-2020 from Malta[29], and the

---

[23] University College London Open Education Road Map https://open-education-repository.ucl.ac.uk//481/1/ucl_oe_roadmap.pdf

[24] University of the South Pacific Open Educational Resources Policy https://policylib.usp.ac.fj/form.readdoc.php?id=736

[25] Strategy of Education, Science and Technology from Croatia https://oerworldmap.org/resource/urn:uuid:09ed0707-bf91-46dc-a253-34f4ff39eb01

[26] Digital Strategy for Cyprus https://ec.europa.eu/digital-single-market/en/news/digital-strategy-cyprus#:~:text=The%20Digital%20Strategy%20for%20Cyprus,modernization%20of%20the%20public%20sector.&text=The%20summary%20states%20all%20objectives%20of%20the%20national%20strategy%20and%20corresponding%20measures.

[27] Cyfrowa szkoła" (Digital School) National Program in Poland https://creativecommons.pl/open-educational-resources-in-the-digital-school-program/

[28] E.g. Strategy of Education, Science and Technology, Croatia https://oerworldmap.org/resource/urn:uuid:09ed0707-bf91-46dc-a253-34f4ff39eb01

[29] National Lifelong Learning Strategy 2014-2020, Malta https://education.gov.mt/en/Documents/Malta%20National%20Lifelong%20Learning%20Strategy%202020.pdf

Strategic Agenda for Higher Education and Research 2015-2025 from The Netherlands[30].

4. **Policies designed as part of National Open Government Action Plans with some OE component**. A national action plan can be understood as a nationwide initiative which sets out proposed work in a certain area, in the case of the OGP, these *are the product of a co-creation and participatory process in which government and civil society jointly develop commitments.* Successful OGP action plans focus on significant national open government priorities and ambitious reforms; are relevant to the values of transparency, accountability, and public participation; and contain specific, time-bound, and measurable commitments and foresee specific budget allocations[31]. Some examples of OE-related commitments are the Greek National Action Plan 2016-2018: Commitment 20: Open Education[32], the OER Virtual School Library from Romania[33] and the training strategy in Open Government from Chile[34].

Beyond these four policy groups described by the JRC, we consider that is important to highlight another two key groups of policies that can contain or embed OE in their areas of work, such as general openness policies with an OE/OER component, and Labour market policies with OE/OER component.

---

[30] Strategic Agenda for Higher Education and Research 2015-2025 from The Netherlands https://www.government.nl/documents/reports/2015/07/01/the-value-of-knowledge

[31] Open Government Partnership (OGP), Develop a National Action Plan https://www.opengovpartnership.org/develop-a-national-action-plan.

[32] Greece National Action Plan 2016-2018: Commitment 20: Open Education https://oerworldmap.org/resource/urn:uuid:5bdae9c6-2b12-4aed-8406-d5b02d10d0df

[33]Romania, Virtual School Library and OER https://www.opengovpartnership.org/wp-content/uploads/2001/01/Romania-NAP_2016-2018%20EN.pdf

[34] Chile, training strategy in Open Government https://oerworldmap.org/resource/urn:uuid:3431f189-72f6-4df7-b697-5d3934126ff1

5. **Openness policies with an OE/OER component.** These are normally understood as national, institutional or organisational open access, open data, open GLAM or open science policies whose key focus is access to knowledge, information and research but that include OE or OER as components of the policy. Some examples are the Heritage UK licensing requirements[35], the Open Access Strategie des Landes Brandenburg[36], and the Technische Universität Hamburg Policy for openness in research and teaching[37].

6. **Labour market policies with an OE/OER component.** These can be understood as policies with a strong focus in the development of skills for the labour market that include OE/OER within their strategies. Some examples are the US Department of Labor: Career Pathways Innovation Fund Grants Program[38] and the Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant program[39]

To ensure that an OE policy will be effective, it must balance both institutional and community drivers[40]. Thus, it is necessary to design it considering some co-creation principles, in which the key elements are **collaboration**, **benchlearning** and **engagement**.

---

[35] Heritage UK licensing requirements https://www.heritagefund.org.uk/stories/advice-understanding-our-licence-requirement

[36] Open Access Strategie des Landes Brandenburg https://oerworldmap.org/resource/urn:uuid:953c85d0-a575-4f0c-aff5-2d9706cf0caa

[37] Technische Universität Hamburg Policy für Offenheit in Forschung und Lehre https://oerworldmap.org/resource/urn:uuid:6119d0e6-d3ae-4bcd-8ce8-244b1eb3a8a9

[38] US Department of Labor: Career Pathways Innovation Fund Grants Program https://oerworldmap.org/resource/urn:uuid:7b2f14ef-a4ca-4f19-9e1d-213418e888fc

[39] US Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant program https://oerworldmap.org/resource/urn:uuid:48d81e50-a9dd-411c-a343-13cee33d668c

[40] JISC: Open Education: Policy, practice, research and scholarship https://digitalcapability.jiscinvolve.org/wp/digital-leadership/open-education-policy-practice-research-and-scholarship/

**Collaboration** in policymaking can be understood as an equitable and non-hierarchical process where every participating stakeholder has not just a voice but a task, as co-creation also includes co-ownership. **Benchlearning** is defined as a process for creating a systematic link between benchmarking and learning activities[41], to identify good practices through comparative learning using a wide range of diverse indicators[42]. Finally, **engagement** is the process in which policy has the input of the community which has become a strategic partner, using a variety of participatory arenas.

Educators, researchers, librarians and copyright experts, institutional senior management, government advisors, local and international OE and policy experts, as well as students and student unions[43] can provide a landscape perspective on the policy context. It is vital to consider local needs and cultural approaches, to ensure the successful implementation of a policy; there is therefore a very strong case for the inclusion of a wide range of stakeholders in the co-creation process (Voorberg, Bekkers & Tummers, 2015).

---

[41] UNESCO (2016) *Knowledge Societies Policy Handbook*. United Nations Educational, Scientific and Cultural Organization Information for All Programme (UNESCO/IFAP). Paris
https://en.unesco.org/sites/default/files/knowledge_socities_policy_handbook.pdf

[42] European Union, Directorate-General for Employment, Social Affairs and Inclusion European Network of Public Employment Services (2018) PES Network Benchlearning Manual
https://ec.europa.eu/social/BlobServlet?docId=18857&langId=en

[43] National Teaching Forum Ireland: Enabling Policies for Digital and Open Teaching and Learning
https://www.teachingandlearning.ie/our-priorities/digital-transformation/enabling-policies-for-digital-and-open-teaching-and-learning/

# 3.
## OPEN EDUCATION POLICY DESIGN

According to Olejniczak, Śliwowski & Leeuw (2020) policy design *is a process of a deliberate and conscious attempt to create a response to a policy problem* (p.1), and, drawing on Colebatch & Hoppe (2018), they also argue that *participants in policy design can often approach policy issues with different mental models rooted in different perspectives, and values. Reasoning about policy issues is therefore a collective puzzling that often ends up with an incoherent shared mental model, or even with conflicting hypotheses on how things could be changed (p.7).*

For Miao, Mishra, Orr & Janssen (2019), *to develop a cohesive and comprehensive policy, there must be discussion on several strategic considerations that will constitute the framework of the policy.* In their view, policies to support OER must particularly aim towards achieving SDG4[44] through being inclusive, culturally and gender diverse, promoting formal and informal lifelong learning, and supporting OEP of both teachers and students.

Each government or organisation developing policy for OE must of course be guided by its own context and strategic aims, but an emphasis on developing

---

[44] Sustainable Development Goal 4 (SDG 4) is the education goal: it aims to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all." https://sdg4education2030.org/the-goal

cohesive and comprehensive policy is one we would echo (Atenas & Havemann, 2019). The danger of not doing so is that OE can be seen primarily in terms of content production rather than in the wider context of the aims, goals and work of educators, or understood as a distinct silo, away from normal educational work. In such scenarios a resulting policy might focus on funding a specific development, such as a repository, but risks insufficient community engagement which then sees little content actually shared or reused. Similarly, a policy focused on MOOC production will not automatically enhance the learning design capabilities of staff, while a lack of attention to the licensing might leave the content locked up in the MOOC platform, unable to be reused (Atenas, 2015).

Therefore, in addition to developing an holistic vision for policy aims and benefits, policymakers must also consider the risks or problems that under-developed OE or policies may engender, and how these might be avoided through thoughtful design (Colebatch, 2018; Fingerle, 2019). For example, there may be increasing demand for 'solutions' which enable data collection from learning activities to perform analytics; unanticipated 'reforms' of copyright regulations; lobbying and collusion[45] against open options by publishers and ed-tech vendors to promote commercial interests; and furthermore, changes of management, priorities and governments, as any of these elements might affect or even derail an OE policy (Atenas, Havemann, Nascimbeni, Villar-Onrubia & Orlic, 2019).

Thus, at the core of co-creation of an OE policy, the leading unit must organise a participatory multi-stakeholder co-creation forum. Inviting a wide range of stakeholders and designing co-ownership into the process should promote the successful implementation and sustainability of the policy (Lesko, 2019). A series of participation principles are at the heart of this process; as Cox and Trotter (2016) note, *the success of a proposed OER-related policy intervention is mediated by an institution's existing policy structure, its prevailing social culture and academics' own agency* (p.147).

---

[45] Communia: Member States adopt negotiation position, side with rightsholders in attack on user rights https://www.communia-association.org/2018/05/28/member-states-adopt-negotiation-position-side-rightsholders-attack-user-rights/

# KEY ELEMENTS OF OPEN EDUCATION POLICY

OE projects seeking to support and improve education in diverse cultural contexts, are therefore *change* projects which also face the risk of derailment by inhospitable policy environments or policy inconsistency. Stevens, Bradbury & Hutley (2017) note that *the necessity to implement policy and guidance to effect change became a focal point for institutions to facilitate progress in the OER movement* (p. 252). In our view, a common policy pitfall has been the perception of OE as a particular and very discrete silo of activity.

Design of OE policy should take into account the need for instilling a *culture of openness*, because OE is not limited to enabling access to knowledge, whether technically or legally, but rather must rest upon foundations of transparency, trust and collaboration within, across and beyond educational institutions. Consequently, it is important that institutions and governments embrace the values of OE as they work to steer profound cultural changes (Corrall & Pinfield, 2014), taking account of a series of elements that can ensure their success and impact, or prevent policy derailment.

For example, to develop a culture of openness, it is important that policies are harmonised with national and institutional copyright and intellectual property regulations. Otherwise, the first obstacle these policies may face is the inability of opening up content because of regulatory frameworks. Also, it is important to ensure cohesion and coherence amongst educational strategies and *openness policies*[46] in a country or institution, to prevent duplication of efforts and to share activities and platforms when possible.

---

[46] Openness policies here refers to policies focused on the broader range of open activities and content including Open Data, Open Access, Open Education, Open Science, Open Source and Open Governance , see also: https://opendatahandbook.org/glossary/en/terms/open-movement

OE policies should ideally be designed with an inclusive focus on a broader range of OEP, not only to foster OER, but also to support innovation in teaching and learning, encouraging students as well as educators to reuse and adapt both content and practices (Teixeira et al., 2013; Croft & Brown, 2020). Furthermore, OE policies should work in harmony with and promote the accreditation of prior and micro-units of learning, as well as credit transfer (Witthaus, et al., 2015; Czerniewicz, 2017), to widen learning and credential attainment opportunities. Also, it is important to design OE policies considering the cultural richness of each context while promoting a diverse access to knowledge (Harley, 2008; Richter, 2011; Deimann, 2013; Pirkkalainen, Jokinen & Pawlowski, 2014; Rodés, Gewerc-Barujel & Llamas-Nistal, 2019). In addition, policy should activate programmes to build capacities in OE, as well as mechanisms to promote and incentivise this work, by recognising and rewarding those who have included aspects of OE into their teaching.

Finally, OE policies should aim to promote an ethical and sustainable approach to platforms and technology, for example, providing guidance to support the procurement, selection and adoption of technologies for the production of OER, the selection of MOOC platforms, or the implementation of repositories, in order to prevent investing in technologies which might become outdated or underutilised, or have problematic business models.

According to Atenas, Havemann, Nascimbeni, Villar-Onrubia & Orlic (2019) there are elements that can be considered key enablers of an OE policy as these can help prevent derailing or failing in a policy regardless of its context. These elements are described in the subsections that follow.

## COPYRIGHT

Copyright law governs the usability of proprietary content in education, and therefore can potentially have a severe impact in the education and science landscapes, affecting national and institutional policies and commitments[47]. In Europe, recent copyright reforms[48] have imposed barriers to the fair use of digital content within education, limiting rights to access and disseminate knowledge and information which are nonetheless regarded as vital within curricula. Rather than having the effect of extracting further revenues from struggling public institutions for the use of such content, reforms may instead drive copyright infringement, threatening to criminalise those who rely on the use of copyright material. Secker & Morrison (2016) and Nobre (2017) argue that copyright law should instead be acting to empower teaching and learning.

It is key that OE policies work in concert with education sector voices calling for fair use of copyright material, in addition to promoting the adoption of open licensing[49] of publicly funded educational materials which should be available to the public for reuse, adaptation, and localisation in national languages and in diverse cultural contexts.

---

[47] Directive of the European Parliament - On Copyright in the digital single market - EU copyright reform – COM (2016) 593 final https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52016PC0593

[48] EU copyright reform, FAQs https://ec.europa.eu/digital-single-market/en/faq/frequently-asked-questions-copyright-reform

[49] Creative Commons, Open Licenses https://wiki.creativecommons.org/wiki/Open_license

## POLICY COHERENCE

It is important that institutions and governments ensure coherence amongst open policies and review potential concomitance and contradictions amongst their Open Science[50], Open Access[51] and Open Government policies and commitments[52], and also, it is key to ensure cohesion between OE policies and educational strategies, including academic development and career recognition schemes (Czerwonogora & Rodés, 2019, Proudman, Santos-Hermosa & Smith, 2020; UNESCO, 2020b; Atenas, Havemann & Timmermann, 2020).

This step is essential to overcome some potential challenges and prevent incongruities within national and institutional policies, and to avoid duplication of efforts within departments or agencies, as having a cohesive set of policies promoting openness can facilitate widespread adoption of open practices in teaching and in research.

## PEDAGOGIC INNOVATION

According to Cronin (2017) OEP can support innovative approaches for teaching and learning and can widen participation in education, not just by facilitating access to content, but creating communities of open practice. Through sharing their practices as well as resources, educators can adapt activities and designs of others, as well as developing students' abilities to collaboratively and construct knowledge in the open (Havemann, 2016). Reaching out to local communities, identifying knowledge needs and skills

---

[50] Foster Open Science, Open Science Policies

https://book.fosteropenscience.eu/en/02OpenScienceBasics/09OpenSciencePolicies.html

[51] Registry of Open Access Repository Mandates and Policies (ROARMAP) http://roarmap.eprints.org

[52] Open Government Partnership, Education Policy Recommendations
https://www.opengovpartnership.org/policy-area/education/#recommendations

gaps, and developing OE initiatives can build community capacity in lifelong learning (Sabadie, Muñoz, Redecker, Punie & Vuorikari, 2014).

## INCLUSIVE AND ACCESIBLE DESIGN FOR LEARNING

OE is a vehicle for inclusion, therefore, OE policies need to ensure that OERs and platforms prioritise an inclusive and accessible design to ensure these directly benefit and impact, following the article 24 of the Convention on the Rights of Persons with Disabilities[53] to provide equal opportunities and reasonable accommodation for people to ensure they can access education on an equal basis.

For Chambers, Varoglu & Kasinskaite-Buddeberg (UNESCO, 2016), it is key to ensure strategies and internal disability policies for the systematic inclusion of students and staff with disabilities to remove barriers to learning, including, but not limited to, cognitive, physical and sensory barriers. Thus, it is key that OER and Open  Education Platforms use an Universal Design for Learning (UDL) approach for learning following the W3C accessibility guidelines[54] , and in the EU, organisations, including the education sector, need to comply with accessible design following the European Accessibility Act[55], to ensure that learners and educators have fair access to digital contents and platforms.

Currently, institutions are making great efforts to promote good practices in accessibility for the education sector to design inclusive and accessible OE,

---

[53] United Nations Convention on the Rights of Persons with Disabilities (UNCRPWD). Article 24 – Education https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-24-education.html

[54] World Wide Web Consortium (2008). Content Accessibility Guidelines https://www.w3.org/WAI/standards-guidelines/wcag/

[55] Directive (EU) 2019/882 of the European Parliament and of the Council of 17 April 2019 on the accessibility requirements for products and services https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019L0882

such as the FLOE project[56], the BC campus accessibility toolkit[57], the Universal Design for Learning in Higher Education OE policy[58], the CUNY accessibility guides[59], the Núcleo REA accessible tools[60] and SPARC US inclusive learning guide[61], as inclusion and accessibility are at the core of many OE initiatives. Thus as recommended by Castaño Muñoz, Redecker, Vuorikari, & Punie (2013); Samzugi, & Mwinyimbegu (2013); Dalsgaard & Thestrup (2015); Reed & Turner (2018) it is important to consider the needs of the learners when designing OER, as accessibility is key to ensure access to quality education, therefore must be at the heart of OE practices and policies.

## LEARNING ACCREDITATION AND CREDIT TRANSFER

The current tendency towards a policy vacuum in terms of credentialing of open learning risks this space being filled by hype of for-profit ventures that are normalising transformations in HE, which affect the most disadvantaged groups, as well as promoting precariousness in academic jobs (Atenas, Havemann, Nascimbeni, Villar-Onrubia & Orlic, 2019). We have seen that during the peak of MOOC hype, they often appeared to be viewed by institutions as marketing vehicles rather than as a means to democratise knowledge, and research has noted that the mainstream of MOOCs might even be acting to widen social inequalities by catering largely for the already educated (Bass & Eynon, 2017; Czerniewicz, 2017; UNESCO, 2018).

---

[56] FLOE, Flexible and Open Education https://floeproject.org/index.html
[57] BC campus accessibility toolkit https://opentextbc.ca/accessibilitytoolkit/
[58] Universal Design for Learning in Higher Education OE policy
http://udloncampus.cast.org/page/media_oer#:~:text=OERs%2C%20or%20open%20educational%20resources,of%202010%20supports%20the%20use
[59] CUNY accessibility guides https://guides.cuny.edu/accessibility
[60] Núcleo REA Accesibility https://www.nucleorea.ei.udelar.edu.uy/productos-generados-por-el-nucelo-reaa/
[61] SPARC US OE accessibility guides https://sparcopen.org/news/2018/oer-accessibility-working-toward-inclusive-learning/

Yet, since the initial hype of the MOOC phenomenon cooled, MOOCs have evolved; course formats, platforms and audiences have diversified, creating low or no cost opportunities to develop skills, encounter specialists and cutting-edge knowledge from researchers, and potentially earn micro-credentials. Consequently, for UNESCO[62] (2012), accreditation mechanisms should be adopted in order to formally recognise the learning acquired through open courses, which can mean to incorporate and accredit the participation in MOOCs while recognising and accredit knowledge acquired through OER by creating adequate mechanisms to assess learners' competences.

## DIVERSE ACCESS TO KNOWLEDGE

OE is about human rights and access to learning for the benefit of all, fostering a culture of developing knowledge (Blessinger & Bliss, 2016), promoting mutual understanding across cultures and groups, democratic values, transparency, equity, and social participation. For Richter (2011), it is key that educational materials are designed taking cultural diversity into consideration, while for Deimann & Farrow (2013), OE should work to ensure access to materials from various cultural contexts.

Therefore, policymakers should foster international and inter-institutional cooperation and endorse democratic and diverse access to knowledge, in order to encourage the creation of locally relevant content (Ball, 1998; Harley, 2008); to complement existing resources (Nascimbeni, Burgos, Spina & Simonette, 2020); and thereby to increase the global pool of culturally diverse, gender-sensitive, accessible OER in multiple languages and formats. (Hockings, Brett & Terentjevs, 2012)

---

[62] UNESCO (2012). *Guidelines for the recognition, validation and accreditation of the outcomes of non-formal and informal learning* https://unesdoc.unesco.org/ark:/48223/pf0000216360

## CAPACITY BUILDING

OE can be transformative at academic level, as when a critical mass of impactful activities are visible, a long lasting cultural change can occur within the institutions involved (Urbančič, Polajnar & Jermol, 2020), enhancing institutional recognition and reputation. Such changes can then have an impact at national and international level (Bell & Stevenson, 2006). OE policies should therefore support educators and instructional designers (Morgan, 2020) in strengthening their capacities by providing a range of informal and certified continuous professional development opportunities.

Approaches to openness and consequent considerations should therefore be incorporated into both in- and pre-service training programmes for educators in order to enhance capacity in OEP (Tur, Havemann, Marsh, Nascimbeni & Keefer, 2020), with a view to the development of pedagogic and technical competences for the creation, use and reuse of OER, as well as for engagement with wider learning and teaching communities through open social learning with peers (Nerantzi, 2018; Neumann, Orr & Muuß-Merholz, 2018).

## REWARDING OEP TO PROMOTE AN OPEN CULTURE

To promote the adoption of OE and foster cultures of openness, it is important that OE policies consider models for reward and recognition for educators who have integrated aspects of OEP into their teaching. For example, institutions can incentivise the career progression of educators and researchers (Cardoso, Morgado & Teixeira, 2019) who include aspects of OE in their practices, offering incentives via promotion (Amiel, da Cruz Duran & da Costa, 2017; Amiel & Soares, 2019), awards or reassigned time, with

credentials that can be used to accredit teaching and learning innovation (Annabi & Wilkins, 2016) and which can be used to promote educators' careers in line with institutional and national accreditation and reward mechanisms for career progression for example, researchers are rewarded for producing Open Access research (Pas te & Zhang, 2019).

## DIRECTING RESOURCES TOWARDS OE INITIATIVES

Openness can stimulate the supply and demand for high-quality OER which are essential for modernising and democratising education by making publicly available all the resources, including teaching materials, funded by public funds (Stacey, 2013; Neumann, Orr & Muuß-Merholz, 2018). It is necessary that governments and higher education institutions direct and invest in human capital and resources for the development of OE initiatives by ensuring and providing funding for the development of OE programmes[63] to create a sustainable model of OEP (Wiley, Green & Soares, 2012), while providing the technical and professional support functions needed for practitioners to adopt an innovative way of designing and delivering education, towards achieving the goals of quality and diversity in learning.

## SUSTAINABLE OPEN INFRASTRUCTURES

OE policies should not neglect the significance of the infrastructure dimension of open and digital practices. In fact, policy should be in place to guide the process of assessment, selection, procurement, adoption or design of the technologies to be used in OE (such as the production, dissemination,

---

[63] Richtlinie zur Förderung von Offenen Bildungsmaterialien (Open Educational Resources – OERinfo) (OERinfo Förderrichtlinie) https://www.bmbf.de/foerderungen/bekanntmachung-1132.html

storage, deployment or remixing of OER) in order to ensure sustainable and equitable access to ethical open software and platforms (AbuJarour et al., 2015; Decuypere, 2019). For example, policymakers might consider collaborating to provide shared repositories to host OER (Atenas & Havemann, 2013); developing multi-purpose repositories to support hosting of OER, Open Data and Open Access rather than implementing separate ones; ensuring that the content produced for MOOCs can be reused as OER after the conclusion of a course (Havemann & Atenas, 2014); or adoption of open platforms and Open Source Software to foster the reuse and creation of OER.

## DATA GOVERNANCE AND PRIVACY

As discussed above, OE activities do not occur in a silo but rather within educational ecosystems which typically articulate together a range of institutional and vendor-operated, open and closed, non-profit and commercial systems and services. It is incumbent upon policymakers to take due consideration, when anticipating how OE activities are going to interact with this spectrum of actors, of questions of data governance and privacy concerns.

According to Privacy International[64], privacy is crucial for the protection of human dignity and constitutes one of the fundamental bases of democratic societies. For Atenas et al. (2019) *Acquiring services from for-profit ed-tech providers and publishers carries the risk of tracking and monetising data generated as a result of learner interaction*, and thus, *when developing policy to support OE, we need to consider the relationship between datafication of education and the broader rise of surveillance capitalism* (p.172).

---

[64] Privacy International https://privacyinternational.org/explainer/56/what-privacy

Thus, OE initiatives need to consider data protection as a pillar that enables the exercise of the rights of learners and educators, guaranteeing in practical terms the right to privacy in the context of digital learning environments (Farrow, 2016; Regan & Bailey, 2019; Marín, Carpenter & Tur, 2020).

# 4.

## UNDERSTANDING POLICY CO-CREATION

The process of shaping policy is complex and multi-layered, therefore it requires laying the groundwork of a series of tools and tactics towards advocating and mobilising stakeholders, as the rationale of the policy making process has to do with setting an agenda to be discussed by stakeholders to find solutions and make agreements and decisions regarding a policy, because as Rinhard (2010) argues, *policymaking in modern societies is complex and uncertain* (p.47).

According to Cronin (2020) and Campbell (2020a), OE aims at increasing educational access and effectiveness, as well as equity, through fostering participation and knowledge co-creation, including by marginalised and traditionally under-represented groups. Similarly, for Gouillart & Hallett (2015), the idea of co-creating policy is related to the principles of participation and democracy, and holds real promise as a way to facilitate innovation in policymaking. OE policies should be designed in an open, transparent and participatory way to ensure that those who will be affected by the policy can participate and be involved in the decision-making process (Nelson, Folhes, & Finan, 2009).

To co-create a policy, the institution, coalition, consortium or government needs to acknowledge that something needs to improve, change or be opened to discussion, and then set up a process support framework which incorporates some essential elements for participation and co-creation. These include the adoption of **participation principles** to guide the process, and the formation of a **co-creation**

**forum** consisting of all the relevant stakeholders who will participate. Furthermore, there must be **mechanisms for dissemination of information**; **spaces and platforms for dialogue and co-creation**, and **co-ownership and joint decision making**. Below, we provide a series of guidelines to co-design and co-create OE policies across the entire policy cycle, grounded on the principles of participation, inclusion and democracy.

# CO-CREATION PRINCIPLES

Co-creation can be understood to indicate a transparent and collaborative process in which participants have a central role. At the stage of initiating such a process it is important to set the scope, objectives and boundaries, the expectations and workload forecast for the participants, as well as specifying the activities to be carried out and the means of participation. In order to facilitate these processes, we will next outline a set of co-creation principles, which are grounded on the core values drawn up by the International Association for Public Participation (IAP2[65]), which aims to foster good engagement in participatory processes.

We suggest that participatory policy co-creation processes must:

A. Be based on the belief that those who are affected by a decision have a right to be involved in the decision-making process.
B. Include the promise that the public's contribution will influence the decision.
C. Promote sustainable decisions by recognising and communicating the needs and interests of all participants, including decision makers.
D. Seek out and facilitate the involvement of those potentially affected by or interested in a decision.
E. Seek input from participants in designing how they participate.

---

[65] IAP2 Core Values for Public Participation https://www.iap2.org/page/corevalues

F. Provide participants with the information they need to participate in a meaningful way.

G. Communicate to participants how their input affected the decision.

The guidelines for OE policy co-creation which follow build upon these principles to ensure that participation and inclusion are embraced.

## CO-CREATION FORUM

When co-creating an OE policy, it is essential to consider its intended beneficiaries - immediately, learners and educators, but also, institutions and society at large. The key benefits of OE are related with access, equity, quality, costs, inclusion and innovation as for Sabadie, Muñoz, Redecker, Punie & Vuorikari (2014) it is understood that OE can increase access to education by narrowing the gap between those who can access resources or courses.

These considerations should guide the process of planning and organising a participatory multi-stakeholder **co-creation forum**, which will be the arena for stakeholders to meet, discuss and seek agreements for every step and area of a policy. Therefore, the leading unit, who are those responsible to plan, develop, implement and support a policy and also the point of contact for the stakeholders and community, first need to map the key stakeholders to organise a co-creation forum.

When developing national policies, UNESCO (2020a)[66] mentions the following actors as key stakeholders across the formal, non-formal and informal sectors

> *teachers, educators, learners, governmental bodies, parents, educational providers and institutions, education*

---

[66] UNESCO (2020). *UNESCO Recommendation on OER* https://en.unesco.org/themes/building-knowledge-societies/oer/recommendation

*support personnel, teacher trainers, educational policy makers, cultural institutions (such as libraries, archives and museums) and their users, ICT infrastructure providers, researchers, research institutions, civil society organizations (including professional and student associations), publishers, the public and private sectors, intergovernmental organisations, copyright holders and authors, media and broadcasting groups and funding bodies.*

We further suggest inclusion of copyright experts, learning technologists and designers, students' and workers' unions, experts in copyright law, and local and international OE and policy experts and advocates (Atenas, Havemann, Nascimbeni, Villar-Onrubia & Orlic, 2019). Some examples of co-creation guidance and practice can be seen in Spain[67], EU[68], OECD[69] and the World Bank[70].

## DISSEMINATION OF INFORMATION

To ensure that stakeholders are kept informed throughout, a plan for dissemination of information needs to be carefully designed. This should provide timely and regular information in a clear, and structured manner about all aspects of the policy process, including feedback on how their inputs are taken into account, ensuring that every relevant stakeholder participates equally in the decision-making process. This can be supported through provision of a dedicated policy website where the information on all aspects of the process is proactively published, which:

---

[67] How to join OGP - OGP Euskadi https://www.ogp.euskadi.eus/about-ogp/-/how-to-join-ogp/

[68] European Union: The influence of the Open Government Partnership (OGP) on the Open Data discussions https://www.europeandataportal.eu/sites/default/files/report/2013_the_influence_of_the_ogp_on_the_open_data_discussions.pdf

[69] OECD: Communicating Open Government https://www.oecd.org/gov/Open-Government-Guide.pdf

[70] OGP MDTF - World Bank https://ewsdata.rightsindevelopment.org/files/documents/67/WB-P171667.pdf

- Is visible to everyone, accessible and searchable.
- Identifies the leading unit clearly and provides their contact details publicly on the dedicated policy website.
- Contains the information and documents, including the data and the different versions of all administrative documents.
- Communicates information to stakeholders in advance to guarantee they are informed and prepared to participate in all stages of the process.

Furthermore, the site must provide spaces and platforms to facilitate an inclusive and ongoing dialogue appropriate to the institutional or national context.

## SPACES AND PLATFORMS FOR DIALOGUE AND CO-CREATION

Inclusive and ongoing dialogue should be facilitated using a variety of spaces and platforms, both face to face and/or digital, such as fora, round tables and meetings, and also, spaces in which to comment and reflect on the documentation, which are appropriate to the institutional or national context following a series of guidelines such as:

- To ensure participation by facilitating access in person and/or remotely to promote inclusion of those unable to attend in person, thus co-creating the co-creation calendar.
- To welcome and include diverse representation and have a non-discriminatory and inclusive approach to the selection of relevant stakeholders.
- To facilitate a mechanism in which the leading unit promotes direct communication with stakeholders to respond to process questions and keeps a record of communications and responses to make available to any interested party.

- To conduct outreach and awareness raising activities to relevant stakeholders (e.g. educators, researchers, students, librarians, civil society organisations, government departments, etc.) to inform them of the policy process.

## CO-OWNERSHIP AND JOINT DECISION MAKING

To co-create policies, it is key to ensure co-ownership and joint decision making as every relevant stakeholder should jointly own and develop the process as follows:

- Members of the co-creation forum jointly develop its remit, membership and governance (e.g. frequency of meetings, who sets the agenda, how decisions are made, how conflicts are managed, the level of detail of minutes), which are communicated on the website.
- The co-creation forum includes a balance of representatives from different levels and roles (students, educators, researchers, senior management, civil society, librarians, government, etc).
- Members of the co-creation forum are selected through a fair and transparent process.
- The co-creation forum proactively communicates and reports back on its decisions, activities and results
- The co-creation forum includes high-level representatives with decision-making authority to ensure it is sufficiently empowered to take action.

# POLICY CO-CREATION PROCESS

To co-create a policy, it is necessary to carefully design an inclusive and participatory action plan that considers a series of activities and elements such as consultations[71] and discussions to ensure that every stakeholder co-owns the responsibility to successfully implement it. Therefore, the leading unit needs to chair the co-creation forum by proactively communicating, through the website and other channels, with adequate notice, the process for the development of the policy to ensure equitable participation amongst all the stakeholders.

In the next chapter, we briefly introduce the concept of the co-creation process as a cycle consisting of a series of phases, and then present a series of guidelines relating to each phase.

---

[71] UNESCO (2003). *Planning national education stakeholder consultations: ensuring that Education for All is fully integrated in national strategic frameworks.* UNESCO Caribbean Regional Forum on National Stakeholder Consultations, Belize City, 2003 https://unesdoc.unesco.org/ark:/48223/pf0000370936

# 5.

## CO-CREATION OF OPEN EDUCATION POLICIES

The OECD[72] has identified four vital areas of activity for successful design and implementation of educational policy: to help ensure that policies are fit for purpose in the context in which it will be implemented, to engage and involve a diverse range of stakeholders, to favour the development of a conducive environment for implementation; and finally, to develop coherent implementation strategies. In order to provide a template for a process that incorporates this range of activities, we outline below a cyclical model of co-creation and implementation.

As Howlett, McConnell & Perl (2014) have noted, models of the policy process are necessarily simplified, and those which propose an end-to-end series of stages, or even a recursive cycle of stages, can oversimplify the messy complexity of real world policymaking, which has also been described in terms of the coming together of disparate 'streams' which each impact the agenda, such as *problems* and *politics,* in addition to *policy*. We would suggest, however, that the adoption of a co-creation methodology should act to improve transparency in agenda setting and beyond. While there may well be overlaps and non-linearity in progression through the stages discussed below, the distinct stages of a policy process can be understood as follows:

---

[72] OECD, Generic framework for effective education policy implementation
http://www.oecd.org/education/implementing-policies/

I. **Agenda setting:** the prioritisation of problems, deciding which ones must be addressed and which ones are to be postponed. From the many competing arguments, policy makers must select those issues to be given priority and those to be left out, as it is important here to identify those issues which are most significant due to effects these may have on a collective or group.

II. **Policy development:** the stage in which several stakeholders are trying to generate solutions to a specific problem. The solutions may come from different directions and the alternative proposed solutions can be discussed in participatory tables presenting ideas for problem-solving to start shaping the policy and its roadmap.

III. **Policy formulation:** the process of developing formal policy statements (legislation, executive orders, administrative rules, etc.) that are viewed as legitimate.

IV. **Policy implementation:** the phase in which the policy goals are translated into tangible and measurable actions, and in which the stakeholders have a role in ensuring the achievement of such goals by conducting the activities from the agenda and roadmap.

V. **Policy evaluation:** the phase in which the policy is assessed and examined towards assessment of its impact. The evaluation process measures the real value and utility of a policy to provide evidence about its effectiveness and accountability for resources invested.

VI. **Policy revision:** in which an already published policy is revised, amended or updated, or it is determined whether a policy should be expanded, reduced and/or merged with other policies to ensure that it achieves its objectives.

In order for co-creation to take place across the cycle, it is key to embrace to the principles of co-design, which is described by McKercher (2020) as an inclusive technique to address power imbalances:

> *currently, many systems and organisations fail to listen to people with lived experience, or to see and build their capability to design, deliver and evaluate change. This leads to policy gaps, where professionals' understanding of what people want and need is vastly different to people's lived realities (p.10).*

# OPEN EDUCATION POLICIES CO-CREATION CYCLE

## AGENDA SETTING

For Rosa, Gudowsky & Warnke (2018), conventionally, only a reduced and senior body of people can set policy agendas, excluding groups from participating in including their research and ideas, therefore, to enable a participatory and inclusive process is key to enable an institutional or public consultation.

The leading unit and the co-creation forum need to develop an appropriate methodology for the consultation[73], which should include a combination of open meetings and online engagement for the institutional or context, as well as providing information and enabling participation mechanisms such as:

❖ Include in the website the timeline of key stages and deadlines; as well as opportunities to be involved to any interested stakeholders to participate in the development of the policy.

---

[73] OECD (2017). *Open research agenda setting*, OECD Science, Technology and Industry Policy Papers, No. 50, OECD Publishing, Paris, https://doi.org/10.1787/74edb6a8-en.

❖ Include e.g. details of meetings, events, written consultations, feedback mechanisms); and the decision-making process for agreeing to the final steps, plans and strategies and releasing the policy.

❖ Provide timely updates on the website including information about progress on the development of the policy, including notes of events, drafts of commitments, and other relevant information as well as an overview of the co-creation forum contributions, and the senior management or government's responses on the website.

❖ Provide adequate background information around the agenda items to stakeholders for them to participate in an informed manner. (e.g. definitions of OE or other relevant concepts)

❖ Use the website to publish and provide feedback about the consultation and include a range of options for stakeholders to respond (e.g. written responses, online discussions, surveys, face-to-face or remote meetings), which remain open for an adequate time frame (e.g. at least 2 weeks).

❖ Publish the co-created agenda, which has been agreed by the **joint decision-making** mechanism and establish the co-creation priorities goals and milestones.

## POLICY DEVELOPMENT

Once the agenda has been set, it is necessary for the co-creation forum to assess and select the research and data which will be used as evidence, as policies need to be developed throughout a rigorous review of research evidence and good practices in the area of open education.

To co-develop a policy[74], it is key that the leading unit

❖ Provides access to the research, data and good practices in an accessible format using the website as a main archive and communication point

❖ Facilitates the formation of working groups to discuss and refine ideas into draft documentation.

❖ Publishes an overview of stakeholders and working groups contributions, and their responses on the website.

❖ Publishes in the website regular updates on the progress of the policy, including progress against milestones, reasons for any delays, next steps.

❖ Provides the co-creating forum draft policy papers for review which include the research, data and good practices as well as an implementation roadmap.

❖ Opens arenas for discussing the research, data and good practices used to draft a policy paper and to include and exclude information,

---

[74] Co-creation and open policy making https://open.canada.ca/en/blog/co-creation-and-open-policy-making

❖ Enables discussions in the co-creation forum to concur the priorities for the policy development and implementation and assess its feasibility, and potential risks and challenges.

## POLICY FORMULATION

As this process is related to the development of formal policy statements that are viewed as lawful or statutory, it is related to the publication of the finalised versions of the policy and the implementation roadmap, so at this stage is necessary for the leading unit and the co-creation forum to:

- ❖ Jointly design and agree the mechanisms to inform the community about the impact of the policy.

- ❖ Design events to present the policy and the roadmap and to listen and gather feedback from the community.

- ❖ Invite the working groups design a range of implementing and monitoring methods for the different elements of the policy and implementation roadmap.

- ❖ Provide the relevant information by publishing it in the website allowing and encouraging the members of the community to provide feedback, raise questions and concerns and to provide evidence, good practices and data relevant for the policy.

## POLICY IMPLEMENTATION

The implementation process is the phase in which a policy is enacted and must be executed, therefore the policy aims must be actioned towards being measured according to the roadmap and the agenda priorities. In this case, is necessary that the leading unit and the co-creation forum facilitate this process by:

- ❖ Publishing updates on the website on the different milestones and goals reflected on the implementation roadmap, allowing the community to comment on progress updates.

- ❖ Holding at least two open meetings with the co-creation forum and the community on the implementation of the policy.

- ❖ Sharing the policy relevant implementation documentation with other governments or institutions and stakeholders to encourage policy benchlearning in OE

- ❖ Facilitating a mechanism for the co-creation forum and the community to monitor and deliberate on how to improve the implementation of the policy.

## POLICY EVALUATION

For Oxman et al. (2010), the concept impact evaluation refers to the activities to assess the outcomes of the policies once it has been launched against a series of expected parameters or milestones throughout carefully designed to document the real impact and the problems and challenges that were encountered to define the effectiveness of a policy. For Blomkamp (2018) the evaluation process can be co-designed in a participatory way, including a wide range of stakeholders to ensure that innovative solutions can be included to assess the impact of a policy.

According to the CDC[75] to conduct a policy evaluation it is necessary to include four categories in the assessment framework:

- ❖ Utility: Who wants the evaluation results and for what purpose?
- ❖ Feasibility: Are the evaluation procedures practical, given the time, resources, and expertise available?
- ❖ Propriety: Is the evaluation being conducted in a fair and ethical way? Accuracy: Are approaches at each step accurate, given stakeholder needs and evaluation purpose?
- ❖ Accuracy: Are approaches at each step accurate, given stakeholder needs and evaluation purpose?

To ensure that the policy evaluation is conducted in a participatory manner, is important that the leading unit enables this process by

- ❖ Providing an arena for the co-creation of impact assessment tools to assess the value and adoption of the policy in a year's time and to understand the challenges faced by the community.

---

[75] Department of Health and Human Services: Centers for Disease Control and Prevention
https://www.cdc.gov/injury/pdfs/policy/Brief%201-a.pdf

❖ Enabling spaces for the members of the community to participate in the evaluation process both in face to face and online opportunities.

❖ Facilitating a mechanism for the co-creation forum and the community to propose and deliberate solutions to the challenges and the problems encountered.

❖ Publishing outcomes of the consultations providing access via the website showcasing the proposed solutions.

❖ Enabling channels for the co-creation forum and the community to monitor the progress of the evaluation tasks.

## POLICY REVISION

Once the policy has been published and the impact assessment has been completed, and the gaps and challenges have been identified, it is necessary to amend or update a policy including new milestones or activities in order to ensure the effectiveness and impact of the policy.

When revising a policy, it is key to ensure the participation of the co-creation forum and the community, as they will enable the pathways for success, therefore, is important to enable arenas for facilitated participation by

- ❖ Inviting the co-creation forum working groups to review each the existing document, identify gaps and draft proposals

- ❖ Create spaces for the co-creation forum stakeholders and members of the community to participate in reviewing the draft proposals and provide feedback to the leading unit and the working groups

- ❖ Facilitating a mechanism for the co-creation forum and the community to propose and deliberate solutions to the challenges and the problems encountered.

- ❖ Publishing outcomes of the consultations providing access via the website showcasing the proposed solutions.

- ❖ The leading unit provides to the co-creation forum and the community a brief synopsis of changes proposed, and their feasibility and the reasons to be included or excluded in the new policy documentation.

- ❖ Enabling channels for the co-creation forum and the community to monitor the uptake of the new milestones and activities of the revised policy.

# 6.

## CONCLUSIONS

Co-creation of policies to support and foster inclusive, democratic approaches in education must follow an inclusive and participatory process. In order to participate effectively, stakeholders will need training and support, such as provision of spaces for open and active communication and for peer learning. Policy needs to be supportive and enabling of OEP to create value for those who will be directly affected.

When initially designing a co-creation forum, it is worth consulting experts in Open Government and co-design (from local OGP units, organisations from civil society, or scholars with relevant expertise) to consider the processes, spaces and platforms, and assist the leading unit to benchlearn from work already undertaken elsewhere.

Co-creation should not simply be understood as a methodology that enables stakeholder voices to be heard; it is a way of making better policies which can help governments and institutions to ensure success. Co-creation leverages the collective intelligence of the forum, which can help to anticipate issues and problems, preventing the derailment of a policy; just as importantly it fosters stakeholder 'buy-in' (shared ownership and responsibility), while ensuring the uniqueness of each context is taken into consideration[76].

---

[76] Praxisrahmen für Open Educational Resources (OER) in Deutschland http://mapping-oer.de/wp-content/uploads/2016/02/Praxisrahmen-fu%CC%88r-OER-in-Deutschland_Online-1.pdf

Therefore, it is key at the outset to map the policy landscape to ensure that the policy sits comfortably amongst educational strategies and Open Government, Open Access and Open Science policies, as well with copyright regulations, and mapping on existing policies and relevant data[77]. In the case of the actors in the forum, it is key that every affected group is represented, but also that such representation is balanced in terms of diversity and acknowledges the cultural richness of the local context.

Finally, we suggest to review and evaluate the tools that will be used and/or adapted in the process, as these need to be tailored to fit with the context, and furthermore, to capture relevant evidence of the policy's effects and design a toolkit for impact assessment[78] which can feed into policy revision.  It is key that, in keeping with the ethos of OE, the initiatives arising from local OE policy are open to and promoted through collaboration, ensuring efforts are visible and impactful.

If the opening of education claims and seeks to be a democratising, participatory movement, it should therefore embody these values in its fundamental processes including policymaking, embracing the convergence of top-down and bottom-up approaches: shifting from hierarchies to networks, from 'command and control' to co-operation.

---

[77] National Teaching Forum Ireland (2018):  Guide to Developing Enabling Policies for Digital Teaching and Learning https://www.teachingandlearning.ie/publication/guide-to-developing-enabling-policies-for-digital-teaching-and-learning/.

[78] Policy Impact Right from the Start: Strategies for Co-Creating Research with Impact https://www.poverty-action.org/blog/policy-impact-right-start-strategies-co-creating-research-with-impact%C2%A0

# 7.

## REFERENCES

AbuJarour, S. A., Pirkkalainen, H., Pawlowski, J., Bick, M., Bagucanskyte, M., Frankenberg, A., Hudak, R., Makropoulos, C., Pappa, D., Pitsilis, V., Tannhauser, A. C., Trepule, E., Vidalis, A. & Volungeviciene, A. (2015). Design principles for collaboration platforms for open education. In *the International Conference on Computer Supported Education*. Retrieved from https://www.scitepress.org/papers/2015/54510/54510.pdf

Alves, H. (2013). Co-creation and innovation in public services. *The service industries journal*, 33(7-8), 671-682. https://doi.org/10.1080/02642069.2013.740468

Amiel, T., da Cruz Duran, M. R., & da Costa, C. J. (2017). Construindo Políticas de Abertura a partir dos Recursos Educacionais Abertos: Uma Análise do Sistema Universidade Aberta do Brasil / Building Open Policy through Open Educational Resources: An analysis of the Open University of Brazil System. *Revista Latinoamericana de Tecnología Educativa*, *16*(2), 161–176. http://dx.doi.org/10.17398/1695-288X.16.2.161

Amiel, T., & Soares, T. C. (2019). A*dvancing open education policy in Brazilian higher education*. Retrieved from https://repositorio.unb.br/handle/10482/37567

Annabi, C. A., & Wilkins, S. (2016). The use of MOOCs in transnational higher education for accreditation of prior learning, programme delivery, and

professional development. *International Journal of Educational Management*. https://pdfs.semanticscholar.org/df73/abc5e77fc53501985714033d41f9dae2417d.pdf

Atenas, J. (2015). Model for democratisation of the contents hosted in MOOCs. *RUSC. Universities and Knowledge Society Journal*, 12(1). pp. 3-14. doi http://dx.doi.org/10.7238/rusc.v12i1.2031

Atenas, J., & Havemann, L. (2013). Quality assurance in the open: an evaluation of OER repositories. *INNOQUAL: The International Journal for Innovation and Quality in Learning*, *1*(2), 22-34. http://oro.open.ac.uk/56347/

Atenas, J., & Havemann, L. (2019). On the trail of OE policy co-creation. Open Education Policy Lab. http://doi.org/10.5281/zenodo.2654899

Atenas, J., Havemann, L., Nascimbeni, F., Villar-Onrubia, D., & Orlic, D. (2019). Fostering Openness in Education: Considerations for Sustainable Policy-Making. *Open Praxis,* 11(2), 167-183. http://dx.doi.org/10.5944/openpraxis.11.2.947

Atenas, J., Havemann, L., & Timmermann C. (2020). Critical literacies for a datafied society: academic development and curriculum design in higher education. *Research in Learning Technology*, 28. https://doi.org/10.25304/rlt.v28.2468

Ball, S. J. (1998). Big Policies / Small World: An introduction to international perspectives in education policy. *Comparative Education*, *34*(2), 119–130. http://doi.org/10.1080/03050069828225

Bass, R., & Eynon, B. (2017). From Unbundling to Rebundling: Design Principles for Transforming Institutions in the New Digital Ecosystem. *Change: The Magazine of Higher Learning*, *49*(2), 8–17. https://doi.org/10.1080/00091383.2017.1286211

Bell, L., & Stevenson, H. (2006). *Education policy: process, themes and impact*. London: Routledge. Retrieved from http://eprints.lincoln.ac.uk/1851/1/Ed_Policy_book_proofs.pdf

Blessinger, P., & Bliss, T. J. (2016). *Introduction to open education: towards a human rights theory. Open education: international perspectives in high education*. Cambridge, Openbook Publishers, 11-30. http://dx.doi.org/10.11647/OBP.0103.01

Blomkamp, E. (2018). The promise of co-design for public policy. *Australian Journal of Public Administration*, 77(4), 729-743. https://doi.org/10.1111/1467-8500.12310

Bryson, J., Sancino, A., Benington, J., & Sørensen, E. (2017). Towards a multi-actor theory of public value co-creation. *Public Management Review*, 19(5), 640-654. https://doi.org/10.1080/14719037.2016.1192164

Cardoso, P., Morgado, L., & Teixeira, A. (2019). Open Practices in Public Higher Education in Portugal: faculty perspectives. *Open Praxis*, 11(1), 55-70. https://doi.org/10.5944/openpraxis.11.1.823

Campbell, L. (2020a). *Openness, Precarity and Equity*. Femedtech http://femedtech.net/published/openness-precarity-and-equity/

Campbell, L. (2020b). Policy, Practice and Permission. Open World. https://lornamcampbell.org/higher-education/policy-practice-and-permission/

Castaño Muñoz, J., Redecker, C., Vuorikari, R., & Punie, Y. (2013). Open Education 2030: planning the future of adult learning in Europe. *Open Learning: The Journal of Open, Distance and e-Learning*, 28(3), 171-186. https://www.tandfonline.com/doi/abs/10.1080/02680513.2013.871199

Chambers, D., Varoglu, Z., & Kasinskaite-Buddeberg, I. (2016). *Learning for All: guidelines on the inclusion of learners with disabilities in open and distance learning.* United Nations Educational, Scientific and Cultural Organization (UNESCO), Paris https://unesdoc.unesco.org/ark:/48223/pf0000244355

Colebatch, H. K. (2018). The idea of policy design: Intention, process, outcome, meaning and validity. *Public Policy and Administration*, *33*(4), 365-383. https://doi.org/10.1177/0952076717709525

Coolidge, A. & Allen, N. (2017). *Advancing OER Through Effective Policy.* OTsummit17 (24 May). Retrieved from https://www.slideshare.net/txtbks/oer-policy-76319050

Corrall & Pinfield (2014), Coherence of "open" initiatives in higher education and research: Framing a policy agenda. *iConference 2014 Proceedings*. https://doi.org/10.9776/14085

Cox, G., & Trotter, H. (2016). Institutional Culture and OER Policy: How Structure, Culture, and Agency Mediate OER Policy Potential in South African Universities. *The International Review of Research in Open and Distributed Learning*, *17*(5). https://doi.org/10.19173/irrodl.v17i5.2523

Croft, B., & Brown, M. (2020). Inclusive open education: presumptions, principles, and practices. *Distance Education*, 1-15. https://doi.org/10.1080/01587919.2020.1757410

Cronin, C. (2017). Openness and Praxis: Exploring the Use of Open Educational Practices in Higher Education. *The International Review of Research in Open and Distributed Learning*, 18(5). https://doi.org/10.19173/irrodl.v18i5.3096

Cronin, C. (2020). Open education: Walking a critical path. *In Open(ing) Education*. Eds Dianne Conrad and Paul Prinsloo, (pp. 9-25). Brill Sense. http://eprints.teachingandlearning.ie/4345

Czerniewicz, L. (2017). Unbundling and Rebundling Higher Education in an Age of Inequality. *Educause Review*. https://er.educause.edu/articles/2018/10/unbundling-and-rebundling-higher-education-in-an-age-of-inequality

Czerwonogora, A., & Rodés, V. (2019). PRAXIS: Open Educational Practices and Open Science to face the challenges of critical Educational Action Research. Open Praxis, 11(4), 381-396. http://dx.doi.org/10.5944/openpraxis.11.4.1024

Dalsgaard, C., & Thestrup, K. (2015). Dimensions of openness: Beyond the course as an open format in online education. International review of research in open and distributed learning, 16(6), 78-97. https://doi.org/10.19173/irrodl.v16i6.2146

Decuypere, M. (2019). Open Education platforms: Theoretical ideas, digital operations and the figure of the open learner. *European Educational Research Journal, 18*(4), 439-460. https://doi.org/10.1177/1474904118814141

Deimann, M. (2013). Open Education and Bildung as kindred spirits. *E-Learning and Digital Media, 10*(2), 190-199. https://doi.org/10.2304/elea.2013.10.2.190

Deimann, M., & Farrow, R. (2013). Rethinking OER and their use: Open education as Bildung. *The International Review of Research in Open and Distributed Learning*, 14(3), 344-360. https://doi.org/10.19173/irrodl.v14i3.1370

Ellison, J., & Eatman, T. K. (2008). *Scholarship in public: Knowledge creation and tenure policy in the engaged university*. https://surface.syr.edu/cgi/viewcontent.cgi?article=1002&context=ia

Farrow, R. (2016). A Framework for the Ethics of Open Education. Open Praxis, 8(2), 93-109. http://dx.doi.org/10.5944/openpraxis.8.2.291

Fingerle, B. (2019). *New indicators for Open Science and Open Innovation* https://www.zbw-mediatalk.eu/2019/10/discussion-paper-new-indicators-for-open-science-and-open-innovation/

Gonsales,P., Sebriam, D. & Markun, P. (2017). Iniciativa educação aberta: Como Implementar uma Política de Educação Aberta https://aberta.org.br/wp-content/uploads/2020/03/folheto_iniciativa_EA_completo_PT_2020.pdf

Gouillart, F., & Hallett, T. (2015). Co-creation in government. *Stanford Social Innovation Review*, 13, 40. Retrieved from https://ssir.org/articles/entry/co_creation_in_government

Harley, D. (2008). Why understanding the use and users of open education matters. *Opening up education: the collective advancement of education through open technology, open content, and open knowledge*, 197-211. http://library.oapen.org/bitstream/id/19158c41-61c5-4fac-a8eb-9e8658951911/1004016.pdf#page=219

Havemann, L. (2016). Open Educational Resources. In: Peters, Michael A. ed. *Encyclopedia of Educational Philosophy and Theory: Living Edition*. Singapore: Springer Singapore. https://doi.org/10.1007/978-981-287-532-7_218-1

Havemann, L. (2020). Open in the Evening: Openings and Closures in an Ecology of Practices. In: Conrad, Dianne and Prinsloo, Paul eds. *Open(ing) Education: Theory and Practice.* Leiden, Netherlands: Brill Sense, pp. 329–344. http://oro.open.ac.uk/69167/

Havemann, L., & Atenas, J. (2014). MOOCs must move beyond open enrolment and demonstrate a true commitment to reuse and long-term redistribution. *LSE Impact of Social Sciences Blog*. Retrieved from http://eprints.lse.ac.uk/71129/

Hockings, C., Brett, P., & Terentjevs, M. (2012). Making a difference—inclusive learning and teaching in higher education through open educational resources. *Distance Education*, *33*(2), 237-252. https://doi.org/10.1080/01587919.2012.692066

Hoppe, R., & Colebatch, H. K. (2018). Policy and the theorising of governing. In *Handbook on Policy, Process and Governing*. Edward Elgar Publishing.

Howlett, M., Mcconnell, A., & Perl, A. (2014). Streams and stages : Reconciling Kingdon and policy process theory. *European Journal of Political Research*, 1–16. http://doi.org/10.1111/1475-6765.12064

Huss, O. & Keudel, A. (2020). *Open government in education: clarifying concepts and mapping initiatives*. UNESCO, International Institute for Educational Planning https://unesdoc.unesco.org/ark:/48223/pf0000373142/PDF/373142eng.pdf.multi

Inamorato dos Santos, A., & Punie, Y. (2016). *Opening up education: A support framework for higher education institutions* (No. JRC101436). Joint Research Centre https://publications.jrc.ec.europa.eu/repository/bitstream/JRC101436/jrc101436.pdf

Inamorato dos Santos, A., Nascimbeni, F., Bacsich, P., Atenas, J., Aceto, S., Burgos, D. & Punie, Y. (2017). *Policy Approaches to Open Education - Case Studies from 28 EU Member States* (Open Edu Policies). European Union. Retrieved from https://ec.europa.eu/jrc/en/publication/policy-approaches-open-education-case-studies-28-eu-member-states-openedu-policies

Inamorato dos Santos, A. (2017). *Going Open: Policy Recommendations on Open Education in Europe (OpenEdu Policies)* (No. JRC107708). Joint Research Centre https://publications.jrc.ec.europa.eu/repository/bitstream/JRC107708/jrc107708_jrc_107708_final__going_open_-_policy_recommendations_on_open_education_in_europe.pdf

Lesko, I. (2019). *Do governmental Open Educational Resources (OER) policies lead to sustainability of Open Education?*. OER Conference. Galway, Ireland. Retrieved from https://oer19.oerconf.org/sessions/do-governmental-open-educational-resources-oer-policies-lead-to-sustainability-of-open-education-initiatives-o-042/

Marín, V. I., Carpenter, J. P., & Tur, G. (2020). Pre-service teachers' perceptions of social media data privacy policies. *British Journal of Educational Technology*. https://doi.org/10.1111/bjet.13035

McKercher, K. A. (2020). *Beyond Sticky Notes is a deep-dive into the mindsets and methods of co-design*. Inscope Books. Retrieved from https://www.beyondstickynotes.com/tellmemore

Miao, F., Mishra, S., Orr, D., & Janssen, B. (2019). *Guidelines on the development of open educational resources policies*. UNESCO Publishing. https://unesdoc.unesco.org/ark:/48223/pf0000371129

Morgan, T. (2020). Instructional Designers and Open Education Practices: Negotiating the Gap Between Intentional and Operational Agency. *Open Praxis, 11*(4), 369-380. https://doi.org/10.5944/openpraxis.11.4.1011

Nascimbeni, F., Burgos, D., Spina, E., & Simonette, M. J. (2020). Patterns for higher education international cooperation fostered by Open Educational Resources. *Innovations in Education and Teaching International*, 1-11. https://doi.org/10.1080/14703297.2020.1733045

Nelson, D. R., Folhes, M. T., & Finan, T. J. (2009). Mapping the road to development: a methodology for scaling up participation in policy processes. *Development in Practice*, 19(3), 386–395. https://doi.org/10.1080/09614520902808225

Nerantzi, C. (2018). The design of an empirical cross-boundary collaborative open learning framework. Open Praxis, 10(4), 325-341. http://dx.doi.org/10.5944/openpraxis.10.4.907

Neumann, J., Orr, D., & Muuß-Merholz, J. (2018). Open Educational Resources in Germany: State of development and some initial lessons learned. *EmRede-Revista de Educação a Distância*, 5(2), 259-270. Retrieved from https://www.aunirede.org.br/revista/index.php/emrede/article/view/335

Nobre, T. (2017). *Copyright and Education in Europe: 15 everyday cases in 15 countries*. COMMUNIA International Association of the Digital Public Domain. https://rightcopyright.eu/wp-content/uploads/2017/04/15casesin15countries_FinalReport.pdf

Olejniczak, K., Śliwowski, P., & Leeuw, F. (2020). Comparing Behavioral Assumptions of Policy Tools: Framework for Policy Designers. *Journal of Comparative Policy Analysis: Research and Practice*, 1–23. https://doi.org/10.1080/13876988.2020.1808465

Oxman, A. D., Becerra, F., Gibson, M., Angel, M., Block, G., Haines, A., Whitworth, J. (2010). Helping to ensure well-informed public policy decisions : A framework for mandatory impact evaluation. *The Lancet*, *375*(9712). https://doi.org/10.1016/S0140-6736(09)61251-4

Orr, D., Neumann, J., & Muuß-Merholz, J. (2017). German OER Practices and Policy—from Bottom up to Top-down Initiatives. *UNESCO Institute for Information Technologies in Education, Moscow*. Retrieved from https://iite.unesco.org/wp-content/uploads/2017/09/OER_Germany_www.pdf

Pas te, S. F., & Zhang, T. (2019). *Career paths in teaching: Thematic Peer Group Report*. European University Association. Retrieved from https://dspace.library.uu.nl/handle/1874/389903

Pirkkalainen, H., Jokinen, J. P., & Pawlowski, J. M. (2014). Understanding Social OER Environments—A Quantitative Study on Factors Influencing the Motivation to Share and Collaborate. *IEEE Transactions on Learning Technologies*, *7*(4), 388-400. https://ieeexplore.ieee.org/abstract/document/6823168

Proudman, V., Santos-Hermosa, G., & Smith, J. (2020). Open Education in Academic European Libraries. *The Envisioning Report for Empowering Universities*, 15. Retrieved from https://empower.eadtu.eu/images/report/The_Envisioning_Report_for_EMPOWERING_Universities_4th_Edition_2020.pdf

Raunio, M., Räsänen, P., & Kautonen, M. (2016). Case Finland, Tampere: *Open innovation platforms as policy tools fostering the co-creation and value creation in a knowledge triangle*. Council of Tampere Region. Saatavissa. http://www.pirkanmaa.fi/wp-content/uploads/OECD_Open-innovation-platforms_Case-Tampere-Finland.pdf

Reed, M., & Turner, C. (2018). *Experiential Learning and Open Education: Partnering with Students to Evaluate OER Accessibility*. Pacific University Press. https://rc.library.uta.edu/uta-ir/handle/10106/27656

Regan, P. M., & Bailey, J. (2019). Big data, privacy and education applications. Ottawa Faculty of Law Working Paper, (2019-44). http://dx.doi.org/10.2139/ssrn.3501191

Richter, T. (2011). Adaptability as a special demand on open educational resources: The cultural context of e-learning. *European Journal of Open, Distance and E-Learning, 14*(2). Retrieved from https://www.eurodl.org/index.php?p=special&sp=articles&article=458&article=460

Rhinard, M. (2010). *Framing Europe: the policy shaping strategies of the European Commission*. Dordrecht: Republic of Letters.

Rodés, V. (2019). *Una Teoría Fundamentada sobre la Adopción de Repositorios y Recursos Educativos Abiertos en universidades latinoamericanas*. Universidade de Santiago de Compostela. Centro Internacional de Estudos de Doutoramento e Avanzados (CIEDUS), Programa de Doutoramento en Equidade e Innovación en Educación. http://hdl.handle.net/10347/18238

Rodés, V., Gewerc-Barujel, A., & Llamas-Nistal, M. (2019). University Teachers and Open Educational Resources: Case Studies from Latin America. *The International Review of Research in Open and Distributed Learning, 20*(1). https://doi.org/10.19173/irrodl.v20i1.3853

Rosa, A., Gudowsky, N. & Warnke, P. (2018). But do they deliver? Participatory agenda setting on the test bed. *European Journal of Futures Research.* 6 (14) https://doi.org/10.1186/s40309-018-0143-y

Sabadie, J. M. A., Muñoz, J. C., Redecker, C., Punie, Y., & Vuorikari, R. (2014). OERs: a European Policy Perspective. In *Reusing Open Resources* (pp. 92-112). Routledge. https://files.eric.ed.gov/fulltext/EJ1034709.pdf

Samzugi, A. S., & Mwinyimbegu, C. M. (2013). Accessibility of open educational resources for distance education learners: The case of The Open University of Tanzania. *HURIA: Journal of The Open University of Tanzania*, *14*(1), 76-88. https://www.ajol.info/index.php/huria/article/view/110779

Secker, J. & Morrison, C.M. (2016). Copyright education and training. In: J. Secker & C.M. Morrison (Eds.), *Copyright and E-Learning*. (pp. 211-238). London, UK: Facet Publishing. Retrieved from https://openaccess.city.ac.uk/id/eprint/17937/1/

Stacey, P. (2013). Government support for open educational resources: Policy, funding, and strategies. *The International Review of Research in Open and Distributed Learning*, *14*(2), 67-80. http://www.irrodl.org/index.php/irrodl/article/view/1537

Stagg, A., & Bossu, C. (2016). *Educational policy and open educational practice in Australian Higher Education*. https://books.openedition.org/obp/3554

Stevens, J., Bradbury, S., & Hutley, S. (2017). Open education in practice – how policy can lead to positive change. *Journal of the Australian Library and Information Association*, 66(3), 249–258. https://doi.org/10.1080/24750158.2017.1357914

Teixeira, A., Correia, C.J., Afonso, F., García Cabot, A., García López, E., Otón Tortosa, S., Piedra, N., Canuti, L., Guzmán, J., and Córdova Solís, M. A. (2013). Inclusive open educational practices: how the use and reuse of OER can support virtual higher education for all. *European Journal of Open, Distance and E-learning*, *16*(2). Retrieved from https://www.eurodl.org/?p=special&sp=articles&inum=5&abstract=632&article=632

Trencher, G., Yarime, M., McCormick, K. B., Doll, C. N., & Kraines, S. B. (2014). Beyond the third mission: Exploring the emerging university function of co-

creation for sustainability. *Science and Public Policy*, 41(2), 151-179. https://doi.org/10.1093/scipol/sct044

Tur, G., Havemann, L., Marsh, J. D., Keefer, J. M., & Nascimbeni, F. (2020). Becoming an open educator: Towards an open threshold framework. *Research in Learning Technology*, *28*. https://doi.org/10.25304/rlt.v28.2338

Urbančič, T., Polajnar, A., & Jermol, M. (2020). Open Education for a Better World: A Mentoring Programme Fostering Design and Reuse of Open Educational Resources for Sustainable Development Goals. *Open Praxis*, *11*(4), 409-426. http://dx.doi.org/10.5944/openpraxis.11.4.1026

UNESCO (2003). *Planning national education stakeholder consultations: ensuring that Education for All is fully integrated in national strategic frameworks*. UNESCO Caribbean Regional Forum on National Stakeholder Consultations, Belize City, 2003 https://unesdoc.unesco.org/ark:/48223/pf0000370936

UNESCO (2012). *Guidelines for the recognition, validation and accreditation of the outcomes of non-formal and informal learning.* Paris: UNESCO Publications. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000216360

UNESCO (2014) Education Strategy 2014-2021. Paris: UNESCO Publications. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000231288

UNESCO (2016) *Knowledge Societies Policy Handbook*. United Nations Educational, Scientific and Cultural Organization Information for All Programme (UNESCO/IFAP). Paris https://en.unesco.org/sites/default/files/knowledge_socities_policy_handbook.pdf

UNESCO (2018). *Digital Credentialing Implications for the recognition of learning across borders*. Paris: UNESCO Publications. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000264428

UNESCO (2019). *Draft Recommendation on Open Educational Resources,* UNESCO. General Conference, 40th, 2019 [1191].  Paris: UNESCO Publications.  Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000370936

UNESCO (2020a). *UNESCO Recommendation on OER.* Paris: UNESCO Publications. Retrieved from  https://en.unesco.org/themes/building-knowledge-societies/oer/recommendation

UNESCO (2020b). Recommendation on Open Science https://en.unesco.org/sites/default/files/en-unesco_osr_first_draft.pdf

Voorberg, W. H., Bekkers, V. J., & Tummers, L. G. (2015). A systematic review of co-creation and co-production: Embarking on the social innovation journey. *Public Management Review*, 17(9), 1333-1357. https://doi.org/10.1080/14719037.2014.930505

Voorberg, W., Bekkers, V., Timeus, K., Tonurist, P., & Tummers, L. (2017). Changing public service delivery: learning in co-creation. *Policy and Society*, 36(2), 178-194. https://doi.org/10.1080/14494035.2017.1323711

Voorberg, W., Bekkers, V., Flemig, S., Timeus, K., Tonurist, P., & Tummers, L. (2017). Does co-creation impact public service delivery? The importance of state and governance traditions. *Public Money & Management*, 37(5), 365-372. https://doi.org/10.1080/09540962.2017.1328798

Wiley, D., Green, C., & Soares, L. (2012). *Dramatically Bringing down the Cost of Education with OER: How Open Education Resources Unlock the Door to Free Learning*. Center for American Progress. Retrieved from https://eric.ed.gov/?id=ED535639

Witthaus, G, Childs, M., Nkuyubwatsi, B., Conole, G., Santos, A. I. dos, & Punie, Y. (2015). An assessment-recognition matrix for analysing institutional practices in the recognition of open learning. *ELearning Papers*, 40.

Retrieved from https://repository.lboro.ac.uk/articles/An_assessment-recognition_matrix_for_analysing_institutional_practices_in_the_recognition_of_open_learning/9500960

# We would like to express our sincere thanks to the following organisations

# OPEN EDUCATION POLICIES

Guidelines for
co-creation