Mainstreaming OER Towards Education 2030

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Sustainable Development Goal 4 (SDG4) for Education 2030: Main targets

“Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.”

Inclusion and relevance

- 4.1 Primary & Secondary
- 4.2 Pre-primary
- 4.3 TVET & HE
- 4.4 Skills for Work
- 4.5 Gender Equality
- 4.6 Youth Literacy
- 4.7 ESD & Global Citizenship
- 4.a Learning Environments
- 4.b Scholarships
- 4.c Teachers and Educators

Inclusion and relevance
Leveraging OER for achieving targets of SDG 4: Action lines and strategies

**Enablers**
- Costing & funding
- Policy alignment
- Monitoring and evaluation
- Public awareness
- Partnership

**Action Lines**
- Regulatory framework
- Policy on open license
- Inclusive access
- Quality assurance
- OER repositories
- Capacity building for pedagogical use of OER
- OER creation & sharing incentives
- Business models
- OER researches & evidence bases

**Targets**
1. Inclusive OER
2. OER for indigenous languages/cultures
3. Equity and gender-equality
4. Knowledge deepening & creation in K-12
5. Expanding HE
6. TVET & skills development
7. Non-formal learning
8. Lifelong learning
Multiple actors to share responsibilities and take concerted actions

- Open Content & QA
- Open Research
- Open Tech Enabler
- Open License
- Machine code
- Legislation/policy code
- Open Education, learning, & Assessment
- Open Practice Capacity
- Open EdTech
- Teachers’ or users’ capacity
- Incentive & T/L time flexibility
- Open education provision
- Open pedagogy
- Knowledge-creation based learning

Additional topics:
- ICT for OER management (big) data mining
- ICT for access and creation
- Integrated quality assurance
- Content development & sharing
- Analytical studies
- Open License
- Machine code
- Legislation/policy code
- Content development & sharing
- Open Education, learning, & Assessment
- Open Practice Capacity
- Open Tech Enabler
- Open Research
- Open Content & QA
Multi-stakeholder action and collaboration

Civil society:
- Independent QA agencies
- Parents & community
- Associations

Users as creators:
- Teachers & Students

Government:
- Decision makers
- ADM & managers
- ED institutions

Private sector:
- Publisher & other content provider
- ICT service provider

Inter-sectoral Partnership and Collaboration
UNESCO’s programmes

- UNESCO coined the term of **OER** in 2002
- Hosted the 1\textsuperscript{st} World OER Congress in 2012 - \textit{Paris OER Declaration}
- Supporting countries to develop **OER policies**
- UNESCO-COL joint publication of 15 case studies “**OER: Policy, Costs, and Transformation**”
- **OER Indicators** to monitor national adoption and impact of OER
- 2\textsuperscript{nd} World OER Congress: September 2017, Slovenia→ Ljubljana OER Action Plan 2017
- **OER Recommendation** - a normative instrument to be adopted in 40\textsuperscript{th} Session of UNESCO General Conference – November 2019
UNESCO supports member states to develop national OER policies

- Contextualizing OER policies
- National team or committee

Inception Meeting

- Consultation with multi-stakeholders

National Workshops

- Public awareness raising and Policy advocacy
- Alignment with other policies & initiatives

Review Meetings

- Policy endorsed
- Master plans and funds to ensure effective implementation

Official Approval

- Knowledge transfer & capacity building – policy brief & toolkit
- First draft of OER policy and master plans

Launch of Policies

- Policy dialogues
- Knowledge sharing on effective practices – case studies

International Advocacy
A Multi-Entry Approach to the Development of ICT in Education Policy (Fengchun Miao, f.miao@unesco.org)

<table>
<thead>
<tr>
<th>ICTs</th>
<th>School</th>
<th>Public</th>
<th>Personal</th>
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</thead>
<tbody>
<tr>
<td>School devices &amp; connection per students → 1:1</td>
<td>Universal broadband &amp; Personal devices (BYOT)</td>
<td>Public digital devices &amp; internet connection</td>
<td>Universal broadband &amp; Personal devices (BYOT)</td>
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<thead>
<tr>
<th>Content</th>
<th>Govt. or institutional (open)educational resources</th>
<th>Public open educational resources</th>
<th>Teacher/student generated resources (BYOC)</th>
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<tr>
<th>Teaching &amp; Learning</th>
<th>ICT enhanced classroom based lectures</th>
<th>Extended lessons or online courses (e.g. OER MOOCs)</th>
<th>Coached U-learning &amp; project based learning</th>
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</thead>
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<tr>
<th>Learning outcomes</th>
<th>Subject knowledge acquisition in fixed time &amp; space</th>
<th>Enhanced &amp; extended knowledge value deepening</th>
<th>Knowledge creation &amp; personalized life long learning</th>
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</thead>
</table>

Openness of schools or learning environments
Openness of curriculum & assessment
Key elements of national OER policies

- Adoption of open licenses
- Operational strategies for quality assurance (integrating OER QA into existing QA mechanism for educational content)
- Strategies to ensure universal access to OER by target users
- Repository to deliver and manage OER
- Build teachers’ and students’ capacities to find, use, and re-use OER
- Strategies to sensitize stakeholders on OERs
- International collaboration to promote cross-boarder resources sharing
UNESCO’s OER Indicators to monitor the adoption and impacts of OER

1. Provide a framework
   • monitoring the national/institutional adoption
   • evaluating impacts on inclusion, equity, gender equality, quality

2. Enhance evidence bases
   • data centers
   • comparative reports

3. Inform OER policy and practices
Key steps of applying OER Indicators

Stage 1
Indicators and Methodology

Stage 2
Pilot Test and Report

Stage 3
Data Centers and Regular Monitoring
### UNESCO OER Indicators: Framework

#### Conceptual Domains

<table>
<thead>
<tr>
<th>Benchmarks</th>
<th>Government Commitment</th>
<th>Institutional Adoption</th>
<th>Teaching &amp; Learning</th>
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<tbody>
<tr>
<td>Concepts to be Measured</td>
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<td>Potential Sources of Data</td>
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<tr>
<td>Conceptual Domain</td>
<td>Indicator Label</td>
<td>Indicator</td>
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| **Government Commitment** | OER1 | Presence of a national or provincial OER policy, strategy, or program:  
- Open licensing policy/framework or endorsement of open licensing  
- Funding program for OER  
- Quality assurance mechanisms for evaluating OER  
- Making international OER available  
- Making local-language-based OER available  
- OER training academy or training initiative  
- Incentive mechanism to encourage OER adoption and use  
- Pro equity provisions for the use of OER in favor of disadvantaged populations  
- OER partnerships in place |
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<tr>
<th>Conceptual Domain</th>
<th>Indicator Label</th>
<th>Indicator</th>
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<tbody>
<tr>
<td>Government Commitment</td>
<td>OER2</td>
<td>Proportion of education contexts covered by existing national or provincial policies, strategies, or programs for OER in education</td>
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<tr>
<td></td>
<td></td>
<td>• Primary education (ISCED 1)</td>
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<td></td>
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<td>• Secondary education (ISCED 2 and 3)</td>
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<td></td>
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<td>• Post-secondary/Not Tertiary (ISCED 4)</td>
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<td>• Tertiary (ISCED 5-8)</td>
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<td>• General education</td>
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<td>• Technical Vocational Education and Training</td>
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<td></td>
<td></td>
<td>• Informal learning</td>
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<td></td>
<td>• Non-formal learning</td>
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<td>Institutional Adoption</td>
<td>OER3</td>
<td>Presence of local/institutional OER policy, strategy or program:</td>
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<tr>
<td></td>
<td></td>
<td>● Open licensing policy/framework or endorsement of open licensing</td>
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<td></td>
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<td>● Access to funding or mobilization of funding for OER</td>
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<td>● Quality assurance mechanisms for OER</td>
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<td>● National or local OER repository or curated collection</td>
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<td>● Local Learning management system or other system with student-facing OER</td>
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<td>● Local OER training academy or training initiative, or supporting national training programs</td>
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## UNESCO OER Indicators

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<th><strong>OER4</strong></th>
<th><strong>OER5</strong></th>
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<tr>
<td><strong>Institutional Adoption</strong></td>
<td><strong>Proportion of educators (for ISCED levels 1-8) using OER in their teaching by major subjects:</strong></td>
<td><strong>Proportion of learners (for ISCED levels 1-8) who have used student-facing OER as part of coursework by major subjects:</strong></td>
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<tr>
<td></td>
<td>● Maths</td>
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<td>● Sciences</td>
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<td>● Languages</td>
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<td>● Social Sciences</td>
<td>● Social Sciences</td>
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<td>● Technical and Vocational Subjects</td>
<td>● Technical and Vocational Subjects</td>
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### UNESCO OER Indicators

| Institutional Adoption | OER 6 | Proportion of educators who have created new OER:  
|                        |      | ● Added new OER they created to an institutional platform for OER  
|                        |      | ● Added new OER they created to a national platform for OER  
|                        |      | ● Added new OER they created in the relevant local language  
| OER 7 | Proportion of educators who have redistributed/shared existing OER  
|       |      | ● Added existing OER to an institutional platform or repository  
<p>|       |      | ● Added existing OER to a national or international platform or repository |</p>
<table>
<thead>
<tr>
<th>Teaching and Learning</th>
<th>OER 8</th>
<th>Proportion of institutions reporting that OER has contributed to improved teaching and learning:</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>● Affordability of education for learners</td>
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<td>● Quality of teaching</td>
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<td>● Quality of curriculum materials</td>
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<td>● Relevance of curriculum materials</td>
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<td>● Content availability to address gaps</td>
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<td>● Student success and grades</td>
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<td>OER 9</td>
<td>Proportion of institutions reporting that OER has contributed to an increase in personalized instruction to meet the distinct learning needs of individual students</td>
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# UNESCO OER Indicators

| Teaching and Learning | OER 10 | Proportion of institutions reporting that OER has contributed to increased collaboration through:  
|-----------------------|--------|----------------------------------------------------------------------------------------------------------------|
|                       |        | ● Increased co-creation of OER among educators  
|                       |        | ● Increased co-creation of OER among educators and their students |

→ Supplemental Concepts and Indicators on OER
Thank you...

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