Open Educational Resources (OER): The Coming of Age of ICT in Education?

Sir John Daniel & Stamenka Uvalić-Trumbić
Education Masters, DeTao Masters Academy, China
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In Principle:

ICT can improve education
In Principle:

ICT can improve education

In Practice:

Results are disappointing
Improving Education?

• ACCESS (wider)
• QUALITY (higher)
• COST (lower)

ALL AT THE SAME TIME!
PLAN

• Potential of ICT
PLAN

• Potential of ICT

• The Record
PLAN

• Potential of ICT

• The Record

  Weaknesses:
  1. Planning
  2. Training
  3. Materials
PLAN

• Potential of ICT

• The Record

  Weaknesses:
  1. Planning
  2. Training
  3. Materials - OER
WHY do ICT inspire dreams of transforming education ???
Teaching and Learning

= Manipulation of symbols (Words, Numbers, Formulae, Images...)
Contemporary ICT are KNOWLEDGE MEDIA

“knowledge is a dynamic process – a living thing”
Teachers cannot pour knowledge into students’ heads!
Contemporary ICT are KNOWLEDGE MEDIA

“knowledge is a dynamic process – a living thing”

“science is less a statement of truth than a running argument”
“ICT will become an increasingly powerful asset to education as its capacities for interactivity and data-linking continue expand”
The Practice of Education

“the Internet is an extraordinary vehicle for the wide distribution of information, knowledge and educational material at low cost.”
BUT...

ICT has not yet fulfilled this potential
‘there are no technology shortcuts to good education. For primary and secondary schools that are underperforming... efforts to improve education should focus... on better teachers and stronger administrations.

Technology has a huge opportunity cost (compared to) more effective non-technology interventions.’

*Toyama (2011)*
The OLPC XO-1 laptop

One Laptop Per Child
Education in Peru

Error message

A disappointing return from an investment in computing

Apr 7th 2012 | LIMA | from the print edition
Professor Tony Bates
“2011 Outlook for Online Learning and Distance Education”
(www.contactnorth.ca)
SADLY...

• goals for eLearning are unambitious
• costs are rising
• no evidence of better learning outcomes
• failure to meet quality standards
Why are ICT underperforming?
Why are ICT underperforming?

Politicians dazzled by the headlights of oncoming technology
THREE VITAL PRELIMINARY STEPS

- Objectives: to achieve what?

Bangkok
THREE VITAL PRELIMINARY STEPS

- Objectives: to achieve what?
- Trained teachers

ICT Competency Framework for Teachers

Commonwealth Certificate for Teacher ICT Integration
THREE VITAL PRELIMINARY STEPS

• Objectives: to achieve what?

• Trained teachers

• ICT-rich Learning Material

Open Educational Resources
Sharing Learning Materials

Super in principle!

Tough in practice!
Sharing Learning Materials

- Adaptation = rekeying
- Third party copyright
Sharing Learning Materials

• Adaptation = rekeying

• Third party copyright
OPEN EDUCATIONAL RESOURCES (OER)

educational materials that may be freely accessed, reused, modified and shared.
THE TREND TOWARDS OPENNESS

- Open Source Software
- Open Access to Research
- Open Educational Resources
Collaborative Development of OER

COL & Hewlett Foundation

20 sets of self-instructional materials in the secondary curriculum (each is a complete syllabus for one grade 10 or 12 subject)
UNESCO HQ Paris

2002 Forum on the Impact of Open CourseWare for Higher Education in Developing Countries
2002 FORUM on the Impact of Open CourseWare for Higher Education in Developing Countries

Declaration:

Participants expressed:

“their satisfaction and their wish to develop together a universal educational resource for the whole of humanity, to be referred to henceforth as Open Educational Resources”
World Congress on
Open Educational Resources
Paris – June 20-22 – 2012
The World Conference on Higher Education
Paris - July 2009: *New Dynamics of HE*
Taking OER beyond the OER Community: Policy & Capacity for Developing Countries

Zeynep Varoglu

Trudi van Wyk
Workshops

South Africa
Namibia
Malaysia
Mali
India
Tanzania
Mozambique

Plus three online forums
Fostering Governmental Support for Open Educational Resources Internationally
QUESTIONNAIRE SURVEY

Responses from ~ 100 countries
Survey on Governments’ Open Educational Resources (OER) Policies

Sarah Hoosen

Prepared for the World OER Congress
June 2012
“There appears to be great interest in OER across all regions of the world, with several countries embarking on notable OER initiatives. Indeed, the survey itself raised interest and awareness of OER in countries that may not have had much prior exposure to the concept.”

Hoosen Report
WHY OER?

- Idealism
- Economics
Exploring the Business Case for OER
Prepared by Neil Butcher and Sarah Hoosen for the Commonwealth of Learning
The Business Case for OER

- Resource-based learning
- OER reduce costs
- Better approaches to textbooks
…there appears to be some confusion regarding understanding of the concept and potential of OER.

Many projects are geared to allowing online access to digitized educational content, but the materials themselves do not appear to be explicitly stated as OER.

Where licences are open, the Creative Commons framework appears to be the most widely used licensing framework, but licensing options varies between countries.

Hoosen Report
Open Licensing

AUTHORS
• OER within copyright legislation

USERS
• Assurances & restrictions
Open Licensing

No consensus on ‘non-commercial’ restriction
Regional Policy Forums

• Dialogue between governments and practitioners

• Promote World OER Congress

• Consult on Paris Declaration
The Paris Declaration

• Principles and aims – not implementation
• Focus on OER – not open source/access
• Avoid technical language
Regional Policy Forums

- Caribbean – January
- Africa – February
- Latin America – March
- Europe – April
- Asia & Pacific – April
- Arab States - May
10 Caribbean jurisdictions reported on the status of OER

Antigua & Barbuda
Belize
Guyana
St. Vincent & the Grenadines
Trinidad & Tobago
The Bahamas
Grenada
Jamaica
St. Kitts & Nevis
Cayman Islands

Barbados, January 2012
ICT in Education Leadership Forum in the Caribbean & Caribbean OER Policy Forum
17 African Nations reported on their Status of OER
Results of OER Survey Questionnaires (February 2012)
Kwame Nkrumah University of Science and Technology

The University of Science and Technology succeeded the Kumasi College of Technology which was established by a Government Ordinance on 6th October, 1961. Following the report of a University Commission which came out early 1961, Government decided to establish two independent Universities in Kumasi at Legon near Accra. The Kumasi College of Technology was thus transformed into a full-fledged University Kwame Nkrumah University of Science Technology by an Act of Parliament on 22nd August, 1961. By another act of Parliament, Act 559 of 1998, the University has been renamed Kwame Nkrumah University of Science and Technology, Kumasi.
Africa Policy Forum
Pretoria (February 2012)

- Connectivity/electricity
- Sharing OER across languages
- Research on OER
- New business models to include industry
Regional Policy Forum for Latin America
March 2012
10 Latin American Nations reported on their Status of OER

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<th>Argentina</th>
<th>Brazil</th>
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<td>Chile</td>
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Regional Policy Forum for Latin America
March 2012

• Preamble: Internationally agreed statements
• Clarify and simplify
• Strategic alliances
• “Appropriate legal frameworks”
• Open licences “with restrictions as judged necessary”
Europe Regional Policy Forum
Cambridge, UK – April 2012
18 countries reported on their OER policies/intentions

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<thead>
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<th>Armenia</th>
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<td>USA</td>
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Europe Regional Policy Forum
Cambridge, UK – April 2012

• Longer definition of OER (earlier formulation)
• Encourage private sector and NGOs to participate
Asia – Pacific Regional Policy Forum
Bangkok – April 2012
19 countries reported on their OER policies/intentions

- Australia
- Brunei
- China
- Fiji
- Indonesia
- Iran
- Kazakhstan
- Korea
- Malaysia
- Mongolia
- New Zealand
- Pakistan
- Philippines
- Samoa
- Sri Lanka
- Thailand
- Uzbekistan
- Vanuatu
- Vietnam
Government policies in place
‘open licensing of materials’

Australia
China
Korea

Indonesia
Thailand
Intellectual Property Policy and Best Practice Guidelines
China

Video Open Courseware Project

Open Digital Learning Resources for Continuing Education
• Add CONFINTEA in preamble
• Open licencing does not affect authorship
• Capacity building; incentives, indigenous knowledge
• Action verbs instead of statements
Arab States Regional Policy Forum
Muscat, Oman – May 2012
11 countries reported on their OER policies/intentions

- Algeria
- Bahrain
- Iraq
- Jordan
- Lebanon
- Morocco
- Oman
- Qatar
- Sudan
- Tunisia
- Yemen
No countries have explicit policies on OER but five countries have strategies relating to eEducation, eLearning or ICTs that could be extended to OER:

- Algeria
- Bahrain
- Jordan
- Lebanon
- Morocco
In Morocco the Ministry of Education has created a National Laboratory of Digital Resources, which is in charge of the production and labeling of digital educational resources. Some resources were produced as OER. In addition, an official ICT website of the Ministry, with a management platform for open source content "DRUPAL“, has been created.
• Add reference to Millennium Declaration in Preamble
• Add item on the need for policies and strategies
• Refer to “open standards digital formats”
Importance of government involvement

- Governments make policy and steer education systems

- Governments pay for large amounts of educational material
World Congress on
Open Educational Resources
Paris – June 20-22 – 2012

The Paris Declaration
Fostering Governmental Support for Open Educational Resources Internationally
World Congress on
Open Educational Resources
Paris – June 20-22 – 2012

The Paris Declaration
Paris Declaration on OER

1. Foster awareness and use of OER.

2. Facilitate enabling environments for the use of ICT.

3. Reinforce the development of policies and strategies on OER.

4. Promote the understanding and use of open licensing frameworks.
Paris Declaration on OER

5. Support capacity building for the sustainable development of quality learning materials.

6. Foster strategic alliances for OER.

7. Encourage the development and adaptation of OER in a variety of languages and cultural contexts.

8. Encourage research on OER.
Paris Declaration on OER

9. Facilitate finding, retrieving and sharing of OER.

10. Encourage open licensing of educational material produced with public funds.
The Paris Declaration

Is not legally binding but governments use such declarations as a guide to policy making and this is already happening with this Declaration on OER
THE AIM

“to encourage governments to promote OER and the use of open licences…

(because)

…governments will be major beneficiaries thanks to the potential of OER to improve the cost-effectiveness of their large investments in education.”
UNESCO HQ Paris

2002 Forum on the Impact of Open CourseWare for Higher Education in Developing Countries
THREE VITAL PRELIMINARY STEPS

• Objectives: to achieve what?

• Trained teachers

• ICT-rich Learning Material
Better to work in teams!
THREE VITAL PRELIMINARY STEPS

- Objectives: to achieve what?
- Trained teachers
- ICT-rich Learning Material
  Open Educational Resources
Open Educational Resources (OER): The Coming of Age of ICT in Education?

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THANK YOU
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