Introduction

UNESCO’s Knowledge Societies Division, with the support of the Slovenian National Commission for UNESCO, hosted the Open Educational Resources (OER) Road Map Meeting from 30 to 31 March 2016 at UNESCO Headquarters in Paris.

The main objectives of the meeting:

1. Understanding the OER landscape with a view to a possible normative instrument on OER
2. Exploring mechanisms to facilitate mainstreaming OER

The 2-day meeting brought together representatives of the Member States (Permanent Delegation and National Commissions) from Bahrain, China, DPR Korea, Ecuador, Estonia, France, Germany, Kuwait, Lithuania, Netherlands, Oman, Paraguay, Philippines, Rep. Korea, Russia, Saudi Arabia, Serbia, Slovenia, Sudan and Uruguay as well as experts from the European Commission, Organisation for Economic Cooperation and Development (OECD), Arab League Educational, Cultural and Scientific Organization (ALECSO), International Organisation of La Francophonie (OIF), William and Flora Hewlett Foundation, Commonwealth of Learning (COL), Creative Commons (CC) and UNESCO OER Chairs; and provided a forum for sharing of experiences and expertise to explore mechanisms to facilitate mainstreaming OER.

The UNESCO OER Road Map Meeting discussions were aligned with the framework of the 2030 Agenda, including Sustainable Development Goal 4 (SDG 4 – Quality Education). As unanimously adopted by the United Nations General Assembly in November 2015, SDG 4 sets targets for all UN Member States to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”.

The Road Map Meeting discussed partnerships and strategies toward better mainstreaming OER, highlighting several initiatives and good practices around the world. Six expert working groups addressed scenarios, strategies and solutions to OER challenges: from balancing commercial interests to inclusive and equitable access across languages and cultures. Examples of best practice in OER mainstreaming were presented from Bahrain, India, Kenya and Slovenia.

OER, a term first coined at UNESCO in 2002, refers to any type of educational materials (e.g. textbooks, curricula, lecture notes and videos) either in the public domain or introduced through open license to allow for different levels of free use, reuse and adaptation (such as translation to local learning contexts and languages), while allowing authors and institutions to have their work fully acknowledged.
Outcomes

1. Opening

The meeting was opened by Mr Indrajit Banerjee, Director of the UNESCO Knowledge Societies Division, Communication and Information Sector and ad interim Assistant Director-General for the Communication and Information Sector (DIR/CI/KSD and ADG/CI a.i.). Mr Banerjee welcomed all participants including H.E. Dr Maja Makovec Brenčič, the Minister of Education, Science and Sports of the Republic of Slovenia, H.E. Ambassador Mr Andrej Slapnicar of the Slovenian Delegation to UNESCO, and Ms Marjutka Hafner, Secretary-General of the Slovenian National Commission to UNESCO on behalf of Mr Frank LaRue, Assistant Director-General of the Communication and Information Sector (CI).

H.E. Minister Brenčič gave a keynote speech in which she presented Slovenia’s vision in OER. “UNESCO’s Paris OER Declaration in 2012 encouraged many governments and stakeholders to upgrade their strategies and policies, supporting OER pilots in different countries,” said Minister Brenčič, noting Slovenia’s numerous global and national OER initiatives including the adoption of its National Strategy 2015-2020 of Open Access to scientific publications and research data. In her speech, Minister Brenčič announced a proposal by the Republic of Slovenia to host the 2nd World OER Congress in the Autumn of 2017. Mr Banerjee then provided an overview of the work of UNESCO in OER, with a focus on initiatives undertaken in the framework of the Inclusive Knowledge Societies programme. UNESCO activities address advocacy, policy and capacity building for OER, facilitating OER piloting, and the use of OER in teacher training for the use of ICTs, with a link to the ICT Competency Framework for Teachers (ICT CFT), to support implementation of the Paris OER Declaration 2012. Mr Banerjee outlined the objectives of the Road Map Meeting, and stated that with the launch of the Education 2030 Agenda in 2015 and the upcoming 2017 second World OER Congress, it was an opportune moment for the OER community to work together to support mainstreaming of OER in educational systems worldwide.

2. Plenary Presentations

Plenary Presentation 1: Meeting Working Document

Ms Zeynep Varoglu, Programme Specialist, ICT in ED, CI/KSD, presented the Working Document for the meeting. Ms Varoglu summarized the challenges to achieving mainstreaming OER outlined in the Working Document:

1. Commercial interests
2. Language and cultural barriers
3. Ensuring inclusive and equitable access to quality content
4. Capacity of users to access, re-use, and share OER
5. Development of appropriate policy solutions
6. Need for clarity on the term ‘open’

In summary, Ms Varoglu highlighted the important role of the different stakeholders in the OER landscape in funding strategic solution to these challenges.

Plenary Presentation 2: OER in Higher Education – an Indian Perspective

Dr Savithri Singh, Principal, University of Delhi, examined challenges for traditional face-to-face learning as well as the challenges for the e-learning, which has appeared to be an alternative of traditional education. Dr Singh showed how technology trends worldwide have influenced higher education, including that of India. Dr Singh then explained that Indian
National Programme on Technology Enhanced Learning (NPTEL) has released all contents under CC-BY-SA license, as open educational resources, OER. Dr Singh also emphasized the role that government can play in initiating these changes.

Plenary Presentation 3: Mainstream Adoption of OER in Bahrain
Ms Wafa Al Khalifa, Deputy Permanent Delegate, Permanent Delegation of Bahrain to UNESCO, presented the case of Bahrain on behalf of Ms Nawal Ebrahim AlKhater, Assistant Undersecretary for Planning and Information, Ministry of Education, Bahrain. Ms Al Khalifa stated that ICT in education initiatives in Bahrain have gone through three stages through the King Hamad’s Schools of the Future Project. Ms Al Khalifa illustrated the good practices of the Bahrain OER Initiative and its plan in six steps: raising awareness, developing capacity, technology infrastructure, developing and publishing the policy, implementation, and monitoring and evaluation. Ms Al Khalifa explained that to address the challenge of the quality assurance of e-contents, a Digital Content Production Guide was developed as a guideline for content production, and also showed the future plans and expectations from the Initiative.

Plenary Presentation 4: Partnerships for OER
Ms Barbara Chow, Education Program Director of the William and Flora Hewlett Foundation, stated that it is a critical moment for OER in the education field. Pressure has been mounting on education systems from a variety of sources including demands from the changing labor market for higher skills, and rapidly rising costs. OER is providing immediate and substantial cost saving in addition to empowerment of the teachers and faculties. Ms Chow pointed out that there has been a broad endorsement of the policy principle that publicly funded educational materials should carry public licenses, and there is an opportunity to go beyond rhetorical expectations to action. Ms Chow also emphasized that partnerships in the policy sphere are important because an active engagement of diverse institutions and practitioners for the design of policies is essential for effective implementation.

Plenary Presentation 5: Policy Level & Incentive Level Mechanisms
Dr Cable Green, Director of Open Education, Creative Commons, emphasized the “openness” of the OER includes free copyright permissions to retain, reuse, revise, remix and redistribute educational resources. Dr Green illustrated how Creative Commons has partnered with governments and foundations to promote open licensing policy on educational resources. Creative Commons’ work underlines the efforts to persuade governments to endorse a principle, “Publicly funded resources should be openly licensed resources”.

Dr Wayne Mackintosh, Director, OER Foundation, OERu Chair, presented OERu as an innovative and successful case in combining higher education and open educational resources.

Plenary Presentation 6: Opening up Slovenia Initiative
Dr Mitja Jeroml, OER Chair, Jožef Stefan Institute, Slovenia, presented the “Opening up Slovenia” Initiative. Dr Jeroml underlined the fact that the OER is not used as much as the increasing number of resources created and illustrated how Opening up Slovenia approached and involved the stakeholders. Dr Jeroml also pointed out that Slovenia’s case might not be the one-size-fits-all model, but provides an example of a best practice in implementing OER at the national level.

The Working Group sessions focusing on the key challenges outlined in the Working Document of the meeting. Main points from the Working Group outcome documents include:

Working Group 1 – Commercial interests
The Group recognized that the publishing industry itself is in a period of reflection and in search of new business models. In this regard, the Group made a call for identifying innovative solutions for ensuring that new business models be developed by the OER community jointly with publishers. A possible way towards a solution would be examine hybrid models which allows for both OER and traditional copyrighted publications to co-exist, each meeting different audience needs.

Working Group 2 – Language and cultural barriers
Support from governments for ensuring OER materials in languages other than English was highlighted. In particular, the Group stated that in light of the needs for educational resources in many countries, greater linguistic and cultural diversity through OER could play an important role in achieving the 2030 Education Agenda goals. The Group also underscored the importance of ensuring cultural relevance when knowledge is shared through OER.

Working Group 3 – Ensuring inclusive and equitable access to quality content
With regard to ensuring that OER is accessible to Persons with Disabilities, the Group underscored the importance of ensuring that OER providers and developers are aware of and use standards for accessibility when accessing, using and re-using OER. With regard to equitable access, the Group underscored the need to ensure that OER is developed in a mobile-friendly manner to share, create and/or re-mix. When it comes to quality assurance, a call to extend existing quality control mechanisms for non-e-materials was put forward. Focus on developing new quality control mechanisms such as peer-to-peer review, and feedback from users and authors was recommended.

Working Group 4 – Capacity of users to access, re-use and share OER
With regard to access, the Group focused on partnerships that could raise awareness of OER at regional, national, local and institutional levels both in the public sector (IGOs, governments, Ministries of Education, curriculum development institutes, quality assurance agencies as well as teachers’ networks such as the British Council) and the private sector (such as independent bookstores and distribution networks that create ‘competitive’ environments for accessing OER). In addition, solutions to intellectual property rights issues and a value proposition were put forward. With regard to capacity building, it was recommended that a global roadshow – delivering ‘Go OER’ workshops adapted to local contexts – be examined, and also that OER development and use be embedded in existing digital literacy campaigns. With regards to reuse and sharing, it was suggested that partnerships with different existing OER partners be highlighted, and that the concept of ‘adaptation’ be put forward in the place of ‘reuse’. In terms of sharing, the Group called for an understanding of cultural issues around attitudes to sharing knowledge, and incentivizing of the sharing of teaching resources in higher educational institutions, similar to the way that research is currently incentivized for tenure in higher education institutions.
Working Group 5 – Development of appropriate policy solutions
The Group underscored the vision of the Paris OER Declaration 2012 stating that all publicly funded educational resources should be made available under an open license to the public. The Group identified challenges and strategies to this issue. With regard to partnerships, the Group highlighted the importance of connections of OER policy to link to SDGs in governments’ review process for educational policies. The Group also called for connections with teacher training tools such as the ICT Competency Framework for Teachers (ICT CFT), Media and Information Literacy tools, UNESCO Media & Information Literacy Clearinghouse, as well as the Commonwealth Digital Education Leadership Training in Action (C-DELTA), and existing initiatives such as WIPO and the EU intellectual property office. A detailed road map to move forward in this area was developed, which highlighted issues such as capacity building, micro-credentials for OER, the definition of indicators of success, and the creation of a menu of OER and Open policy activities/options.

Working Group 6 – Need for clarity on the term ‘open’
The Group provided background on reflections on the topic of ‘open washing’ of educational perspectives from experts such as, Stephen Laster (Chief Digital Officer at McGraw-Hill Education) and Mathew Smith (International Development Research Centre, Canada, and funder of the Researching Open Educational Resources for Development - ROER4D project) David Wiley (a ‘founding father’ of OER). The Group then provided a number of recommendations, starting with the principle that sharing is the foundation stone for OER which should be emphasized in all communications. The Group also underscored that mainstreaming requires a concept that is attractive to all, recognizing diversity in education. Therefore, it is important to not focus only on the innovative potential. The Group also underscored that Open Education is an umbrella concept that comprises various components but the prime and immediate priority (within the scope of these actions is) to get OER right.

4. Concluding Remarks
The Meeting was closed by Mr Indrajit Banerjee, Director, Knowledge Societies Division, and Dr Abdul Waheed Khan, Chairman, Buniyad Foundation. Dr Khan provided an overview of progress of the OER movement as he had witnessed it first hand, from the perspective of his former role as UNESCO Assistant Director-General for Communications and Information Sector at the time of the first UNESCO Forum which coined the concept of ‘OER’, to the present day as discussions centre on the mainstreaming of OER in global education systems. Mr Banerjee thanked the participants for their invaluable inputs, and informed the participants that UNESCO would be calling on them to work together towards the World OER Congress 2017 and its lead up activities in 2016.

Annexes:
Annex 1: Outcomes of Working Groups
Annex 2: Agenda of the Meeting
Annex 3: List of Participants
Annex 4: Working Document
Annex 1: Outcomes of Working Groups

1. Composition of the Working Groups

### 1. COMMERCIAL INTERESTS

Moderator: Ms Sana El Harbi

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<tr>
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<tr>
<td>Ms Sana El Harbi</td>
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<td>Ms Nadia Makeen</td>
<td>Permanent Delegation of the Sultanate of Oman to UNESCO</td>
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<td>Mr Domen Božeglav</td>
<td>Ministry of Education, Science and Sport, Republic of Slovenia</td>
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<td>Mr Joe Hironaka</td>
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### 2. LANGUAGE AND CULTURAL BARRIERS

Moderator: Mr Mohamed Jemni

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<td>Mr Mohamed Jemni</td>
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<td>Mr Paul Constantin</td>
<td>International Organization of La Francophonie</td>
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<td>Ms Marjutka Hafner</td>
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<td>Ms Sonia Dubourg- Lavroff</td>
<td>French National Commission</td>
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### 3. ENSURING INCLUSIVE AND EQUITABLE ACCESS TO QUALITY CONTENT

Moderator: Mr Borut Campelj

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<td>Mr Borut Campelj</td>
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<td>Ms Ina Severin</td>
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### 4. CAPACITY OF USERS TO ACCESS, RE-USE, AND SHARE OER

Moderator: Mr Alex Gakuru

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<td>Mr Alex Gakuru</td>
<td>Creative Commons</td>
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<td>Mr Batbold Zagdragchaa</td>
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### 5. DEVELOPMENT OF APPROPRIATE POLICY SOLUTIONS

Moderator: Ms Asha Kanwar

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<td>Ms Asha Kanwar</td>
<td>Commonwealth of Learning</td>
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<td>Mr Rory McGreal</td>
<td>Athabasca University</td>
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<td>Ms Savithri Singh</td>
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<td>Mr Tel Amiel</td>
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<td>Ms Maria Elene Moreira</td>
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<td>Ms Barbara Chow</td>
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### 6. NEED FOR CLARITY ON THE TERM ‘OPEN’

Moderator: Mr Fred Mulder

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<td>Mr Fred Mulder</td>
<td>Open University of the Netherlands</td>
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<td>Mr Wayne Mackintosh</td>
<td>OER Foundation</td>
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2. Outcomes of the Working Groups

**Group 1: Commercial Interests**

We recognize that the trend is threatening for the existence of publishers as they have to find new channels to survive. The promotion of OER should be guided by producing standard-setting instruments, which implies addressing the different stakeholders’ interests.

One potential obstacle is the one encountered by the education publishers.

These are some factors that may influence challenges and solutions for the education publishers:

1. Mixing different approaches, encouraging hybrid teaching: co-existence of the 2 models OER and the conventional publishing practices. Slovenian example: people would still buy traditional books while providing and using OER in classes.
2. Publishers may provide customized services.
3. Publishers may also work on assembling OER. Publishing companies can use OER as a basis upon which they can build by adding their professionalism and their know-how. Publishers may better look to the learning flow of the lessons with a focus on the design of the courses.
4. Publishers might concentrate on new subjects where Open Resources do not exist yet. There is an added value, a professionalism that publishers may use to target profitable niches in the sector.
5. Provide joint products for example producing conventional textbooks while releasing other products digitally for on open license (e.g. educational games which are connected with the conventional textbook.)
6. Sell advertisements in the pages providing OER for relevant subjects.

**Group 2: Language and Cultural Barriers**

1. The multilingualism should be encouraged and promoted at different levels (individuals, institutions and governments) as a crucial issue for OER.
2. Producing OER in the local languages should be prioritized in order to ensure diversity, quality and relevance of the content.
3. Considering the needs for educational resources in many countries where multilingualism is strong, the linguistic and cultural diversity of OER could play a primordial role toward achieving the 2030 Education Agenda goals.
4. The OER is mainly a sharing of knowledge and the translation has a strong potential to empower widely this sharing aspect. In addition, the translation and the adaptation allow the access to different cultures.
5. The governments and public institutions should promote and finance the relevant procedures and tools in order to ensure multilingualism in OER.
6. The digital aspect of most OER makes the translation process easy and affordable thanks to ICT, automatic translators and collaborative tools. These tools should be promoted and improved by public and private investments.
7. OER repositories play an important role in order to ensure sharing at wide scale. Therefore, some technical aspects should be taken into consideration (metadata) in order to facilitate translation to other languages. Governments and institutions should make suitable efforts in order to implement multilingualism in the major and most used repositories.
8. It is important that knowledge shared through OER maintains its cultural relevance and also respects local culture and traditions and rules through contextualization and adaptation.

**Group 3: Ensuring Inclusive and Equitable Access to Quality Content**

*Identify vision, strategies and partnerships to move forward*

1) OER accessible to Person with Disabilities

a) vision: **providers and developers** are not only aware but actually use the standards, guidelines that individuals could find, have access and use or re-use the OER (different disabilities – visual, physical, cognitive, short and long term…)

Strategies and partnerships to move forward:
- comprehensive guidelines on how to create OER
  - preparation/development (in partnership / working group of different stakeholders – user and developers) and revise regularly (quality)
  - implement and disseminate
- good practice example
  - prepared in partnership (also allocate some budget or reconstruct existing projects or activities)
b) vision: the **individuals and groups with the disabilities** have awareness and access to the training and support

- develop face-to-face and online courses and events
  - development in partnership with different stakeholders (teachers and other educators from NGO’s, companies, civil service)
- provide instant services: help desk, e-communities (social networks)
- good innovative examples in practice

2) Vision: **OER is mobile friendly both to share, create, and/or re-mix**

- OER to be provided in different platforms (Android, IOS, Windows…) and open source software in partnerships:
  - with different stakeholders who develop OER
  - but also those who develop the platforms to make OER easily transferable between platforms
- OER follow technological possibilities/opportunities
- intuitive (user friendly) tools to develop, adapt, mix the OER
- easy to publish, share

3) vision: OER has the same or even better quality as non-OER

- for e-materials extend existing quality control mechanism of non e-materials (guidelines, standards, normative):
  - not only professional and pedagogical quality is important but also organisational and multimedia/interactive dimension
  - in partnership with all stakeholders (developers, teachers, users)
- mechanisms should be adapted to different approaches of creating OER, for example:
  - short material (like learning objects)
  - larger team of authors - there is a need for new ways to organise the work and ensure the quality
- new quality control mechanism: peer to peer review, feedback from users and authors

**Group 4: Capacity of Users to Access, Re-Use, and Share OER**

**NOTE**: UNESCO and governments are presumed as partners for all of these problems.

**Awareness raising**

- OER Brand symposia that brings together external brand expertise, marketing, SEO, design
- Competitions for creative input
- Find local networks e.g. British Council
- Independent bookstores and distribution networks to act as “sales” force to compete with commercial publishers
- Funders, IGOs, UNESCO, Governments, Ministries of Education
- Successful stories, e.g. Slovenia
- Curriculum development institutes – both higher and school
- Quality assurance agencies

**Intellectual Property Rights Issues**

- Raising awareness of open licensing in law, teacher training and school education
- Emphasise what it allows, rather than what you can’t do
- Take Leicester model of getting teachers to share material under CC-BY
- Partners = universities, legal associations, teacher training, curriculum development institutes, COL, ROER4D.
Value proposition

Solutions:
- Highlight open business models
  - Partners = CC, open source companies e.g. Ubuntu, MOOCs (?)
- Different audiences need targeted communications
- Highlight value of OER for social issues e.g. migration, medical issues
  - Partners = Red Cross, MSF, UNICEF, media, educators

Increasing range of OER
- OERize courses from one university to another
  - Establish competition
  - Partners = Universities, Hewlett, volunteers,

Capacity building
- Global roadshow – delivering template “Go OER” workshops, but adapted to local context.
- Get embedded with existing digital literacy campaigns
- Partners = CC, local repositories, regional networks that have initiatives which OER could be related to, platform providers
- Find online platforms that will offer pilot offering content, e.g. UNESCO establish platform or do we ‘dance with the devil’ with companies like Facebook/Google, or platforms of Regional trading blocks, or language based platforms e.g. Francophone, COL, etc.
- OER in a box packaged resources – student pack, teacher pack, director pack, etc.
  - Partners – Hewlett, CC, OpenStax, FSF, OERHub (we have an OER Researcher pack)

Reuse
- Use open standards, but also easy to use and edit
  - Partners – software development to improve editing and adaptation e.g. Ubuntu. Try to get standard across projects e.g. Pressbooks (?)
  - Quality Assurance – counter idea that free is not good quality
  - Quality badge that assures the production process (not assessing the quality of each resource). E.g. all outputs from repository X get stamp because they have followed process. Periodic review that still meets these.
  - Partners – ministries, quality assurance agencies, UNESCO National Commissions, OpenUpEd project as example with MOOCs (Fred Mulder project).
  - Think about using the term adaptation instead of reuse

Reputation – make sure materials are used consistently and proudly
- Have open process like OERu
  - The quality badge may resolve this also
  - Open up leads to further benefits e.g. incentives such as citation

Sharing – gap between people using and sharing back
- The “How to OER” workshop above may address this
  - Understand cultural issues around attitudes to sharing
  - Incentivize sharing teaching resource in the way research sharing is incentivized.
  - Partners – UNESCO cultural knowledge (societies division)
  - Stakeholders – Korean, Poland and Slovenia as good examples. Brazilian provincial states have some success, Open Data in Kenya, Open Scotland Policy, USA Department of Education policy, New Zealand Gov Open … etc.

Government metrics that measure capacity of users to access, share and reuse OER. This could provide competition. Agree to report back on these.
Group 5: Development of Appropriate Policy Solutions

Vision: All public funded educational resources are openly licensed through open education policies, leveraging ICT to support efforts of Member States to achieve SDG4.

Mission: The mission is to foster the creation, adoption and implementation of OER policies and practices that advance the public good by supporting organisations and policy makers, connecting OER policy opportunities with assistance, and sharing OER policy information and models.

Principles

- The adoption of open policies can maximize the return on public investments and promote a global commons of resources for innovative reuse.
- Publicly funded resources should be openly licensed resources.
- Open policies should require, as a default, licenses compliant with the Open Definition, with a preference for open licenses that at most require attribution to the author (such as CC BY) for publicly funded content and no rights reserved (such as CC0) for publicly funded data.

Challenges

- Lack of incentives; Lack of time; Lack of recognition;
- Inadequate Leadership
- Lack of awareness
- Commercial interests
- Archaic policies and mindset
- Inertia
- Discoverability

Strategies

- Support the development of appropriate OER policies at multilateral, national, provincial, project and institutional level, and to ensure that the policy is accompanied by a measurable implementation plan with adequate ICT facilities, resources and capacities. The policies for OER will support efforts of Member States to achieve SDG4.
- Clearly identify wide (systemic) partnerships for long-term engagement
- Provide model(s) that establish a Roadmap for implementation
- Define levers/specific incentives for key actors in policy
- Identify sources of continuous support and funding
- Engage key actors (teachers, librarians, lawyers) in OER during initial training/formal opportunities
- Define specific elements of openness part of policy (defining specific licenses, emphasizing open formats, identifying repositories/deposit)
- Define “open” in a gradation (scale) aiming for greater openness
- Comparing advantages of present and open practice
- Use the declaration/recommendation as a mechanism of persuasion

Opportunities

- Connect with SDG as governments review educational policies
- Open Government Partnership
- Take advantage of teacher initial/continuous training opportunities (during changes in curricula)
- Expand/connect with UNESCO Media and Information Literacy and UNESCO ICT-CFT, to include OER skills/practices
- Commonwealth Digital Education Leadership Training in Action (C-DELTA)
- Connecting with existing initiative, such as by WIPO and EU intellectual property office

Road map

- Micro-credential for OER/Open licensing (UNESCO/COL/CC/UNESCO-Chairs)
- Training students, teachers and researchers early in their career
○ Reuse existing resources (COL, Wiley’s course, School of Open, CC Certificate, DS4OER/OERu, CursoREABrazil, handbooks on OER from around the world etc.)
  ■ Modular, create the size of learning activity for different audiences
  ● Phone “hot line” and/or substantial FAQ for copyright / OER
  ● Expand the circle of partners (including UN agencies, intergovernmental/regional agencies and institutes)
  ● Foster country specific champions and networks for OER
  ● Regional forum on OER as build up support for the 2nd World OER Congress (2017)
  ● Define indicators for success – OER as measurable outcomes
    ○ Number of countries that have OER policies (with caveat that this does not paint the whole picture)
    ○ Cost-savings (with attention to country-specific conditions)
    ○ Learning outcomes
    ○ Careful to not request excessive data, simple but meaningful/existing sources of data
    ○ Allow for more agnostic follow-up to policies (what happens after they are accepted), monitoring outcomes beyond indicators
  ● Create a menu of OER & Open policy activities / options
    ○ Work in a country/region, let the local opportunities drive the choices on the list
    ○ Menu/options:
      ■ oerstrategy.org has some good ideas
      ■ Awareness raising:
        ● OER conference (national, regional, institution)
      ■ Training / professional development:
        ● UNESCO/COL/CC/UNESCO-Chairs - micro-credential for OER / open licensing
        ● Hands-on OER workshops
        ● CC/OER Certificate
        ● OER modular course (MOOC)
      ■ Open Government Partnership: add OER / open education policies to “national action plans”
      ■ Meeting with policy makers
        ● Ask is to require publicly funded educational resources be openly licensed by default
        ● Work on open policies @ national, provincial, systems of education, education institutions
  ● Policy handbook/toolkit for high level and middle-level managers at organizations and government (federal/state/local) - e.g., CC Open Licensing Toolkit
    ○ Show models of OER policy (beyond academic examples/analysis)
  ● Expand dialogue and connection with other “open” movements (open access, open data, open science, open government, etc.)

Group 6: Need for Clarity on the Term ‘Open’

Stephen Laster (Chief Digital Officer at McGraw-Hill Education)
The Future of Education Isn’t Free. It’s Open.
Openness is a technical feature whereby technology or content can integrate painlessly with other resources. This requires full interoperability among learning platforms, tools, and content.

David Wiley (one of the founding ‘fathers’ of OER)
While I wholeheartedly support, endorse, approve, and praise arguments extolling the virtues of interoperability, I unequivocally renounce, oppose, and reject arguments that attempt to weaken the meaning of “open.” Unfortunately, the article seems to be as much an attempt to redefine open (by equating it with interoperability) as it is an attempt to argue for interoperability. (…….)
A desire to benefit from the public’s good will toward open is one reason to engage in openwashing, but it isn’t the only one. A second motivation for openwashing is to distract people from the pragmatic benefits of open. Unfortunately, many people (including many people in education) still don’t know that “open” exists.(…….)
In many contexts – like open content, open educational resources, open source software, open access, and open data – “open” means “free plus permissions.” But when modifying nouns that aren’t copyrightable – for example, in contexts like “open pedagogy” or “open educational practices” – open necessarily means something else. There are significant costs when we aren’t clear about what we mean by open in different contexts.
Matthew Smith (IDRC/Canada; funder of the ROER4D program)

What the research in the developing world is revealing over and over again is that “free with permissions” can happen through social rather than legal means – it may be based on norms rather than law. (……)

One of the clear findings emerging from the ROER4D project is that in practice the line between closed, free, and open educational resources is often unclear, if it is even there. Strict adherence to free + permissions sometimes can deter people from engaging in open practices in the first place by raising technical and legal barriers. (……)

Consider how MOOCs generate a lot of debate because in many cases “open” in MOOC means “free” but doesn’t include permissions. This makes MOOCs not only a misnomer but also a threat to OER. The argument is based on the assumption that “before long the general public will feel that ‘free’ is good / innovative enough, and no one will care about ‘open,’ permissions, or licensing.” (……)

Given the evidence emerging from IDRC supported research, the conclusion would be to focus on openness in practice, what that looks like, how to do it well, and its benefits – regardless of legal or technical status. I see this as the logical evolution of openness: First we define it (arbitrarily), then we research it, and then based on the new evidence, we redefine it.

David Wiley (one of the founding ‘fathers’ of OER)

I see two problems with this approach. First, it would equate open with breaking the law (……) We have worked extremely hard to demonstrate that open educational resources respect the law, comply with the law, and that it makes sense for government to embrace the principle of openness in many of its functions. If open became a synonym for violating the law, there is no way governments could support openness, no way that open policies could be enacted, etc. (I could probably support a phrase like “guerrilla open” to describe these practices in order to acknowledge their broad practice and characterize them accurately.) (……)

The opportunity cost of defining the “open” in OER as affordable or free (without permissions), or building the “open” in open pedagogy on a foundation of fair use or guerrilla open, is nothing less than potentially delaying the advance of society.

OECD Report (Dec 2015): ‘Open Educational Resources: a catalyst for innovation’

OER are seldom Massive Open Online Courses (MOOCs)

In many cases, current discussions on educational reform – particularly in higher education – have moved from OER to MOOCs. Both are related to general policies of open education and reform, but there are three general differences: Use of term “open” (……), Form of resource (……), Audience (……).

Despite these differences, overlaps between OER and MOOCs exist. (……)

OER are one element in Open Education

(……) have developed a reference model which they call the “5COE model” that stands for “Five Components for Open Education”. 5COE contains two components on the demand side of education and three components on the supply side. From the demand side, it is expected that education is open to: 1) the requirements and individual needs of learners and to 2) the requirements of the labour market and society in general. (……) This type of openness calls for changes to the content, the teaching process and the support services offered to learners, i.e. to the supply side. The 5OE models sees 3) OER as the kingpin in this change. It is the adaptability of educational materials which improves fitness for purpose, and in turn encourages and facilitates changes to 4) learning support services and to 5) teaching efforts.

(……) argues that in all components the level of openness among educational provisions can be varied among providers which can be desirable in terms of fitness for purpose. The one which can exception concerns educational resources that should be fully open, because of the benefits that can be derived from OER for all learners, all teachers, all educational institutions, as well as for governments and society at large.

The essence of the Sharing Principle!

Recommendations

1. The sharing principle is the foundation stone for OER which should be emphasized in all our communications.
2. Mainstreaming requires a concept that is attractive to all, recognizing diversity in education so we should not fully focus on the innovative potential only.
3. Open Education is an umbrella concept that comprises various components but our prime and immediate priority is to get OER right.
4. We need to be cognizant of contemporary developments and its relations to OER (e.g. the MOOCs movement).
5. We should be aware of continuing attempts to undermine the OER movement and be prepared for consistent messaging based on evidence.
6. We need to develop and agree on filters for selecting strategic partnerships, which can strengthen rather than dilute the case.
7. Include the vast collection of published literature, which supports the case (e.g. the OER Knowledge Cloud, the recent OECD report, the OER Research Hub, GO-GN, etcetera).
### Objectives

1. Understanding the OER landscape with a view to a possible normative instrument on OER
2. Exploring mechanisms to facilitate mainstreaming OER

#### Day 1: Wednesday, 30 March 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Topic</th>
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<tbody>
<tr>
<td>8:45 - 9:30</td>
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<td><strong>Welcoming Tea and Coffee</strong></td>
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<tr>
<td>9:30 - 10:30</td>
<td>1</td>
<td><strong>Welcoming Remarks</strong></td>
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<tr>
<td></td>
<td></td>
<td>Mr Indrajit Banerjee, Director, Knowledge Societies Division,</td>
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<td>Communication and Information Sector, UNESCO</td>
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<td><strong>Keynote: Setting the Stage</strong></td>
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<td>H.E. Dr Maja Makovec Brenčič, Minister of Education, Science and</td>
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<td>Sports of Slovenia</td>
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<td><strong>Background on UNESCO OER Activities and Meeting Objectives</strong></td>
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<td>Mr Indrajit Banerjee, Director, Knowledge Societies Division,</td>
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<td>Communication and Information Sector, UNESCO</td>
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<td>10:30 - 10:45</td>
<td>2</td>
<td><strong>Presentation of the Draft Concept Paper</strong></td>
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<td>Ms Zeynep Varoglu, ICT in Education Programme Specialist,</td>
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<td>Knowledge Societies Division, Communication and Information Sector</td>
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<td>UNESCO</td>
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<td>10:45 - 11:15</td>
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<td><strong>Coffee Break</strong></td>
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<td>11:15 - 12:00</td>
<td>3</td>
<td><strong>OER Strategies and Partnerships:</strong></td>
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<td><em>Moderator:</em> Dr Tel Amiel, University of Campinas (UNICAMP), Brazil</td>
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<td><strong>OER in Higher Education</strong></td>
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<td>Dr Savithri Singh, University of Delhi, India</td>
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<td><strong>Mainstream Adoption of OER in Bahrain</strong></td>
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<td>Ms Wafa Al Khalifa, Deputy Permanent Delegate, Permanent Delegation</td>
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<td>of Bahrain to UNESCO</td>
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<td><strong>Partnerships for OER</strong></td>
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<td>Ms Barbara Chow, Education Program Director, William and Flora</td>
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<td>Hewlett Foundation</td>
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<td>12:00 - 12:30</td>
<td>4</td>
<td><strong>Policy Level &amp; Incentive Level Mechanisms and Discussions:</strong></td>
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<td><em>Discussants:</em> Dr Cable Green, Director of Global Learning, Creative</td>
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<td>Dr Wayne Mackintosh, Director, OERu</td>
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<td>12:30 - 14:30</td>
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<td><strong>Lunch Break</strong></td>
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<td>14:30 - 15:00</td>
<td>5</td>
<td><strong>Opening up Slovenia Initiative</strong></td>
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<td>Dr Mitja Jermol, Jožef Stefan Institute, Slovenia</td>
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<td>15:00 - 17:00</td>
<td>6</td>
<td>**Working Groups: Clarifying Issues Surrounding Challenges to</td>
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<td>Mainstreaming OER**</td>
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<tr>
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<td></td>
<td>1. Commercial interests (Moderator: Dr Sana El Harbi)</td>
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<td>2. Language and cultural barriers (Moderator: Dr Mohammed Jemni)</td>
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<td>3. Ensuring inclusive and equitable access to quality content</td>
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<td>(Moderator: Mr Borut Campelj)</td>
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<td>4. Capacity of users to access, re-use, and share OER (Moderator: Mr</td>
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<td></td>
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<td>Alex Gakuru)</td>
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<td>5. Development of appropriate policy solutions (Moderator: Dr Asha</td>
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<td>Kanwar)</td>
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<td>6. Need for clarity on the term ‘open’ (Moderator: Dr Fred Mulder)</td>
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<td>Output: 1 document per Working Group</td>
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<td>17:00 - 17:30</td>
<td>7</td>
<td><strong>Conclusions from the Chairs of Working Groups: Synthesis of Outputs</strong></td>
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<td>18:00 - 20:00</td>
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<td><strong>Meeting Reception, UNESCO Restaurant, 7th Floor UNESCO</strong></td>
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</table>
### DAY 2: Thursday, 31 March 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Topic</th>
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</thead>
</table>
| 9:30 - 9:45| 8       | **Welcome Day 2 and Summary of Day 1**  
Ms Zeynep Varoglu, ICT in Education Programme Specialist, Knowledge Societies Division, Communication and Information Sector UNESCO |
| 9:45 - 11:00| 9       | **Working Groups: Identify vision, strategies and partnerships to move forward**  
1. Commercial interests (Moderator: Dr Sana El Harbi)  
2. Language and cultural barriers (Moderator: Dr Mohammed Jemni)  
3. Ensuring inclusive and equitable access to quality content (Moderator: Mr Borut Campelj)  
4. Capacity of users to access, re-use, and share OER (Moderator: Mr Alex Gakuru)  
5. Development of appropriate policy solutions (Moderator: Dr Asha Kanwar)  
6. Need for clarity on the term ‘open’ (Moderator: Dr. Fred Mulder)  
Output: 1 proposal per Working Group |
| 11:00 - 11:15|         | **Coffee Break**                                                      |
| 11:15 - 11:45| 10      | **Conclusions from the Chairs of Working Groups: Synthesis of Outputs** |
| 11:45 - 12:15| 11      | **Closing and Final Remarks**  
Mr Indrajit Banerjee, Director, Knowledge Societies Division, Communication and Information Sector, UNESCO  
Dr Abdul Waheed Khan, Chairman Buniyad Foundation |
### Annex 3: List of Participants

**OPEN EDUCATIONAL RESOURCES (OER) ROAD MAP MEETING**

**Wednesday 30 to Thursday 31 March 2016**

UNESCO Headquarters
7, place de Fontenoy, 75007 Paris
Room IX

#### List of Participants

<table>
<thead>
<tr>
<th>Member State Representatives</th>
<th>Country</th>
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<tbody>
<tr>
<td>Ms Wafa Al Khalifa</td>
<td>Bahrain</td>
</tr>
<tr>
<td>Mr Zhijun Yi</td>
<td>China</td>
</tr>
<tr>
<td>Mr Yun Yong Il</td>
<td>DPR Korea</td>
</tr>
<tr>
<td>Ms María Elena Moreira</td>
<td>Ecuador</td>
</tr>
<tr>
<td>Ms Heli Aru</td>
<td>Estonia</td>
</tr>
<tr>
<td>Ms Sonia Dubourg-Lavroff</td>
<td>France</td>
</tr>
<tr>
<td>Mr Philippe Desgouttes</td>
<td>France</td>
</tr>
<tr>
<td>Ms Ina Severin</td>
<td>Germany</td>
</tr>
<tr>
<td>Mr Muhammad Al Shatti</td>
<td>Kuwait</td>
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<tr>
<td>Ms Ringaile Kuokstyte</td>
<td>Lithuania</td>
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<tr>
<td>Ms Sanne Letschert</td>
<td>Netherlands</td>
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<tr>
<td>Ms Nadia Makeen</td>
<td>Oman</td>
</tr>
<tr>
<td>Mr Lucas Hernan Franco Godoy</td>
<td>Paraguay</td>
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<tr>
<td>Mr Sila Estigarribia</td>
<td>Paraguay</td>
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<tr>
<td>Mr Jesus Enrique G. Garcia</td>
<td>Philippines</td>
</tr>
<tr>
<td>Name</td>
<td>Position</td>
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<tr>
<td>Mr Youngchan Lee</td>
<td>First Secretary</td>
</tr>
<tr>
<td>Ms Marina Iankova</td>
<td>First Secretary</td>
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<tr>
<td>Mr Mansoor Alosaimi</td>
<td>Counselor</td>
</tr>
<tr>
<td>Ms Ivona Bagaric</td>
<td>First Secretary</td>
</tr>
<tr>
<td>Ms Selena Ramic</td>
<td>Intern</td>
</tr>
<tr>
<td>Dr Maja Makovec Brenčič</td>
<td>Minister</td>
</tr>
<tr>
<td>H.E. Mr Andrej Slapničar</td>
<td>Ambassador, Permanent Delegate</td>
</tr>
<tr>
<td>Mr Urban Krajcar</td>
<td>Director-General</td>
</tr>
<tr>
<td>Ms Miriam Možgan</td>
<td>Deputy permanent representative, Minister Plenipotentiary</td>
</tr>
<tr>
<td>Ms Marjutka Hafner</td>
<td>Secretary-General</td>
</tr>
<tr>
<td>Mr Gašper Hrastelj</td>
<td>Deputy Secretary-General</td>
</tr>
<tr>
<td>Mr Domen Božeglav</td>
<td>Cabinet Secretary</td>
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<tr>
<td>Mr Borut Campelj</td>
<td>Education Development Office</td>
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<tr>
<td>Mr Amir Abdel-Raouf</td>
<td>First Counsellor</td>
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<td>Ms Mariella Crosta</td>
<td>Minister, Deputy Permanent Delegate</td>
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<td>Experts</td>
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<tr>
<td>Dr Tel Amiel</td>
<td>Researcher</td>
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<tr>
<td>Mr TJ Bliss</td>
<td>Program Officer</td>
</tr>
<tr>
<td>Ms Barbara Chow</td>
<td>Program Officer</td>
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<tr>
<td>Mr Paul Constantin</td>
<td>Attaché de programme - IFADEM</td>
</tr>
<tr>
<td>Ms Sana El Harbi</td>
<td>Professor</td>
</tr>
<tr>
<td>Mr Alex Gakuru</td>
<td>Regional Coordinator - Africa</td>
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<tr>
<td>Dr Cable Green</td>
<td>Director</td>
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<tr>
<td>Mr Mohamed Jemni</td>
<td>Director</td>
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<tr>
<td>Mr Mitja Jermol</td>
<td>Head</td>
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<tr>
<td>Ms Asha Kanwar</td>
<td>President and CEO</td>
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<tr>
<td>Dr Wayne Mackintosh</td>
<td>Director</td>
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<tr>
<td>Mr Rory McGreal</td>
<td>Professor</td>
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<tr>
<td>Mr Sanjay Mishra</td>
<td>E-learning Programme Specialist</td>
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<tr>
<td>Dr Fred Mulder</td>
<td>Professor</td>
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<tr>
<td>Mr Davor Orlic</td>
<td>Deputy Head</td>
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<tr>
<td>Mr Konstantin Scheller</td>
<td>Policy Officer</td>
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<tr>
<td>Dr Savithri Singh</td>
<td>Principal</td>
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<tr>
<td>Mr Dirk Van Damme</td>
<td>Director</td>
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<tr>
<td>Dr Abdul Waheed Khan</td>
<td>Chairman</td>
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<tr>
<td>Mr Martin Weller</td>
<td>Professor</td>
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<tr>
<td>Mr Batbold Zagdragchaa</td>
<td>Executive Director</td>
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## UNESCO Secretariat

### Communication and Information Sector

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<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Mr Indrajit Banerjee</td>
<td>DIR/KSD/ICT</td>
<td>Director, Knowledge Societies Division, Communication and Information Sector, UNESCO</td>
</tr>
<tr>
<td>Ms Zeynep Varoglu</td>
<td>Programme Specialist - ICT in ED</td>
<td>Programme Specialist, Knowledge Societies Division, Communication and Information Sector, UNESCO</td>
</tr>
<tr>
<td>Mr Joe Hironaka</td>
<td>Programme Specialist - OER</td>
<td>Programme Specialist, Knowledge Societies Division, Communication and Information Sector, UNESCO</td>
</tr>
<tr>
<td>Ms Fatma-Zohra Bekhti-Hales</td>
<td>Administrative Assistant</td>
<td>Assistant, Knowledge Societies Division, Communication and Information Sector, UNESCO</td>
</tr>
<tr>
<td>Ms Eunkyung (Eva) Shin</td>
<td>Project Assistant</td>
<td>Knowledge Societies Division, Communication and Information Sector, UNESCO</td>
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### Education Sector

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<th>Name</th>
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<tr>
<td>Mr David Atchoarena</td>
<td>DIR/ED/PLC</td>
<td>Director, Division for Policies and Lifelong Learning, Education Sector, UNESCO</td>
</tr>
<tr>
<td>Mr Fengchun Miao</td>
<td>Programme Specialist - ICT in ED</td>
<td>Division for Policies and Lifelong Learning, Education Sector, UNESCO</td>
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<tr>
<td>Mr Yongyeon Won</td>
<td>Programme Specialist - ICT in ED</td>
<td>Division for Policies and Lifelong Learning, Education Sector, UNESCO</td>
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<tr>
<td>Mr Jonathas De Mello</td>
<td>Project Officer</td>
<td>Division for Policies and Lifelong Learning, Education Sector, UNESCO</td>
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Annex 4: Working Document

OPEN EDUCATIONAL RESOURCES (OER) ROAD MAP MEETING

Wednesday 30 to Thursday 31 March 2016

UNESCO Headquarters
7, place de Fontenoy, 75007 Paris
Room IX

Working Document: Mainstreaming Open Educational Resources (OER)

1. BACKGROUND

1.1 INCEPTION OF OER 2002 TO THE 2012 PARIS DECLARATION

1. Information technology can help to equalize the distribution of high quality educational opportunities throughout the world. In particular, having learning materials freely available for adaptation and re-purposing can expand access to learning of better quality at lower cost. In 2002, the term “Open Educational Resources” (OER) was created at a UNESCO Forum to describe a new global phenomenon of openly sharing educational resources. This campaign to make freely adaptable content known as OER widely available has gathered momentum. Subsequently, a global community of OER producers has emerged and institutions are incorporating these resources into their teaching and learning strategies.

2. In 2009, UNESCO worked with its partners, and notably the Commonwealth of Learning (COL), to follow up on a draft resolution calling for the further promotion of OER presented at the 35th UNESCO General Conference (2009). The Communiqué of UNESCO’s 2009 World Conference on Higher Education, which stated that Open and Distance Learning approaches, Information, and Communications Technologies (ICT) present opportunities to widen access to quality education, particularly when OER are readily shared among many countries, inspired this resolution.

3. This was the context for the COL-UNESCO initiative ‘Taking the Open Educational Resources (OER) beyond the OER Community: Policy and Capacity’ launched in 2010 with the aim of increasing the level of understanding of OER by educational decision makers so as to promote their wider use. The initiative focused in the first instance on higher education institutions – universities located in Africa, Asia and the Pacific – as part of a Joint Work Plan Agreement between UNESCO and COL. It was financed with regular programme funds from the two organizations and some extrabudgetary funds provided by the US Government through its delegation to UNESCO.

4. Eight advocacy and capacity-strengthening workshops (in Africa and Asia) and three online forums on OER were held and the results were reported to a policy forum at UNESCO HQ in December 2010, which recommended that COL and UNESCO develop policy guidelines to support the integration of OER into Higher Education.

5. In response, UNESCO and COL developed The Guidelines for OER in Higher Education, which were launched at the 36th General Conference in November 2011. These Guidelines were developed after lengthy consultations with experts in all UNESCO world regions. They address key stakeholder groups: governments; higher education providers; teaching staff; student bodies and quality assurance/accreditation & qualification recognition bodies. In parallel, A Basic Guide to Open Educational Resources was published as a compendium.

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2 See http://unesdoc.unesco.org/images/0021/002136/213605e.pdf
3 See http://unesdoc.unesco.org/images/0021/002158/215804e.pdf
6. In the months leading up to the June 2012 Congress, COL and UNESCO organized 6 policy fora in the major regions of the world to continue to inform governments and educational leaders about the potential of OER and to invite them to participate in the drafting of the Paris Declaration. These Regional Policy Fora were organized in 2012, thanks to the support of the national authorities in the host countries. They were held in: Bridgetown, Barbados (Caribbean Regional Forum), 24-26 January 2012; Johannesburg, South Africa (Africa Regional Forum), 21-23 February; Rio de Janeiro, Brazil (Latin America Regional Forum), 28-29 March 2012; Cambridge, UK, (Europe Regional Forum), 17 April 2012; Bangkok, Thailand (Asia and the Pacific Regional Forum), 23-24 April 2012; Muscat, Oman (Arab States Regional Forum), 7-8 May 2012. The recent William and Flora Hewlett Foundation evaluation of UNESCO and COL OER initiatives in 2015 recognized that these regional workshops served to lift up new voices, provide examples, and generate new champions. They also served as the basis for the establishment of advocacy, capacity building and policy work undertaken by UNESCO in the implementation of the Paris OER Declaration 2012.

7. Given the absolute importance of effective consultation and networking to the success of the Paris OER Declaration proposal, a broadly based International Advisory and Liaison Group (IALG) with governmental representatives nominated by UNESCO’s regional groupings was established. It is co-chaired by the President of COL (Project Director) and UNESCO’s Assistant Director-General for Communication and Information. Alongside government representatives identified by UNESCO’s regional groupings, it included representation from other organizations (e.g. Creative Commons; OER Africa; OECD; WIPO) with a special interest in OER.

8. These activities provided a solid foundation for the UNESCO World OER Congress 2012 (a UNESCO Category IV meeting) held in Paris on 20-22 June 2012. This event was organized with the support of the William and Flora Hewlett Foundation and in full partnership with the Commonwealth of Learning (COL). The Congress brought together Ministers of Education/Human Resource Development, senior policy makers, expert practitioners, researchers and relevant stakeholders to discuss ongoing OER initiatives and adopted the Paris OER Declaration.

The UNESCO World OER Congress 2012:
   a) showcased the world’s best practices in OER policies, initiatives, and experts;
   b) adopted the 2012 Paris OER Declaration calling on Governments to support the development and use of OER; and
   c) celebrated the 10th anniversary of the 2002 UNESCO Forum that created the term OER;

9. The Paris 2012 Paris OER Declaration at the June 2012 UNESCO World OER Congress adopted the 2012 Paris OER Declaration (Annex 1) that encouraged a commitment to the principle that the products of publicly funded work in support of education should carry open licenses, and supported capacity building, collaboration and research endeavours related to OER.

1.2 PARIS OER DECLARATION 2012 - PRESENT

10. UNESCO has implemented the Paris 2012 OER Declaration as part of its 4-year budget and programme 2013 – 2017, and with the extra-budgetary funds from the William and Flora Hewlett Foundation and the European Commission. In this framework, UNESCO implemented a series of activities focusing on advocacy, policy development and the use of OER in teacher training for the use of ICTs, with a link to the ICT Competency Framework for Teachers (ICT CFT). In this period, UNESCO has also developed a comprehensive OER programme which includes the ‘OER Community on the World Summit on the Information Society (WSIS) Knowledge Community (KC)’ and the network of UNESCO Chairs in OER. The UNESCO Programme and Budget adopted by its Members States for the 2013-2017 biennium articulates this commitment to OER in its Communication and Information Sector through its ‘Open Solutions’ initiatives which aim to support

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4 The OER Community on the WSIS KC is available at: [http://www.wsis-community.org/pg/groups/14358/open-educational-resources-oer/](http://www.wsis-community.org/pg/groups/14358/open-educational-resources-oer/);
policy and capacity building for OER and the harnessing of OER for the implementation of ICT CFT as well as the training on OER-based mobile applications for youth. It is also part of the Education Sector’s programme goals in the areas of ICT in Education which aims to strengthen national capacities to develop and implement national ICT in education policies and programmes, with specific focuses on national and institutional OER policy development and adoption of OER in higher education.

11. The 2015 evaluation of UNESCO and COL’s work in OER concluded that both organizations had succeeded in building awareness, capacity and policies to support OER, both at national and institutional levels in the countries targeted by their interventions. It also found that no one strategy for point of entry fit all cases but that the experiences in the target countries suggest the importance of building on relationships, providing consultation that spans multiple levels within ministries or institutions and building local champions who can sustain the work (ORS Evaluation 2015).

This evaluation concluded that:

12. The ultimate goal is to generate the capacity and local ownership to make OER part of standard practice in local education delivery systems. The movement has not yet developed to that stage. In the short term, there is still an important role for external organizations to play, including providing tangible examples and models of policies, supporting policy implementation, and promoting the development of linguistically- and culturally-relevant OER content… (ORS Evaluation 2015 page 15)

2. OER OVERVIEW

13. Over the last 15 years since its inception, OER has proven to be an effective tool for transforming education and supporting knowledge creation. Today, with the commitment of the International Community to achieve the 2030 Sustainable Development Goals (SDGs), and notably SDG 4 ‘Education’ which calls for “ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all”, it is even more urgent that the full potential of OER be harnessed.

14. The fundamental problem is that OER, after 10 years of advocacy work by stakeholders worldwide, still needs to be mainstreamed more integrally into educational policies and practices. There is a need for consolidation and expansion of the efforts in the implementation of the Paris OER Declaration 2012, started by UNESCO through its Regular Programme as well as the support of the William and Flora Hewlett Foundation and the European Commission in 2013/2014. In particular, actions would be most beneficial in particular in developing countries, where education systems face major challenges of access, quality and cost.

2.1 ICT, KNOWLEDGE CREATION: THE TRANSFORMATIVE NATURE OF OER

15. ICT are dramatically increasing the transfer of information through global communication systems, leading to an explosion in the generation and collective sharing of knowledge. The participation of non-specialists in previously specialised disciplinary areas is extending the boundaries of scholarship, while dynamic knowledge creation and social computing tools and processes are becoming more widespread and accepted. This opens up opportunities to create and share a wider array of educational resources, thereby accommodating a greater diversity of student needs. Increased online access to OER has further promoted individualised study, which, coupled with social networking and collaborative learning, has created opportunities for pedagogical innovation.

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16. The growing demand for education and the ongoing rollout of ICT infrastructure have created unique challenges for education institutions in an era of tight resources. It has become increasingly important for educational institutions to support, in a planned and systematic manner:

- Development and improvement of curricula and learning materials;
- Ongoing programme and course design;
- Organization of interactive contact sessions with and among students;
- Development of quality teaching and learning materials;
- Design of effective assessment tools for diverse environments; and
- Links with the world of work.

17. OER can make a significant contribution to these processes. However, OER do not automatically lead to quality, efficiency and cost-effectiveness; much depends on the procedures put in place. The transformative educational potential of OER depends on:

- Improving the quality of learning materials through peer review processes;
- Reaping the benefits of contextualisation, personalisation and localisation;
- Emphasising openness and quality improvement;
- Building capacity for the creation and use of OER as part of the professional development of academic staff;
- Serving the needs of particular student populations such as those with special needs;
- Optimising the deployment of institutional staff and budgets;
- Serving students in local languages;
- Involving students in the selection and adaptation of OER in order to engage them more actively in the learning process; and
- Using locally developed materials with due acknowledgement.

18. The transformative potential of OER also includes the benefits of sharing and collaborating among education professionals, institutions and countries, and the creatively disruptive role of OER in opening up new educational models.

2.2 OPEN LICENSING AND THE EMERGENCE OF OER

19. Open licences have emerged in an effort to both protect authors’ rights in environments where content (particularly when digitised) can easily be copied and shared without permission and allow authors to share their content, with the public, with the permissions and freedoms they choose. Open licences seek to ensure that copying and sharing happen within a structured legal framework that is more flexible than the automatic all-rights-reserved copyright.

20. OER are part of this process. They allow for more flexibility in the use, reuse and adaptation of educational resources for local contexts and learning environments, while allowing authors to keep their copyright and have their work acknowledged.

21. Some advocates of OER say that a key benefit of open content is that it is ‘free’, but this is overly simplistic. Open content can be shared with others without asking permission and without paying licence or other access fees. However, some important cost considerations must be taken into account. Taking effective advantage of OER requires institutions to invest systematically in programme/course design and materials development and acquisition. Time must be invested in developing courses and materials, finding appropriate OER, adapting existing OER. There are also associated costs such as the procurement and maintenance of ICT infrastructure (for authoring and content-sharing purposes) and bandwidth.

22. Educational institutions are making these investments in order to improve the quality of teaching and learning. They enable peers to share materials and enrich the curriculum for students.
Institutions using and adapting OER can find this a cost-effective way of investing in materials design and development.

23. The most common standard open licenses are Creative Commons licenses. The Creative Commons open copyright licenses and tools forge a balance inside the traditional “all rights reserved” setting that copyright law creates; CC licenses are “some rights reserved.” They provide a simple, standardized way for authors to grant the public permissions to use their creative work. The main common feature of all Creative Commons licenses is that the creators of the intellectual work contained retain copyright while allowing others to copy, distribute, and modify their work. The Creative Commons site provides a clear explanation of the different licenses at: https://creativecommons.org/licenses/.

24. Creative Commons licenses have increased at an astonishing rate from 50 million pieces in 2006 to over 1.2 billion in 2015 (Creative Commons, 2015). Over 14 governments have also made national commitments to open education (TESSA 2012), providing favourable conditions for the mainstream usage of OER.

25. In this regard, the Hewlett Foundation commissioned a study in 2013, which found that some 10 per cent of teachers in the United States use OER as primary materials. This is of significance as experience from other industries has shown that adoption accelerates when mainstream users (teachers and students in this case) see evidence that early adopters are pleased with the innovation. Empirical research of other innovations has identified this central tipping point to be at 15 to 20 per cent of market share.6

2.3 OER IN THE EDUCATION 2030 AGENDA

26. OER has a central role to play in Education 2030 in the framework of SDG 4 which calls for the international community to ‘Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all’ with its key pillars of access, equity and inclusion.7

27. It is recognized in this document that governments have a key fundamental responsibility for successfully implementing this Agenda. The Education 2030 Agenda reaffirms a political commitment to establish legal and policy frameworks that promote inter alia, coordinated partnerships at all levels and across sectors and to uphold the right to participation of all stakeholders. It entrusts UNESCO, to lead and coordinate the 2030 Education Agenda by undertaking advocacy to sustain political commitment, facilitating policy dialogue, knowledge sharing and standard setting. In this regard, as stated in the Qingdao Declaration 2015, during the International Conference on ICT and Post 2015: OER provide education stakeholders with opportunities to improve the quality and expand access to textbooks and other forms of learning content to catalyse the innovative use of content, and to foster knowledge creation. This Declaration also calls for sector-wide strategies and capacity building programmes to fully realize the potential of OER to expand access to lifelong learning opportunities and achieve quality education.

2.4 OBSTACLES TO ACHIEVING THE MAINSTREAMING OF OER

28. It has been observed that awareness of OER has spread faster than its implementation (ORS Hewlett Evaluation 2015). There remain obstacles that hinder the mainstreaming of OER by the global educational community. The Paris OER Declaration 2012 highlighted these obstacles, and had flagged them for international cooperation. While advances have been made in each area, increased efforts by the international community is still necessary. These obstacles include:

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6 Everett Rogers, Diffusion of Innovations, Figure 1-2 (Ch.1) in the William and flora Hewlett Foundation Strategy Paper, ‘Open Educational Resources, Advancing Widespread Adoption to Improve Instruction and Learning. December 2015

7 See http://www.un.org/sustainabledevelopment/education/

8 See http://www.unesco.org/new/en/education/resources/in-focus-articles/qingdao-declaration
Commercial interests - The digitization of information, combined with its increasingly widespread dissemination, poses significant challenges to concepts of intellectual property. Copyright regimes and business models for publication are under scrutiny and challenged. This can result in lobbying to governments to block the use of OER in order to favour the continued use of copyrighted educational materials provided by traditional commercial providers. The main recommendation of the Paris OER Declaration 2012 recognized this issue and encouraged Governments and competent authorities to ensure the open licensing of educational materials (with any restrictions that they deem necessary) produced with public fund in order to maximize the impact of the investment.

[Relevant points of the Paris OER Declaration 2012: j]

Language and cultural barriers – As stated in the Paris OER Declaration 2012 there is a need to encourage the sharing of OER across languages and cultures, respecting indigenous knowledge and rights. While the concept of OER originates from Anglophone institutions, and a great deal of OER has been developed since the inception of the concept primarily in English, significant progress has been done to support the development of OER in languages other than English, however challenges remain.

29. It should be recognized that this is also related to a larger issue – the need to promote multilingualism in cyberspace. Namely, ICTs, which are the main medium through which OER are shared, provide opportunities to improve the free flow of idea by word and image, it also presents challenges to ensuring the participation of all as the majority of its content is still in English.

30. With regard to cultural barriers, it is also important that knowledge shared through OER maintains its cultural relevance. This requires the effective adaption of OER to cultural and linguistic contexts. [Relevant points of the Paris OER Declaration 2012: g]

Ensuring inclusive and equitable access to quality content – This point relates to 3 key concerns: ensuring that OER is accessible for Persons with Disabilities; supporting the use of OER in all ICT environments; and addressing issues of quality assurance related to OER.

- While OER includes an open license, it is not inherently accessible, and there is a need to ensure that accessibility issues are mainstreamed into all use of OER whether it be creating, sharing, and/or re-mixing. Approximately 15 per cent of the population, representing some 1 billion people in the world, have a disability. This figure is accelerating in line with population increases, growing poverty, natural disasters, ongoing conflicts and an ageing population. With such a large number of people living with a disability, it is vital that access to educational opportunities is made widely available.

- With the increased use of mobile technologies and networks to access the Internet in all parts of the world, particularly in developing countries, it is important that OER is mobile-friendly both to share, create, and/or re-mix.

- A concern that OER content materials are not as good quality as their non-OER counterparts has been voiced in debates. This has been addressed in certain contexts successfully by ensuring that mechanisms for the quality assurance of content for non-OER materials are applied where possible. Further study and dissemination of best practices of quality control through peer review mechanisms would be of value.

[Relevant points of the Paris OER Declaration 2012: a, b, d, e, f, i]

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• **Capacity of users to access, re-use, and share OER** - The Paris OER Declaration underscores the need to support capacity building for sustainable development of quality learning materials, the fostering of strategic alliances to create opportunities to share materials created under an open license and the need to facilitate finding, retrieving and sharing of OER through the development of user-friendly tools to locate and retrieve OER that are specific and relevant to particular needs. This includes ensuring that users have the necessary digital and media literacy skills to find/share/create/re-mix OER effectively. It also entails the simplification and popularization of OER storage and retrieval systems. [Relevant points of the Paris OER Declaration 2012: a, d, e, f, i]

• **Development of appropriate policy solutions** - with regard to policy, the considerable potential of OER to improve education and expand its reach, the impact of OER concerning actual OER practices remain unexamined. The Paris OER Declaration 2012 calls for the promotion of the development of specific policies for the production and use of OER within wider strategies for advancing education. Actions in this regard have been undertaken including research and studies of the implementation of OER policies in selected countries\(^{10}\). Further actions are needed in this area. [Relevant points of the Paris OER Declaration 2012: c]

• **Need for clarity on the term ‘open’** – There has been a greater focus of institutions as well as international and regional organizations on ‘Open Education’ initiatives, including the popularization of modalities such as massive open online courses (MOOC). The main issues in Open Education are the area in which ‘openness’ is actually expressed and in what form – namely, is it referring to one or several of these components: contents, teaching/ learning process, sharing of scientific information or other? For example, ironically OER is not a component of all MOOC, including MOOC from some of the most well-known providers. What is the impact of this ‘open’ feature on knowledge creation and/or knowledge acquisition? This issue also includes a need to ensure that there is no ambiguity on what is an openly licensed educational offer, and what is not. [Relevant points of the Paris OER Declaration 2012: d]

### 2.5 NETWORKS AND COMMUNITIES OF INTEREST

31. Since its inception OER has benefitted from having a loyal community supporting its development worldwide. UNESCO has played a key role in federating this community through the creation of a comprehensive OER programme which includes ‘OER Community on the World Summit on the Information Society (WSIS) Knowledge Community (KC)\(^{11}\)’ and the network of UNESCO Chairs in OER\(^{12}\).

32. UNESCO has endeavored to develop the OER community through its different activities described above, with the focus on involving educational stakeholders in all UNESCO regions in OER activities. Advocacy activities intensified through the consultation process leading to and at the Paris OER Declaration 2012. Activities since the Paris OER Declaration 2012 have also focused on sensitizing ministries of education, teacher training institutions and other educational institutions on the benefits of OER by supporting its hands on use through ICT in Education Teacher Training materials, and through policy and advocacy discussions. The involvement of key organizations in this area include COL, Creative Commons, OER Africa, Open Education Consortium, Knowledge 4 All Foundation, Open Society Foundations, as well as associations such as OERu and others.

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10 In 2015 COL and UNESCO launched a study to review the implementation of OER policies and initiatives and their actual impacts across regions. 14 OER examples of OER policies or initiatives have been selected from Australia, Bahrain, Brazil, Canada, Germany, India, Indonesia, Malaysia, New Zealand, Oman, Poland, Russia, South Africa, and the United States. The development and implementation of the OER policies and initiatives have been depicted (HTML to be confirmed).

11 The OER Community on the WSIS KC is available at: [http://www.wsis-community.org/pg/groups/14358/open-educational-resources-oer/](http://www.wsis-community.org/pg/groups/14358/open-educational-resources-oer/); this community is the worlds’ largest online OER community of practice

12 The OER Research Chairs provide decision and policy makers with empirical research evidence of the benefits of OER, among other activities.
33. The William and Flora Hewlett Foundation has been the key donor for OER activities worldwide since 2002. Its goal is to “equalize student and teacher access to high-quality, openly licensed educational materials that offer opportunities for people everywhere to share, use, and reuse knowledge” (Education Program Strategic Plan October 2010). Since 2011, these investments have become increasingly focused on lowering policy barriers to OER and encouraging the development of new policies that create incentives for OER adoption and production (ORS Impact Evaluation of Hewlett foundation Investment in International Policy Advocacy for OER, 201513).

34. The European Commission, has also supported UNESCO OER activities in the framework of its programme 'Opening up Education Communication' (adopted on the 25th of September 2013) which highlighted the need "to encourage partnerships between creators of educational content (e.g. teachers, publishers, ICT companies), to increase the supply of quality OER and other digital educational materials in different languages". At the national level, bilateral funding for project activities has also been made available by UNESCO Member States, including through the United States of America (2009 to 2011) and Slovenia (2016).

3. CONCLUSION

35. This document has outlined the significant contribution of UNESCO to supporting the use of OER to expand access to learning of better quality at lower cost, since the inception of the concept in 2002. It has explored the different implications of OER for improving worldwide educational offer with a focus on the SDG 4 of the Education 2030 Agenda. An identification and examination of the challenges that remain to mainstreaming OER into educational systems at K-12 and tertiary level has also been provided. Today, the key role of the international community, with a focus on Governments and Institutions, remain crucial for the continued dialogue and cooperation necessary to support the larger objective of ensuring the mainstream usage of OER worldwide.

ANNEX I: 2012 PARIS OER DECLARATION

Annex 4-1: 2012 Paris OER Declaration

OPEN EDUCATIONAL RESOURCES (OER) ROAD MAP MEETING

Wednesday 30 to Thursday 31 March 2016
UNESCO Headquarters
7, place de Fontenoy, 75007 Paris
Room IX

Annex I: 2012 Paris OER Declaration

Preamble

The World OER Congress held at UNESCO, Paris on 20-22 June 2012,

Mindful of relevant international statements including:

- The Universal Declaration of Human Rights (Article 26.1), which states that: “Everyone has the right to education”;
- The International Covenant on Economic, Social and Cultural Rights (Article 13.1), which recognizes “the right of everyone to education”;
- The 1971 Berne Convention for the Protection of Literary and Artistic Works and the 1996 WIPO Copyright Treaty;
- The Millennium Declaration and the 2000 Dakar Framework for Action, which made global commitments to provide quality basic education for all children, youth and adults;
- The 2003 World Summit on the Information Society, Declaration of Principles, committing “to build a people-centred, inclusive and development-oriented Information Society where everyone can create, access, utilize and share information and knowledge”;
- The 2003 UNESCO Recommendation concerning the Promotion and Use of Multilingualism and Universal Access to Cyberspace;
- The 2005 UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expression, which states that: “Equitable access to a rich and diversified range of cultural expressions from all over the world and access of cultures to the means of expressions and dissemination constitute important elements for enhancing cultural diversity and encouraging mutual understanding”;
- The 2006 Convention on the Rights of People with Disabilities (Article 24), which recognises the rights of persons with disabilities to education;
- The declarations of the six International Conference on Adult Education (CONFINTEA) Conferences emphasising the fundamental role of Adult Learning and Education.

Emphasizing that the term Open Educational Resources (OER) was coined at UNESCO’s 2002 Forum on Open Courseware and designates “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. Open licensing is built within the existing framework of intellectual property rights as defined by relevant international conventions and respects the authorship of the work”;

Recalling existing Declarations and Guidelines on Open Educational Resources such as the 2007 Cape Town Open Education Declaration, the 2009 Dakar Declaration on Open Educational Resources and the 2011 Commonwealth of Learning and UNESCO Guidelines on Open Educational Resources in Higher Education;

Noting that Open Educational Resources (OER) promote the aims of the international statements quoted above;
UNESCO OER Road Map Meeting

Outcome Report

Recommends that States, within their capacities and authority:

a. **Foster awareness and use of OER.**
   - Promote and use OER to widen access to education at all levels, both formal and non-formal, in a perspective of lifelong learning, thus contributing to social inclusion, gender equity and special needs education. Improve both cost-efficiency and quality of teaching and learning outcomes through greater use of OER.

b. **Facilitate enabling environments for use of Information and Communications Technologies (ICT).**
   - Bridge the digital divide by developing adequate infrastructure, in particular, affordable broadband connectivity, widespread mobile technology and reliable electrical power supply. Improve media and information literacy and encourage the development and use of OER in open standard digital formats.

c. **Reinforce the development of strategies and policies on OER.**
   - Promote the development of specific policies for the production and use of OER within wider strategies for advancing education.

d. **Promote the understanding and use of open licensing frameworks.**
   - Facilitate the re-use, revision, remixing and redistribution of educational materials across the world through open licensing, which refers to a range of frameworks that allow different kinds of uses, while respecting the rights of any copyright holder.

e. **Support capacity building for the sustainable development of quality learning materials.**
   - Support institutions, train and motivate teachers and other personnel to produce and share high-quality, accessible educational resources, taking into account local needs and the full diversity of learners. Promote quality assurance and peer review of OER. Encourage the development of mechanisms for the assessment and certification of learning outcomes achieved through OER.

f. **Foster strategic alliances for OER.**
   - Take advantage of evolving technology to create opportunities for sharing materials which have been released under an open license in diverse media and ensure sustainability through new strategic partnerships within and among the education, industry, library, media and telecommunications sectors.

g. **Encourage the development and adaptation of OER in a variety of languages and cultural contexts.**
   - Favour the production and use of OER in local languages and diverse cultural contexts to ensure their relevance and accessibility. Intergovernmental organisations should encourage the sharing of OER across languages and cultures, respecting indigenous knowledge and rights.

h. **Encourage research on OER.**
   - Foster research on the development, use, evaluation and re-contextualisation of OER as well as on the opportunities and challenges they present, and their impact on the quality and cost-efficiency of teaching and learning in order to strengthen the evidence base for public investment in OER.

i. **Facilitate finding, retrieving and sharing of OER.**
   - Encourage the development of user-friendly tools to locate and retrieve OER that are specific and relevant to particular needs. Adopt appropriate open standards to ensure interoperability and to facilitate the use of OER in diverse media.

j. **Encourage the open licensing of educational materials produced with public funds.**
   - Governments/competent authorities can create substantial benefits for their citizens by ensuring that educational materials developed with public funds be made available under open licenses (with any restrictions they deem necessary) in order to maximize the impact of the investment.

2012-06-22