Open Educational Resources & the Future of Learning

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Paramaribo, Suriname
Canada’s Open University
Fastest growing university in Canada
+39,000 students + 700 courses
Frpm film “My Winnipeg” Guy Maddin
Medieval University
Open Educational Resources (OER)

“...technology-enabled, open provision of educational resources for consultation, use and adaptation by a community of users for non-commercial purposes.”
Types of OERs

- Learning objects, units, textbooks, scholarly articles
  IRRODL.org
- Multimedia objects (Flash etc.)
- Courses, programs full curriculum
- Tools, FOSS
Granularity

- OER comes in many sizes:
  - Diagrams, photos, web pages
  - Articles (Open access publications)
  - Games, simulations, activities
  - Multimedia
  - Units of learning (IMS LD)
  - Lessons, modules & courses
  - Programmes
OER: Example

- Pedagogical purpose; to augment learning about:
  1. Paris
  2. 1839
  3. Urban environments
  4. Architecture
  5. Daguerre
  6. Photography
  7. Daguerreotypes

From Norm Friesen
Granularity

Lesson

Component

Lessons

Component

Eg. Simulation

Topical Unit

Reusable Learning Object

Information Objects

Commonwealth of Learning

Athabasca University

TEKRI

UNESCO

UNITWIN

CANADA'S OPEN UNIVERSITY
Granularity
Granularity

Diagram illustrating the concept of granularity with layers indicating Programme, Course, Module, Lesson, Component, and Information Objects. Examples include simulation, topical unit, reusable learning object, and information objects.
OER’s are Open (Mostly)

- OERs can be:
  - Augmented
  - Edited
  - Customized
  - Aggregated
  - Reformatted
  - Mashups!

See Scott Leslie’s 10 minute video at http://www.edtechpost.ca/gems/open.htm
OER Benefit: Cost sharing
OER Benefit: Timely Updating
OER Benefit: Number of Learners

20 or 2 million?
Internet is the biggest commons

Public domain is a priceless, shared heritage
If you could reproduce food infinitely at no cost?

Wouldn’t it be a crime to not feed the hungry?
• “Open educational resources are materials used to support education that may be freely accessed, reused, modified and shared by anyone” (OER Forum)
Modern learning is not possible without the skill for accessing and using the Internet.
They hang the man and flog the woman
Who steals the goose from off the common
But leaves the greater villain loose
Who steals the common from off the goose.

Anonymous 1764 or 1821?
Mobile Learning

Wireless Access
Mobile learning

¼ of the world’s population

+2 billion Internet connexions

World population: 6.8 billion
Mobile learning

The world is going mobile
Global numbers of Internet users, total and per 100 inhabitants, 2000-2010

+ 2 billion users
Global mobile cellular subscriptions, total and per 100 inhabitants 2000-2009

Source: ITU World Telecommunication/ICT Indicators database.
Web usage worldwide


- Asia: 6.10%
- Africa: 5.81%
- North America: 4.71%
- Oceania / Australia: 2.88%
- Europe: 1.81%
- South America: 1.46%

Worldwide: 3.81%
Chad: 29%
Nigeria: 25%
Sudan: 22%
Percentage of the world's population covered by a mobile cellular signal, 2003 compared to 2009

- 2003: 39% not covered, 61% covered
- 2009: 10% not covered, 90% covered

Mobile learning

1/3 only access internet via mobile

4.5 billion mobile subscriptions
1.5 billion mobile internet users

90% of world population is covered by cellular internet

More time spent on Internet with Mobile than with desktops
A Balancing Act
Fluid design (*elastic or liquid*)

WWW is flexible for display on different-sized screens, enabling user preferences (font size, etc.)
Design for Mobile FIRST
What technology has done more to destroy human community than any other?

Could it be the portable book?
Why OER for MLearning?

• DRM (digital rights management)
• Digital licenses
DRM (Digital Rights Management)

You CANNOT
• Copy & paste, annotate, highlight
• Text to speech
• Format change
• Move material
• Print out
• Move geographically
• Use after expiry date
• Resell
We've done it! Perfect copy protection! A CD that self-destructs after one playing...
Digital Millennium Copyright Act
DMCA

It is illegal to circumvent protection mechanisms (or even criminal) & to even share information on how to circumvent protection
Digital Licenses

• Copy & paste, annotate, highlight
• Text to speech or hyperlink
• Format change
• Move material to another computer
• Print out
• Move geographically
• Use after expiry date
• Resell

• Owners have NO liability even if product doesn’t work
• Owners can “invade” your computer without permission
• Collect & use personal data
• User has a “privilege” to use the product not own it

• Prohibited to show your content to others
• Must accept that you have NO rights
Open ETextbooks

- Copy & paste, annotate, highlight
- Text to speech or hyperlink
- Format change
- Move material to other computer
- Print out
- Move geographically
- No expiry date
- Reuse/Remix/Mash
- Retain privacy and digital rights

Essential for Mobile implementations
Access Rights?

Vendors can control how, when, where, and with what specific brands of technological assistance audiences are able to access content you buy but you don't get.
Toys?

"Moore's Law is too slow for us!"

- Okimoto, Sony
2 jiffies or 200 milliseconds
UNESCO Chairholders in OER Partners

Rory McGreal

Fred Mulder
OER for Development

Goal of developing together a universal educational resource available for the whole of humanity… hope that this open resource for the future mobilizes the whole of the worldwide community of educators”

UNESCO 2002
UNESCO OER Community

- OER Wiki
- OER Discussion group
- International
OER: Type of Licence

- GNU
- BSD
- Creative Commons
- Public Domain

Commonwealth of Learning
TEKRI
Athabasca University
UNESCO
Open Curriculum

Students choose what is of interest to them and what meets their professional development needs from the “smorgasbord” of available open courses — Jim Taylor

designed and based solely on OER
OER University Concept

- Students awarded credible degree or credential
- Participating institutions grant credit for courses
- Open assessment from participating institutions
- Open student support via "Academic Volunteers International"
- Learners access courses based solely on OER

Jim Taylor

California? Washington?
Our Students

Judith Murray, TRU

Our Education

Our Content

Our Support
Education

Any students

Any Content

Any Support

OUR ASSESSMENT

Judith Murray, TRU
The restriction of the commons by patents, copyright, and databases [right] is not in the interests of society and unduly hampers scientific endeavour.
“On the part of rich countries there is excessive zeal for protecting knowledge through an unduly rigid assertion of the right to intellectual property . . .”

- Pope Benedict XVI
“On the part of rich countries there is excessive zeal for protecting knowledge through an unduly rigid assertion of the right to intellectual property.”

- Pope Benedict XVI
"Let's put all this hype about transformation in perspective. It's underhyped.

"There's something coming after us, and I imagine it is something wonderful."

Danny Hillis, Wired

"Change is mandatory, survival is an option. Make the right choice."

François Tavenas, ancien recteur de l'Université Laval
IF YOU DON’T LIKE CHANGE
YOU'RE GOING TO LIKE
IRRELEVANCE EVEN LESS

General Eric Shinseki, retired Chief of Staff, U. S. Army
Thank You

Mahalo

Kiitos

Toda

Gracias

brigado

Grazie

Tack

Спасибо!

Ashanti