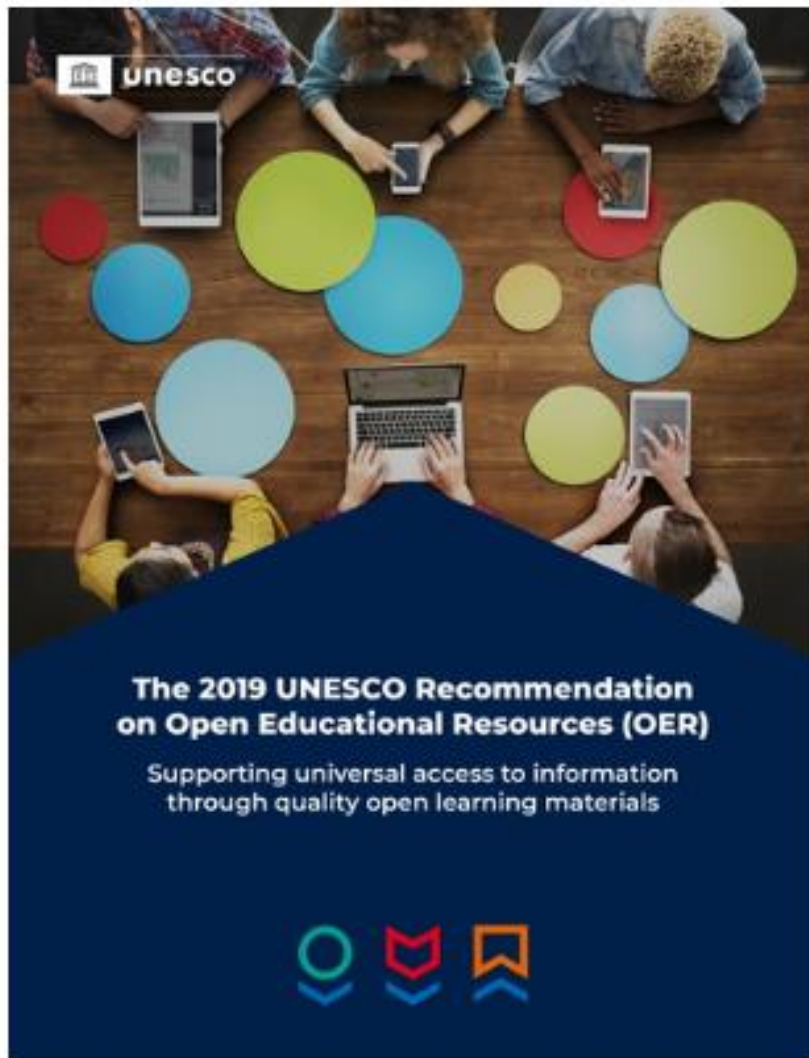Zeynep Varoglu
Senior Programme Specialist
Section for Universal Access to Information
Communication and Information Sector
UNESCO

The UNESCO ICT Competency Framework for Teachers Harnessing OER Project

OER

The 2019 UNESCO Recommendation
on Open Educational Resources (OER)

Supporting universal access to information
through quality open learning materials

I. Definition and scope

1. Open Educational Resources (OER) are learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others.

2. Open license refers to a license that respects the intellectual property rights of the copyright owner and provides permissions granting the public the rights to access, re-use, re-purpose, adapt and redistribute educational materials.

2019 Recommendation on OER

Capacity Building
- Stakeholders understand OER's value
- Training in digital skills to create, access, adapt, share OER
- Access to open tools & platforms with clear metadata standards

Policy
- Open licensing in procurement models
- National/institutional guidelines & incentives for OER use
- Align with Open Science, Open Data policies + ensure data protection

Ensuring inclusive & equitable access to quality OER
- Promote the creation and use of OER that are inclusive, accessible, gender-sensitive, and culturally diverse.
- Public investment supports equitable infrastructure & access
- Ensure that OER meet quality standards and are relevant to learners' needs.

Sustainability Models for OER
- Encourage financial and institutional models that support long-term OER use.
- Promote public-private partnerships and community involvement.
- Support open licensing frameworks that allow reuse and adaptation

International cooperation
- Foster global, regional, and local collaboration on OER initiatives.
- Share best practices, tools, and resources across borders
- Strengtheni nternational networks and communities of practice.

UNESCO OER Dynamic Coalition

5. Facilitating international cooperation

1. Building capacity to create access, use, adapt and redistribute OER

2. Developing supportive policy

3. Ensuring inclusive and equitable access to quality OER

4. Developing sustainability models

Supporting information sharing on best practices and collaboration on joint activities :

➢ Monthly updates on activities in the OER community

➢ Development of the OER DC Portal (upcoming)

➢ Joint projects and intitiatives - e.g. translation and adaptation of the NZ Open Licensing Course for use in West Africa

most free

least free

PUBLIC DOMAIN

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CC BY NC

CC BY NC SA

CC BY ND

CC BY NC ND

CC BY
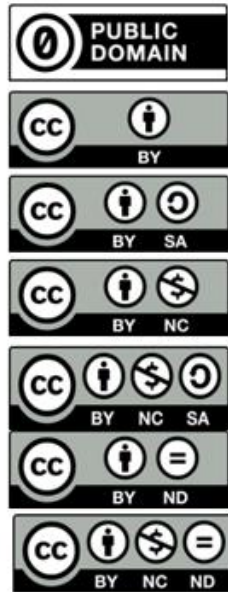
Dr Cable Green, Director
Global Learning, Creative
Commons

Machine Readable

Human Readable

Legal Code

book

UNESCO ICT Competency Framework for Teachers

Corporate author: UNESCO [62911]

ISBN: 978-92-3-100285-4

Collation: 68 pages

Language: English

Also available in: Русский язык, Français, العربية, Español, 汉语, ភាសាខ្មែរ, kir, tgk

Year of publication: 2018

Licence type: CC BY-SA 3.0 IGO [10422]

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The ideas and opinions expressed in this publication are those of the authors; they are not necessarily
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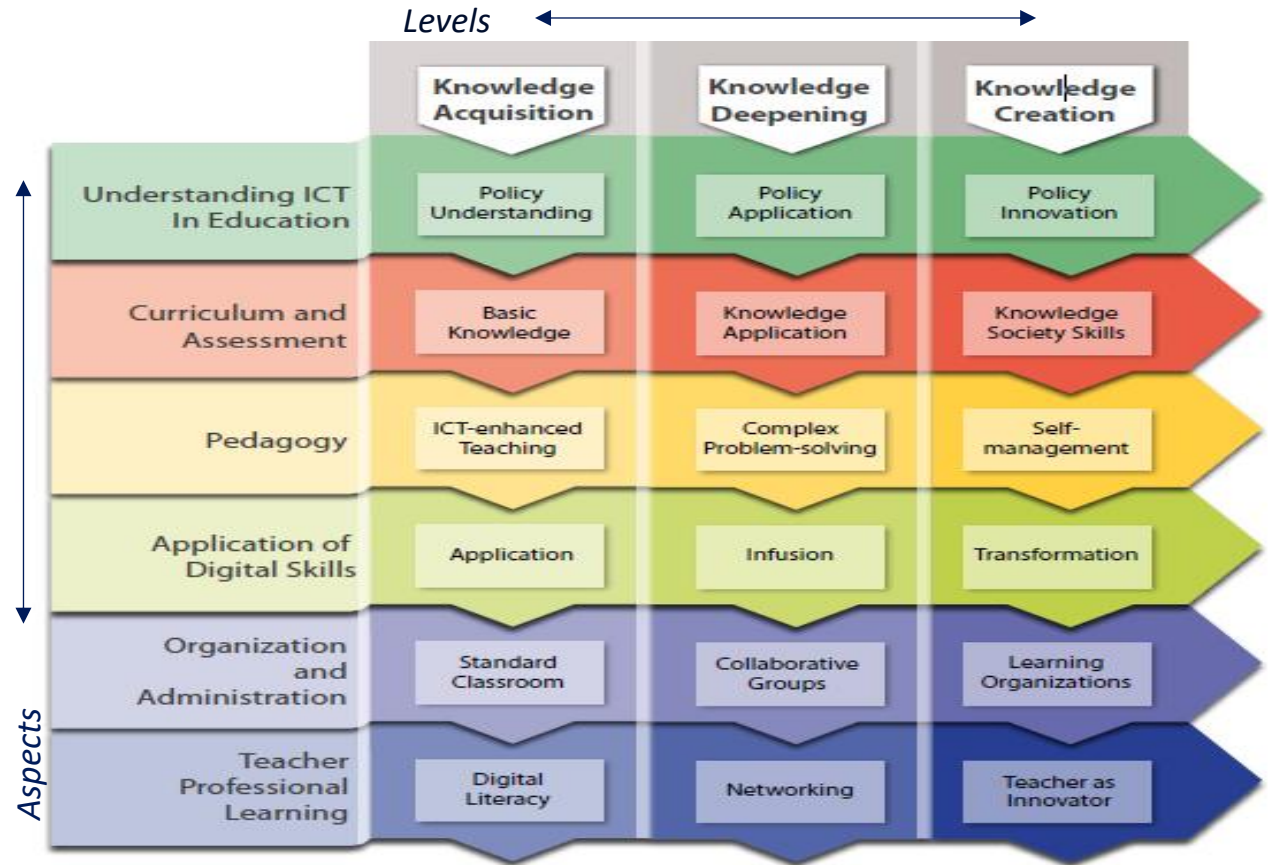Cover photos: © Monkey Business Images/Shutterstock.com
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Graphic Design (cover) - Aurélia Mazoyer
Typesetting (interior) – UNESCO/CLD

ICT Competency Framework for Teachers   (Version 3)

The main idea :
Teachers/ Instructors who have competencies to use ICT in their professional practice will be able to effectively guide the development of students'/ learners' ICT competencies.

Levels

Aspects

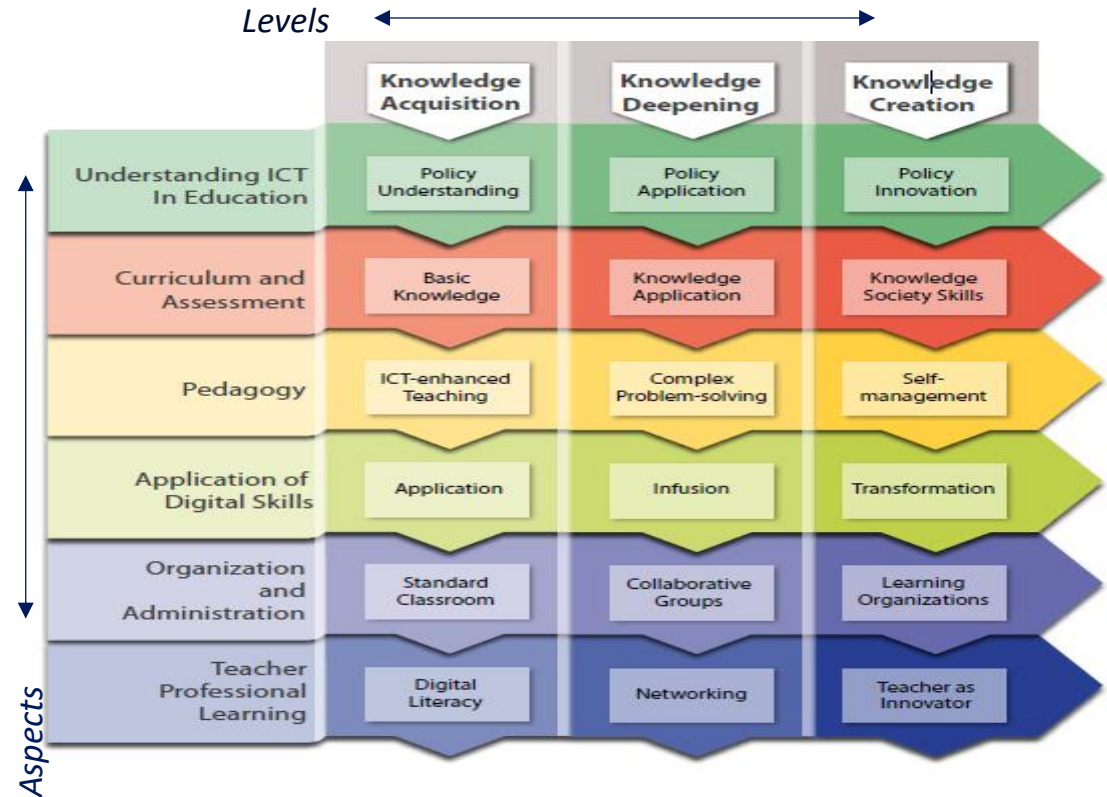| Aspects	Knowledge Acquisition	Knowledge Deepening	Knowledge Creation
Understanding ICT In Education	Policy Understanding	Policy Application	Policy Innovation
Curriculum and Assessment	Basic Knowledge	Knowledge Application	Knowledge Society Skills
Pedagogy	ICT-enhanced Teaching	Complex Problem-solving	Self-management
Application of Digital Skills	Application	Infusion	Transformation
Organization and Administration	Standard Classroom	Collaborative Groups	Learning Organizations
Teacher Professional Learning	Digital Literacy	Networking	Teacher as Innovator

Version 3

ICT Competency Framework for Teachers   (Version 3)

Purpose:
Teacher/ Instructor training on the use of information and communications technology (ICT) in Education.
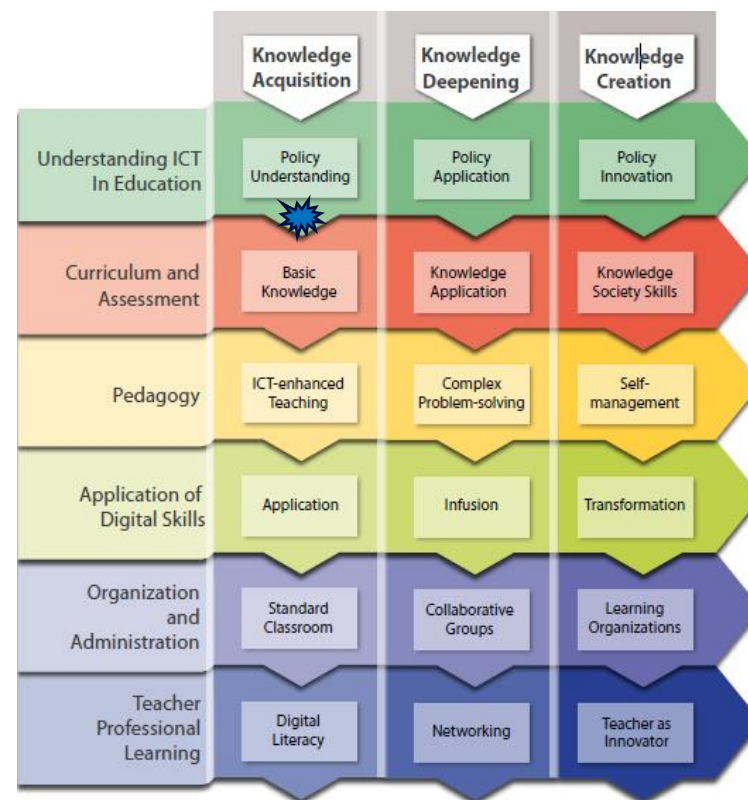
Target Audience:
- Teacher & Instructor training personnel,
- Educational experts (formal & informal),
- Policy makers,
- Teacher & Instructor support personnel
- Other providers of professional learning.

Levels

Aspects

	Knowledge Acquisition	Knowledge Deepening	Knowledge Creation
Understanding ICT In Education	Policy Understanding	Policy Application	Policy Innovation
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Version 3

Knowledge Acquisition

	CURRICULAR GOALS FOR TEACHER TRAINING	TEACHER COMPETENCY (Teachers can ...)	OBJECTIVES (Teachers should be able to ...)	EXAMPLE ACTIVITIES
ASPECT 1 *Understanding ICT in Education Policy*	**Policy Understanding.** Teachers make connections between policy and classroom practices.	Articulate how their classroom practices correspond to and support institutional and/or national policy.	**KA.1.a.** Identify how policy implementation is shaping classroom practice.	Discuss institutional and/or national policies and common classroom practices. Identify those practices that support policy. Teachers identify and analyse their own classroom practices in terms of how their teaching practices contribute to policy implementation.
			KA.1.b. Identify the principles of using ICT in education in a safe and accessible manner.	Investigate the benefits, and also drawbacks, of using ICT in education. Identify appropriate ICT use to support and enhance their productivity, teaching methods, class administration and continuing professional development.
ASPECT 2 *Curriculum and Assessment*	**Basic Knowledge.** Teachers have a basic knowledge of the potential benefits of incorporating a range of relevant ICT resources and productivity tools into any subjects to support both teaching and learning and assessment.	Analyse curriculum standards and identify how ICT can be used pedagogically to support attainment of the standards.	**KA.2.a.** Match specific curriculum standards to particular software packages and computer applications and describe how these standards are supported by these applications.	Identify specific curriculum standards and identify software packages, digital tools and resources that support the attainment of these standards.
			KA.2.b. Search for and identify OER to support curriculum standards.	Search for OER, using both specialized and common search engines, and select open resources to teach specific curriculum standards.
			KA.2.c. Select ICT to support assessment strategies.	Identify how ICT can support different ways to assess students, such as portfolios, peer assessment, formative assessment and journal reflections. Teachers are introduced to dedicated e-assessment tools.

	Knowledge Acquisition	Knowledge Deepening	Knowledge Creation
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Version 3

UNESCO ICT Competency Framework for Teachers

Helping countries develop comprehensive national teacher ICT competency policies and standards.

Welcome

This hub contains collections of Open Education Resources (OER) curated by UNESCO and partner countries, which are aligned to the UNESCO ICT Competency Framework for Teachers (CFT). Here you can discover content and connect with other educators who are using Information and Communication Technology (ICT) to improve teaching practice.

The UNESCO ICT Competency Framework for Teachers (ICT-CFT) is intended to inform educational policy makers, providers of professional learning and working teachers on the role of ICT in educational reform, as well as to assist Member States in developing national ICT competency standards for teachers with an ICT in Education Master Plan approach. Details on the Framework can be found at UNESCO ICT in Education.

ICT-CFT Adopters

These countries are adopting the UNESCO ICT Competency Framework for Teachers. They are using groups to organize, collaborate, and share ICT-CTF aligned resources.

Kenyan ICT CFT Course	Guyana ICT in Education for Teachers Course	Rwanda ICT Essentials for Teachers Course	TIC pour l'université de Djibouti
The Phillippines ICT Competency Resources	Indonesia Rumah Belajar Untuk Semua	Formation à Distance des Enseignants du Togo	Matthew Goniwe School of Leadership & Governance
Zimbabwe ICT Essentials for Teachers	ICT CFT Morocco	Commonwealth of Learning Certificate for Teacher ICT Integration	University of Cambridge OER4Schools

https://www.oercommons.org/curated-collections/587?__hub_id=32

Collection
Policy Understanding

Teachers can articulate how their classroom practices correspond to and support institutional and/or national policy.

18 affiliated resources

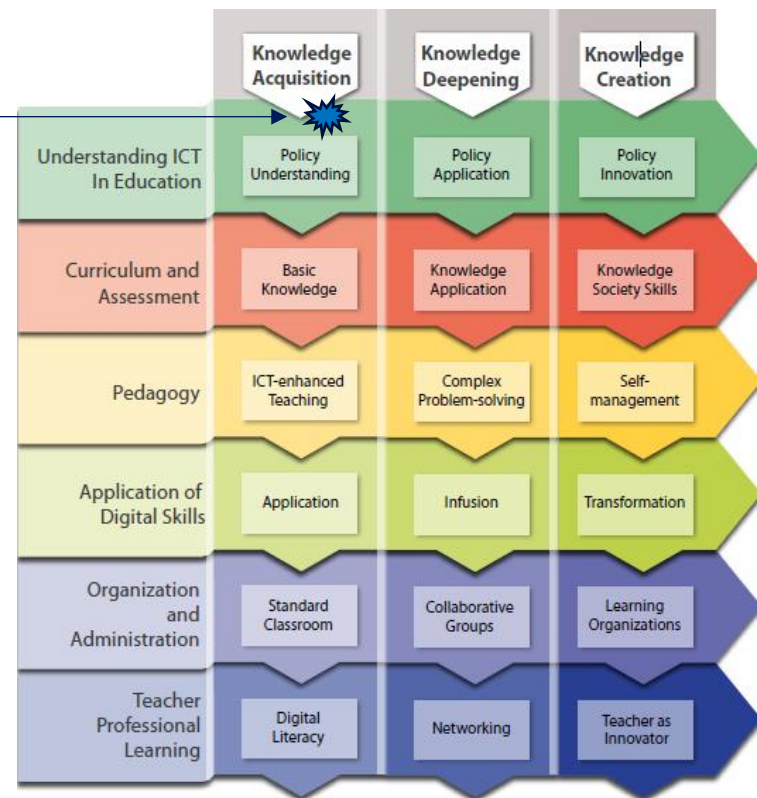**Search Resources**

Enter your keyword(s) here   [Search]

Filter Resources

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The Cabinet Secretary Introduces the KICTCFT Course on Vimeo
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Welcome to Kenyan ICT CFT Course participants from the Cabinet Secretary, Prof....
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Subject: Educational Technology
Material Type: Lecture
Author: Ministry of Education Science and Technology Kenya
Date Added: 04/16/2020

Dep. Commissioner, Simon Kavisi for Teacher Service Commission on Vimeo
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Simon Kavisi introduces the KICTCFT Course on behalf of the Teacher's Service
More
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Subject: Educational Technology
Material Type: Lecture
Author: Ministry of Education Science and Technology Kenya
Date Added: 04/16/2020

ICT Essentials for Teachers Course
Rating ☆☆☆☆☆
Stuff
Subject: Education
Material Type: Full Course
Provider: Ministry of Education (Rwanda)
Author: Rwanda Education Board
Conditional Remix & Share

	Knowledge Acquisition	Knowledge Deepening	Knowledge Creation
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ICT CFT Harnessing OER Project
https: www.oercommons.org/hubs/unesco

Identification of National Priorities

Development of OER-based TT Tools

Organization of Pilot Training

Scaling up

UNESCO OER Commons

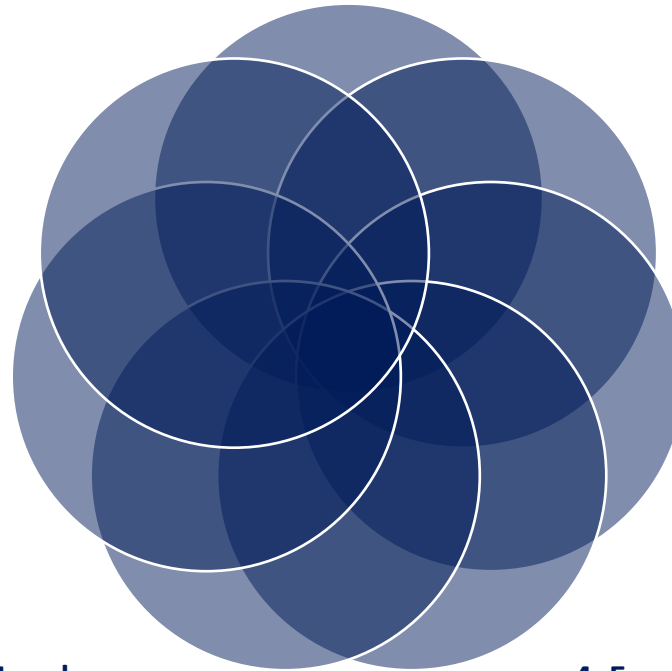Sharing of Expertise

Added Value of the OER

1. Global Alignment and Prestige

- ✅ Enhanced potential for international collaborations in research and teaching.

2. Improved Access to Quality Resources

- ✅ Access to a wide range of customizable teaching materials; ability to adapt resources to the local Qatari context and student needs.

3. Innovation in Pedagogy

- ✅ Flexibility to experiment with new teaching approaches and design student-centered learning experiences.

4. Empowerment Through Capacity Building

- ✅ Institutional support for professional development in digital literacy, instructional design, and open licensing (like Creative Commons).

5. Encouragement of Local Knowledge Creation

- ✅ Opportunity to contribute Qatari and Gulf-focused content to the global OER pool, increasing visibility of regional expertise.

6. Enhanced Collaboration and Networking

- ✅ Opens doors for co-authorship, joint curriculum development, and international conference participation.

7. Cost Efficiency and Sustainability

- ✅ Faculty participation in cost-saving initiatives contributes to QU's social responsibility and sustainability goals.

Benefits

Enhances global engagement
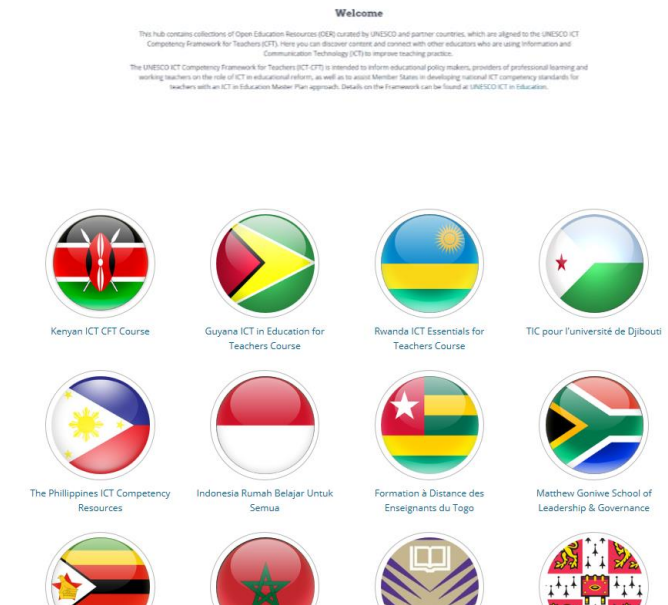
Provides new teaching tools

Fosters local and regional innovation

Supports career development

Encourages open, collaborative, and inclusive education.

ICT CFT Harnessing OER Project
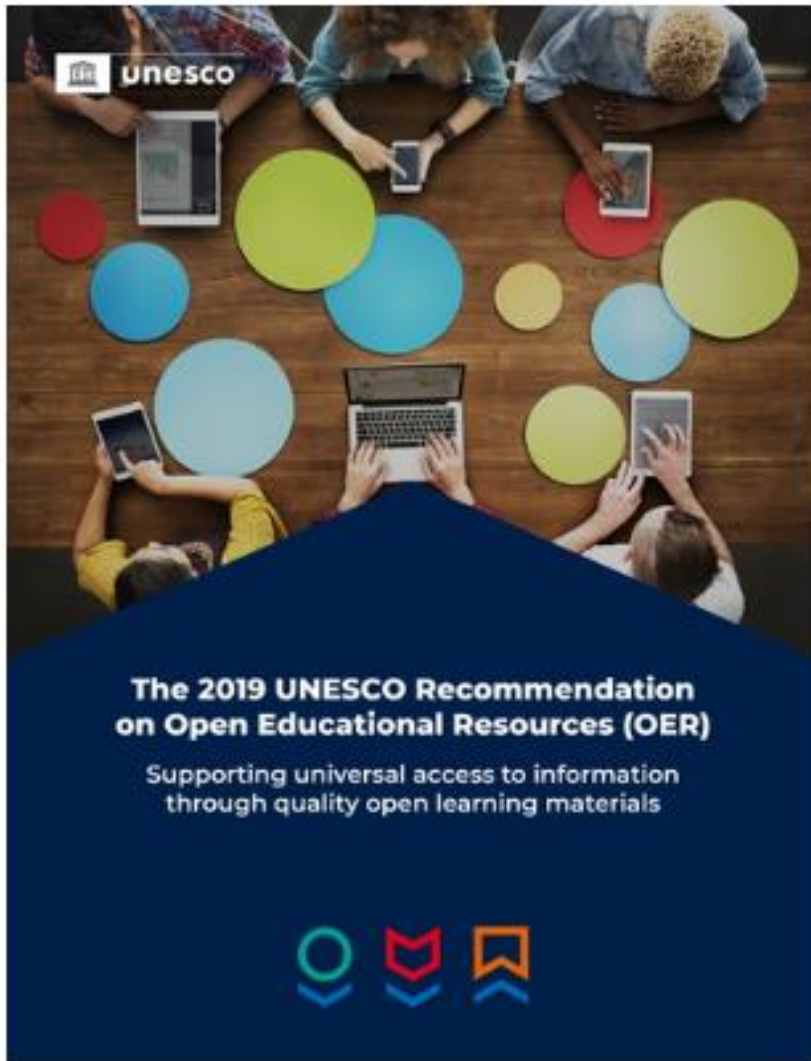https: www.oercommons.org/hubs/unesco

Identification of National Priorities

Development of OER-based TT Tools

Sharing of Expertise

Organization of Pilot Training

UNESCO OER Commons

Scaling up

OPEN EDUCATIONAL RESOURCES

3ʳᵈ UNESCO World OER Congress:

Open Solutions and AI for Inclusive Access to Knowledge

19-20 November 2024,
Dubai, United Arab Emirates

The 2019 UNESCO Recommendation on Open Educational Resources (OER)

Supporting universal access to information through quality open learning materials

5 Areas of Action

1. Capacity Building
2. Policy Support
3. Inclusive Equitable Quality OER
4. Sustainability
5. International Cooperation

Dubai Declaration on Open Educational Resources (OER)

Digital Public Goods and Emerging Technologies for Equitable and Inclusive Access to Knowledge
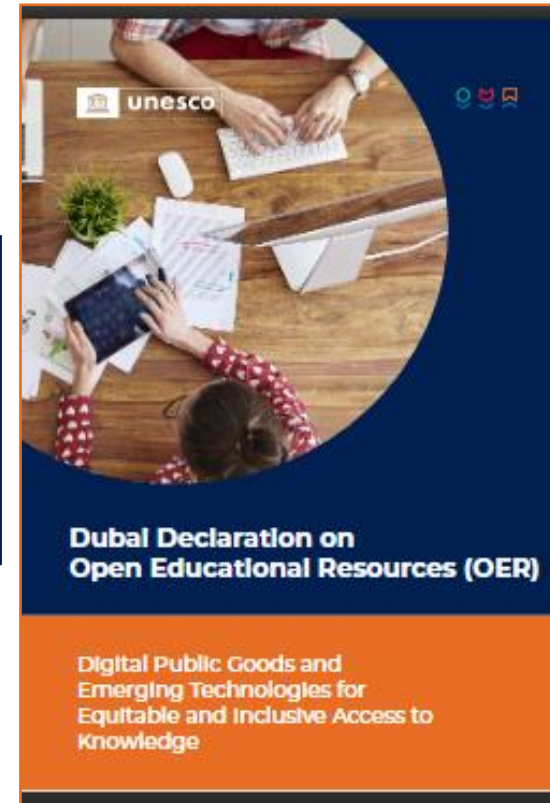
Dubai Declaration on OER

Capacity Building

- Professional Development for AI in OER
- Inclusive Digital Literacy for OER Stakeholders
- Improving OER Attribution and Discoverability
- Digitally Signed Works for OER
- Human Rights-Based Strategies

Policy

- Respect for Licenses in AI Platforms
- Recognition of Open Licenses in AI Training
- Machine-Readable Licenses for AI Outputs
- Research on Attribution Systems

Ensuring inclusive & equitable access to quality OER

1. AI-Enabled OER for Accessibility
2. Machine-Readable Licenses for OER
3. OER Translation and Contextualization
4. Promote Open Ecosystems for OER

Sustainability Models for OER

1. Interoperability and IPR Protection
2. Environmental Sustainability
3. Participatory Governance and Transparency
4. Promote Open Ecosystems for OER

International cooperation

1. Regional and International Networks
2. Engagement with Open Community and Legal Experts
3. Inter-Regional Cooperation on AI Frameworks
4. Authorship Recognition and AI Model Training
5. AI Platforms for OER Creation

UNESCO ROAMX Principles

Rights: Ensuring digital rights, privacy, and freedom of expression.

Openness: Promoting open access to information, data, and knowledge.

Accessibility: Ensuring inclusive digital participation for all.

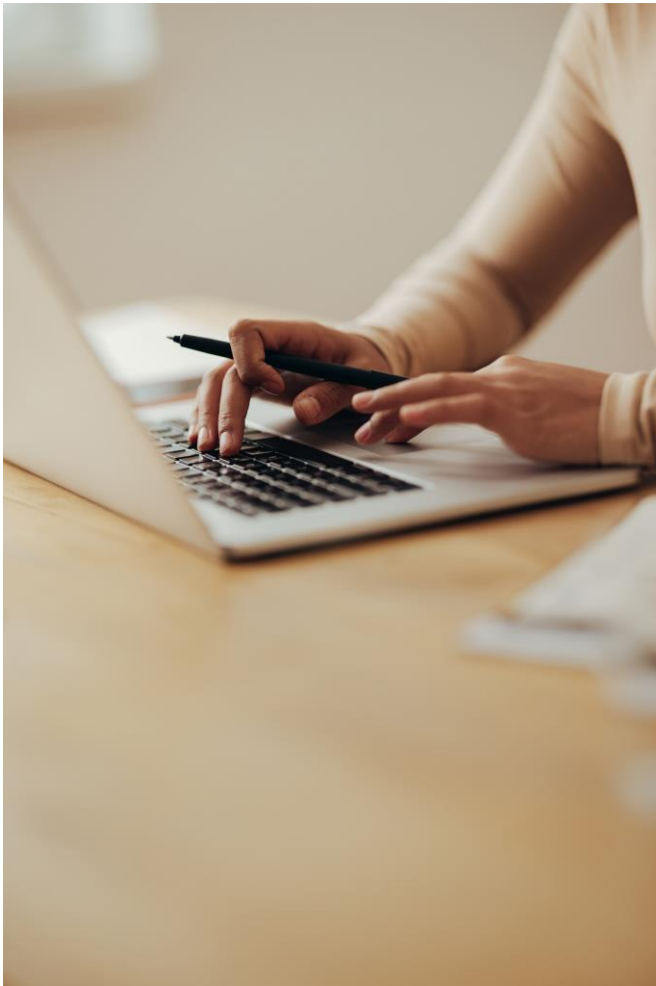**Multi-stakeholder Participation:** Engaging governments, private sectors, and civil society.

Cross-cutting Issues: Addressing ethics, gender equality, and sustainability in digital transformation.

Thank you

Zeynep Varoglu

z.varoglu@unesco.org

To join the UNESCO OER Dynamic Coalition
https://surveys.unesco.org/163625?lang=en

UNESCO 2019 Recommendation on OER
https://unesdoc.unesco.org/ark:/48223/pf0000383205

Dubai Declaration on OER:
https://unesdoc.unesco.org/ark:/48223/pf0000392271/PDF/392271eng.pdf.multi

UNESCO OER Dynamic Coalition Portal
https://oerdynamiccoalition.org/