Open Educational Resources

OER

Research, opportunities & strategies

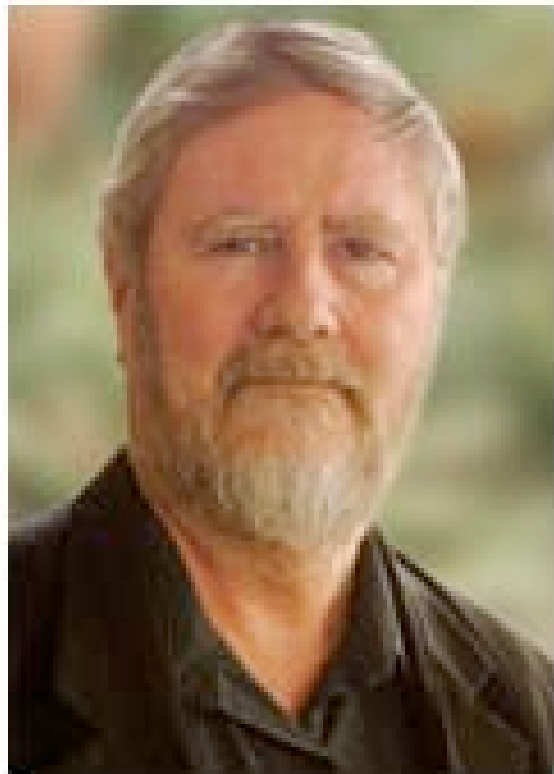Rory McGreal
rory@athabascau.ca

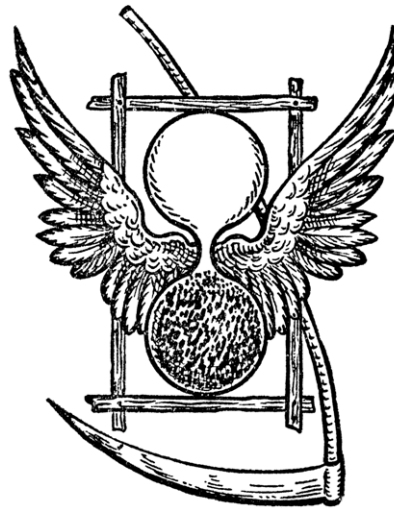Terry Anderson
terrya@athabascau.ca

Open Scholars

Prof. Rory McGreal

Prof. Terry Anderson
Canada Research Chair

Athabasca University

Canada's Open University™

Why OERs?

- **the world's knowledge is a public good in general**

- **the WWW in particular provides an extraordinary opportunity for everyone to share, use, and reuse that knowledge."**

  - Hewlett Foundation Smith, & Casserly. The promise of open educational resources. Change 38(5): 8–17, 2006

Community or accessibility?

What technology has done more to destroy human community than any other?

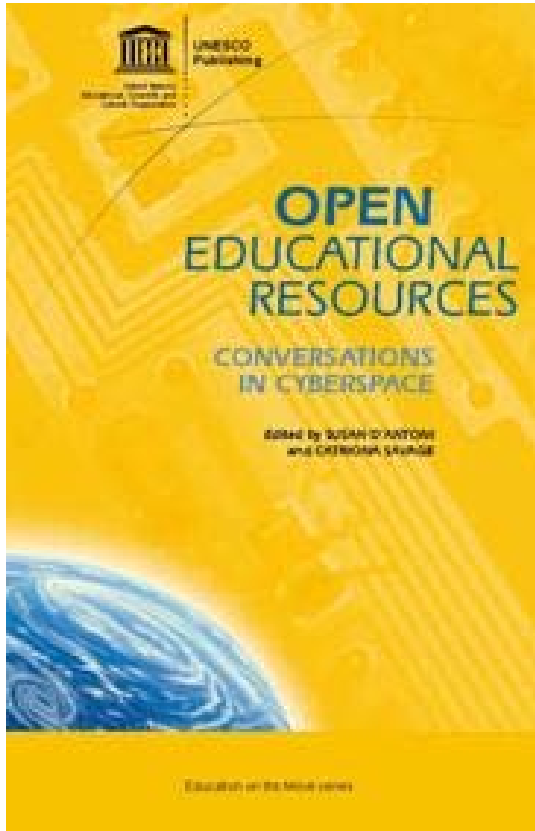# Community or accessibility?

What technology has done more to destroy human community than any other?

Could it be the portable book?

Athabasca University

Canada's Open University™

OER Definition

- "**open provision of educational resources enabled by information and communication technologies, for consultation, use and adaptation by a community of users for non-commercial purposes.**"

  - UNESCO 2008
    http://www.unesco.org/iiep/eng/focus/opensrc/opensrc_1.htm

Athabasca University

Canada's Open University™

Types of OERs

- **Learning objects, units, textbooks, scholarly articles IRRODL.org**
- **Multimedia objects (Flash etc.)**

MERLOT
Multimedia Educational Resource
for Learning and Online Teaching

- **Courses, programs full curriculum**

CONNEXIONS

- **Tools, FOSS**

eduforge
Innovation for Education

Athabasca University
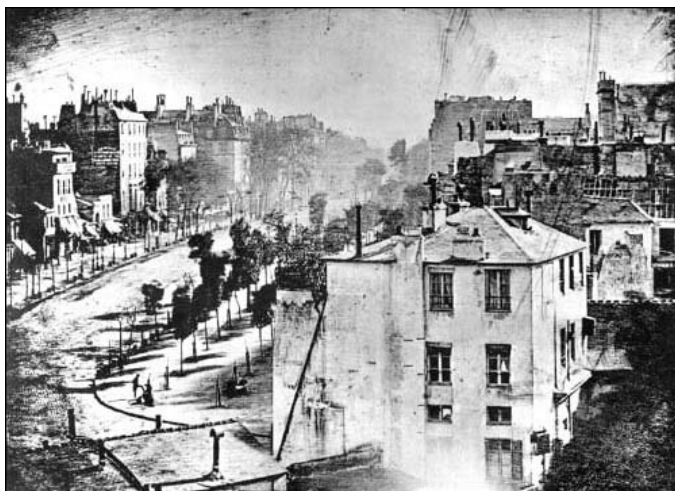

Canada's Open University™

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**
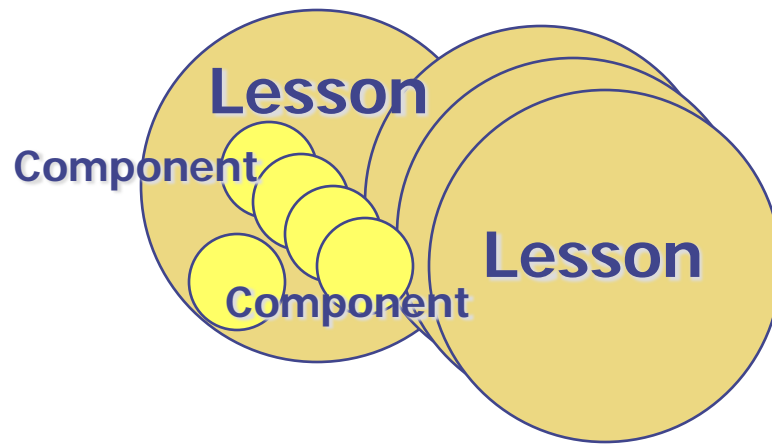
OER: Example

- Content

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

From Norm Friesen
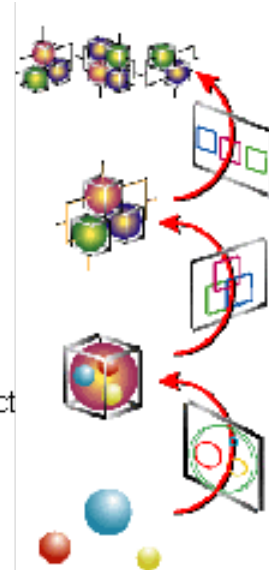
Athabasca University

Canada's Open University™

Granularity

Lesson

Component

Component

Lesson

Eg. Simulation

Topical Unit

Reusable
Learning Object

Information
Objects

Granularity
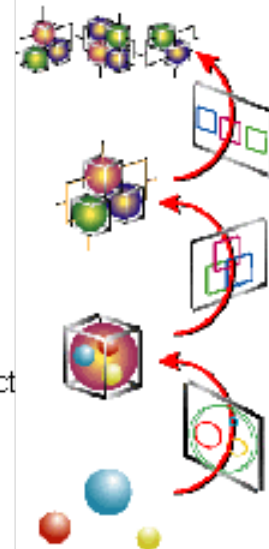

Module

Lesson

Component

Component

Lesson

Module
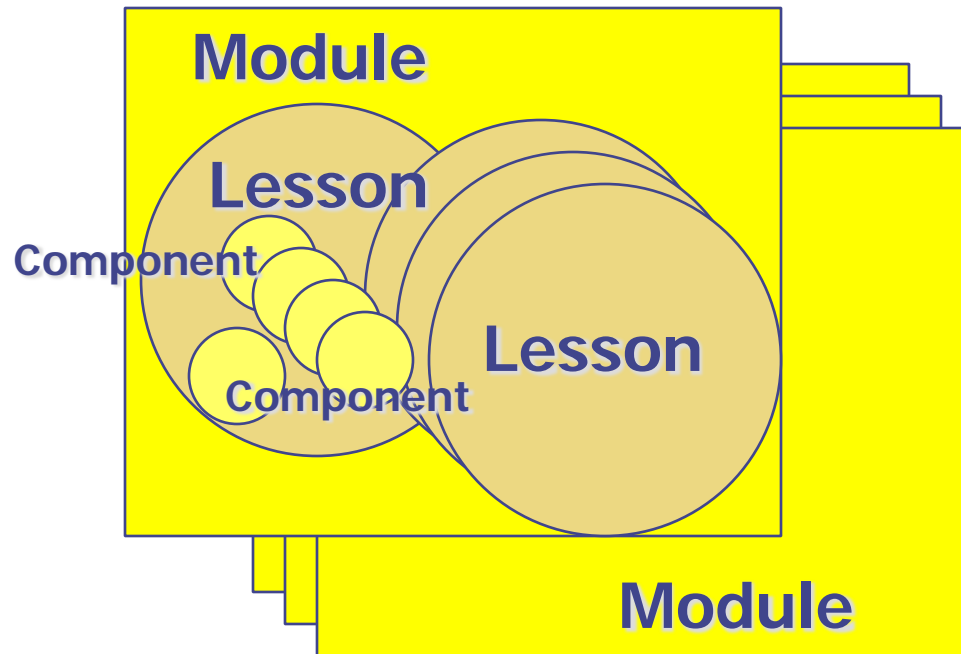
Eg. Simulation

Topical Unit

Reusable
Learning Object

Information
Objects

granularity

Granularity
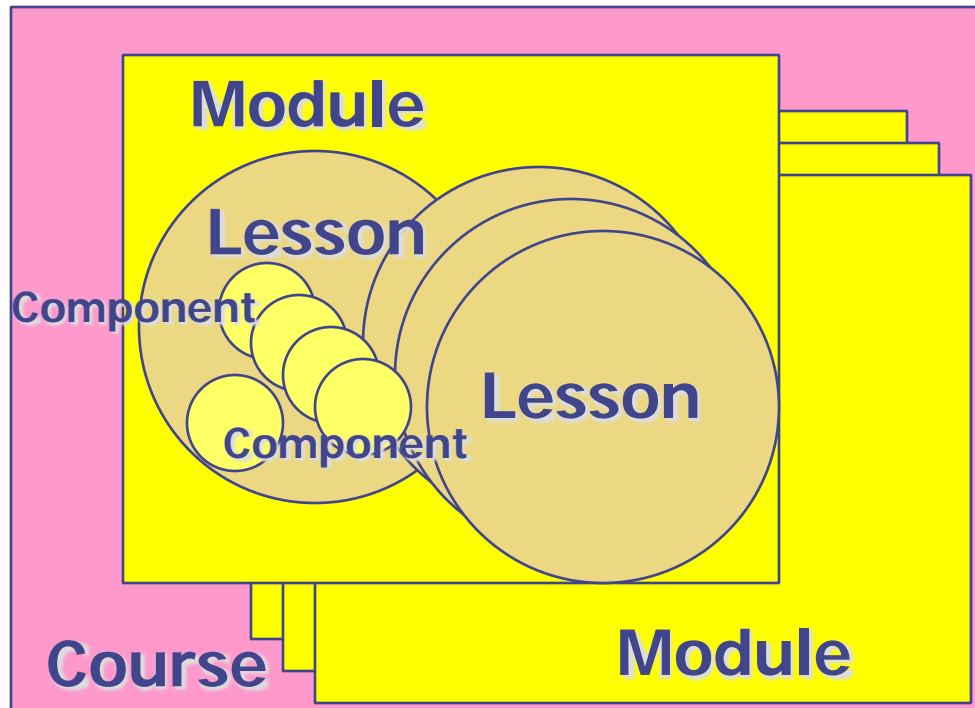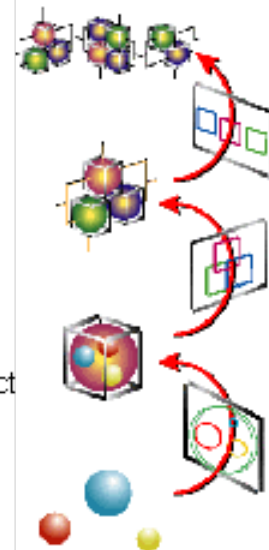
OER's are Open (Mostly)

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

The Mashup Ecosystem:
Flourishing In An Increasingly Nurturing Environment
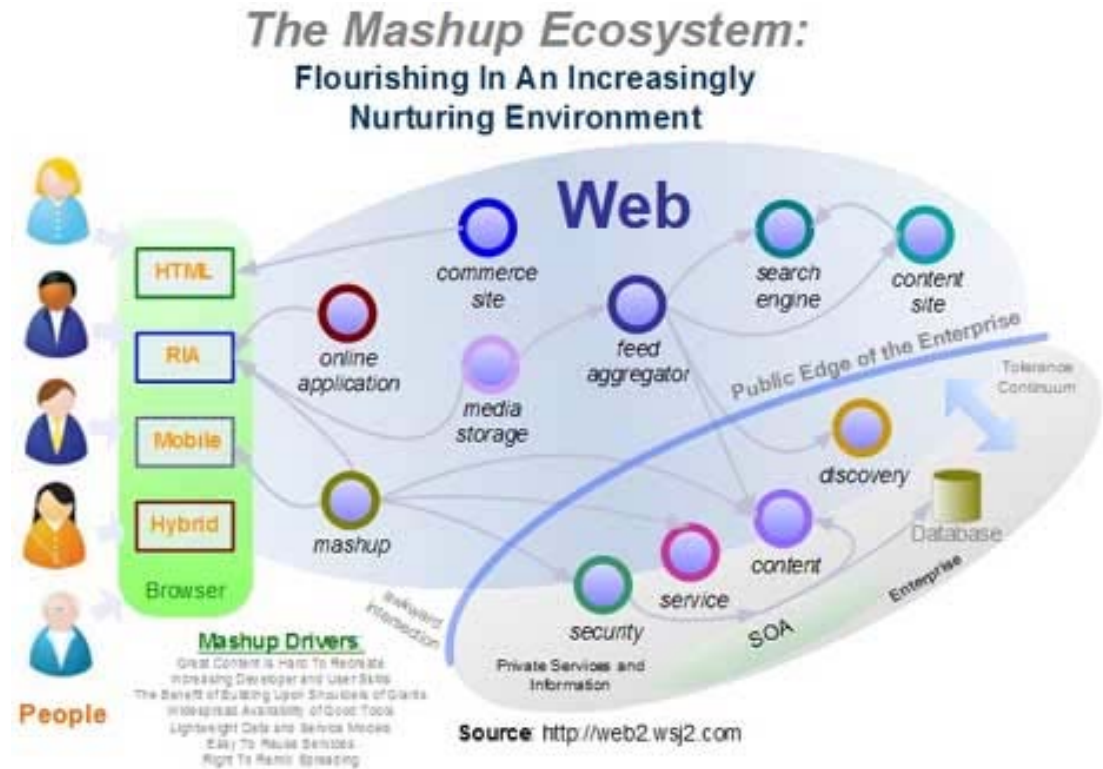
See Scott Leslie's 10 minute video at
□http://www.edtechpost.ca/gems/opened.htm

Athabasca University

Canada's Open University™

4 R's Functionality of OERs

- **Reuse** - Use the work just exactly as you found it.

- **Rework** - Alter or transform the work

- **Remix** – Combine work with other works

- **Redistribute** – Share with others.

  – Dave Wiley
    http://opencontent.org/blog/archives/35
    5

OERs 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

Millions of OERs are available
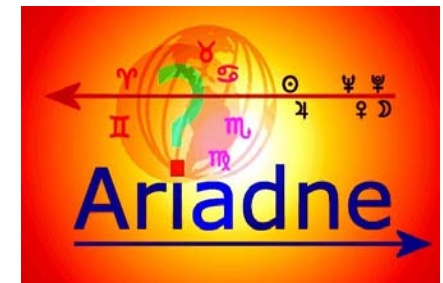
OER Providers

LARGE

Institution

Community

small

Adapted from Alexa Joyce OECD

OER use Rationale

from Open U. UK

- **Opportunity:**
  - **Risk of doing nothing**
  - **Address technology and globalization**
  - **A testbed for technology & work processes**
  - **External funding (similar aims and ideals)**
  - **The world as a resource.**
- **Brand Promotion:**
  - **A route for outreach**
  - **Demo the quality of OUUK materials**

The Open University

Athabasca University

Canada's Open University™

Ownership and Licensing

- **Familiar problems**
  - **Who owns resource - educators or the institution?**
  - **inflated expectations**
- **New problems**
  - **OER's are not journal articles**
  - **Articles are not "reworked"**
    - **Is attribution critical?**
    - **Commercial exploitation?**

Athabasca University

Canada's Open University™
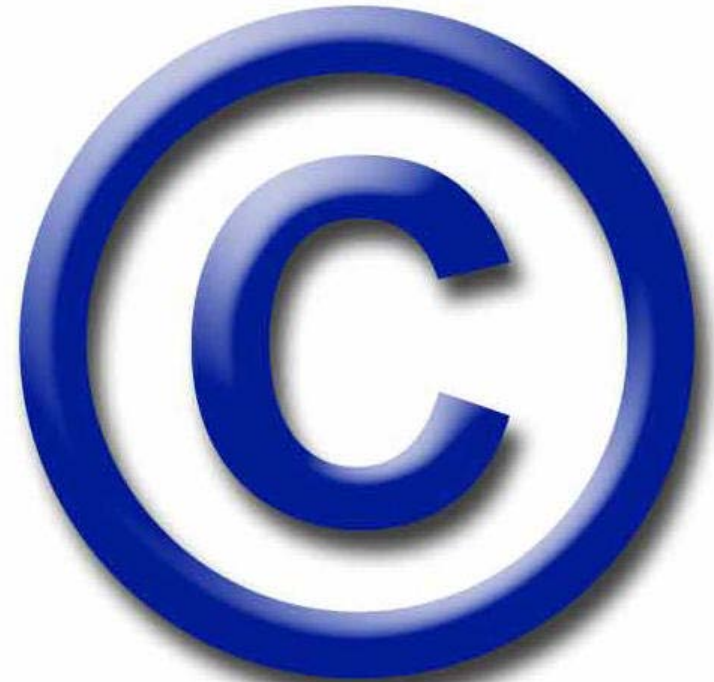
Ownership Models

- **Institutional**
  - Default under most 'work for hire' law
- **Shared**
  - Often unworkable
  - Tragedy of the anti-commons
- **Individual (academic)**
  - Rights of succession? Multiple authors?
- **Produsage**
  - No enforcement of rights
    - (copyleft, public domain)

Funding Models (from Downes, 2007)

- **Endowment**
- **Membership**
- **Donation**
- **Producer contribution – (Publishers dream!)**
- **Sponsorship - Itunes University**
- **Government funding**
- **Institutional**

Creative Commons License

'Some Rights Reserved'

- **Attribution?**

- **Derivatives?**

- **Commercial Use?**

CREATIVE COMMONS WANTS TO HELP DEFINE THE SPECTRUM OF POSSIBILITIES BETWEEN FULL COPYRIGHT -- ALL RIGHTS RESERVED -- AND THE PUBLIC DOMAIN -- NO RIGHTS RESERVED. OUR LICENSES HELP YOU RETAIN YOUR COPYRIGHT WHILE ALLOWING CERTAIN USES OF YOUR WORK. THEY HELP YOU OFFER YOUR CREATIVE WORK WITH SOME RIGHTS RESERVED.
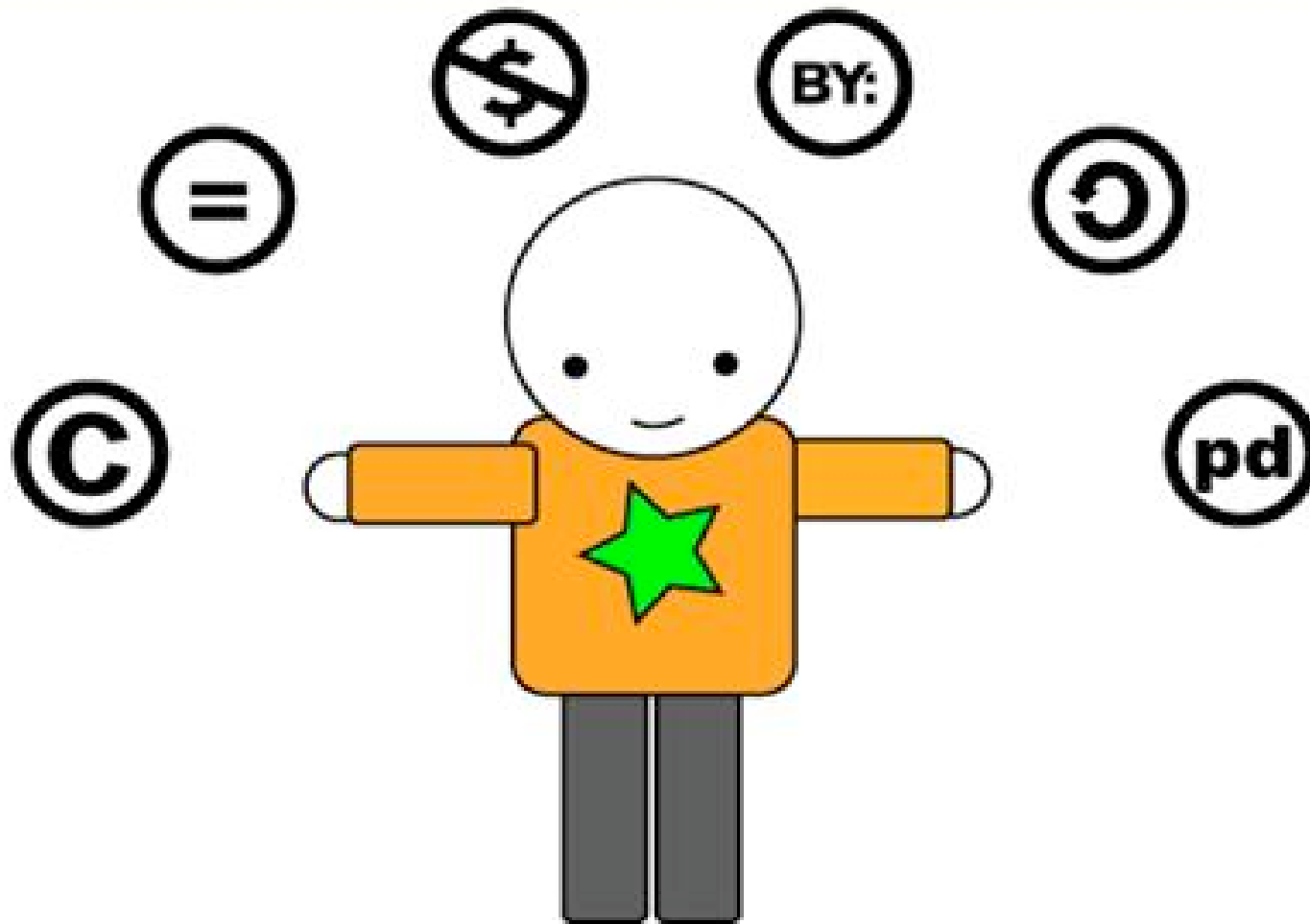
Why the Public Domain?

Public Domain

- facilitates reuse & repurposing
- Attribution is ethical in any case
- For-profit is not always evil

Why the Public Domain?

PD

Public Domain

- facilitates reuse & repurposing

- ~~~~~~ ~~~~~~ ethical in ~~~~~~ use

- For-profit is not always evil

Why NOT?

Athabasca University

Canada's Open University™

Problems with OER

- **Little take up by conventional teachers**
- **Little reward/recognition for authors**
- **Few learners engage with content**
- **A business case?**
- **Little remixing & reposting**

creation of OER community

network of nodes

the way forward

continue the community

introduction to OER

the way forward

roles

Main Page - OER_Wiki.htm

importance of research in group varied

the outputs

who is the community

why was there fairly low emphasis on research

issues

decision makers

where do they sit in institutions

researching the future - action research - and interesting discussion

teachers

Problems with OER

- **Little take up by conventional teach...**
- **Little reward/recognition for...**
- **Few learners engage wi...**
- **A business case?**
- **Little remixi... ...posting**

Solution? Vibrant communities

creation of OER community

network of nodes

the way forw...

continue the community

introduction to OER

the w...

roles

Main Page - OER_Wiki.htm

importance of research in group varied

...e outputs

who is the community

why was there fairly low emphasis on resea...

issues

where do they sit in institutions

decision makers

...ing the future - ...on research - and interesting discussion
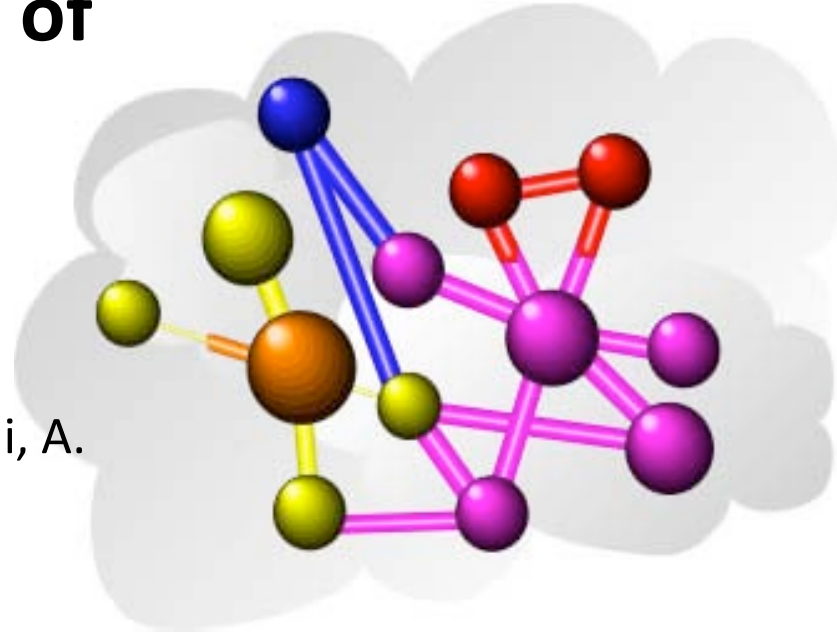
teachers

Publishers vs. re-user/publishers

- **88% (70) involved authors of own content**

- **ONLY 12% (10) derived by others**

Petrides, L., Nguyen, L., Cynthia, J., & Karaglani, A. (2008)
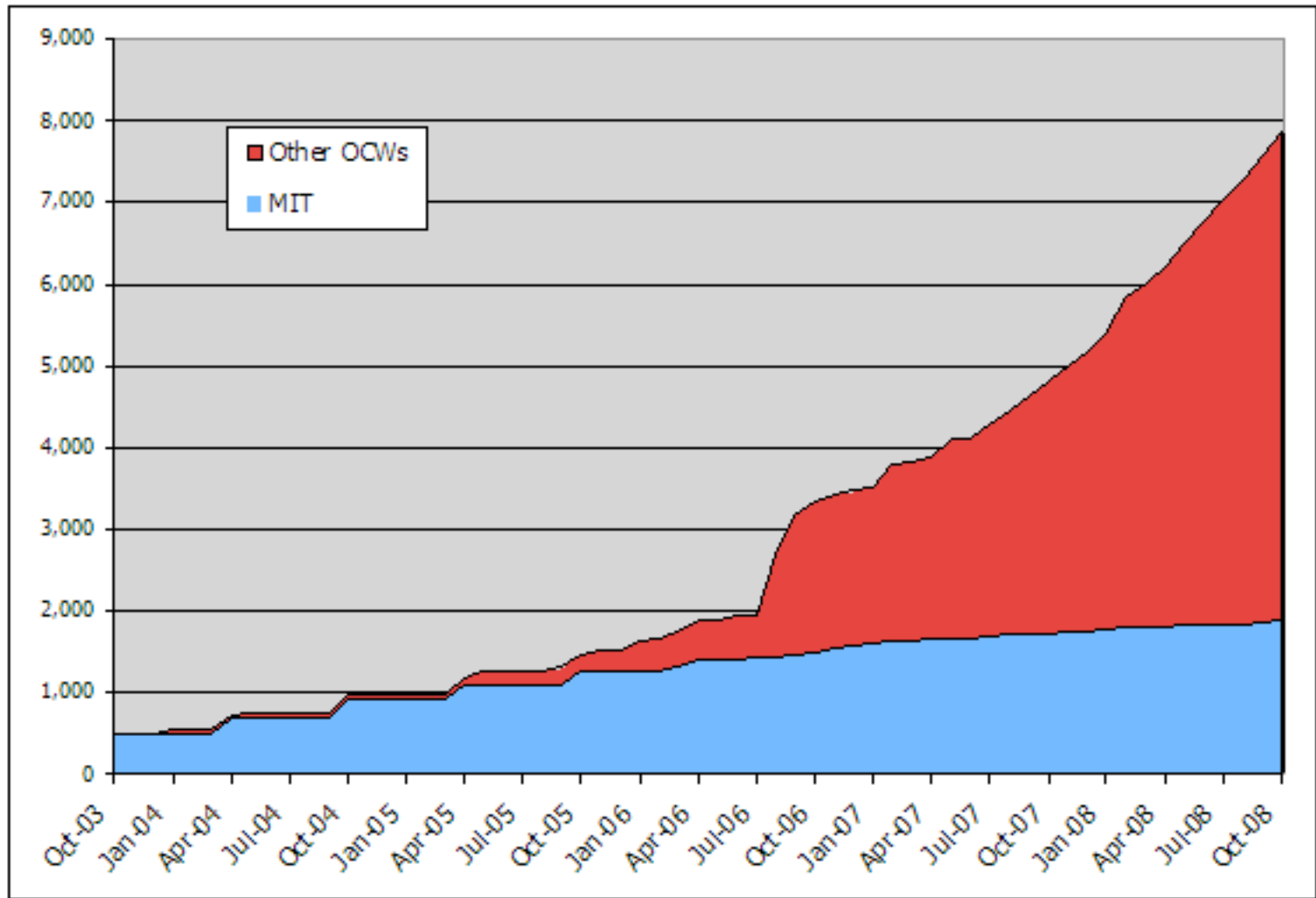
Open Learn Example

402 units

http://openlearn.open.ac.uk/

The OpenLearn website gives free access to course materials from The Open University. The LearningSpace is open to learners anywhere in the world.

Topics	Discuss	Number of Units
Arts and History	Arts and History forum	52
Business and Management	Business and Management forum	31
Education	Education forum	38
Health and Lifestyle	Health and Lifestyle forum	21
IT and Computing	IT and Computing forum	25
Law	Law forum	6
Mathematics and Statistics	Mathematics and Statistics forum	28
Modern Languages	Modern Languages forum	15
Science and Nature	Science and Nature forum	65
Society	Society forum	57
Study Skills	Study Skills forum	28
Technology	Technology forum	28
How to...		8

Search units

Athabasca University

Canada's Open University™

OCWC member courses 2008

http://ocwblog.org/wp-content/uploads/2008/11/ocwchart.gif

Athabasca University

Canada's Open University™
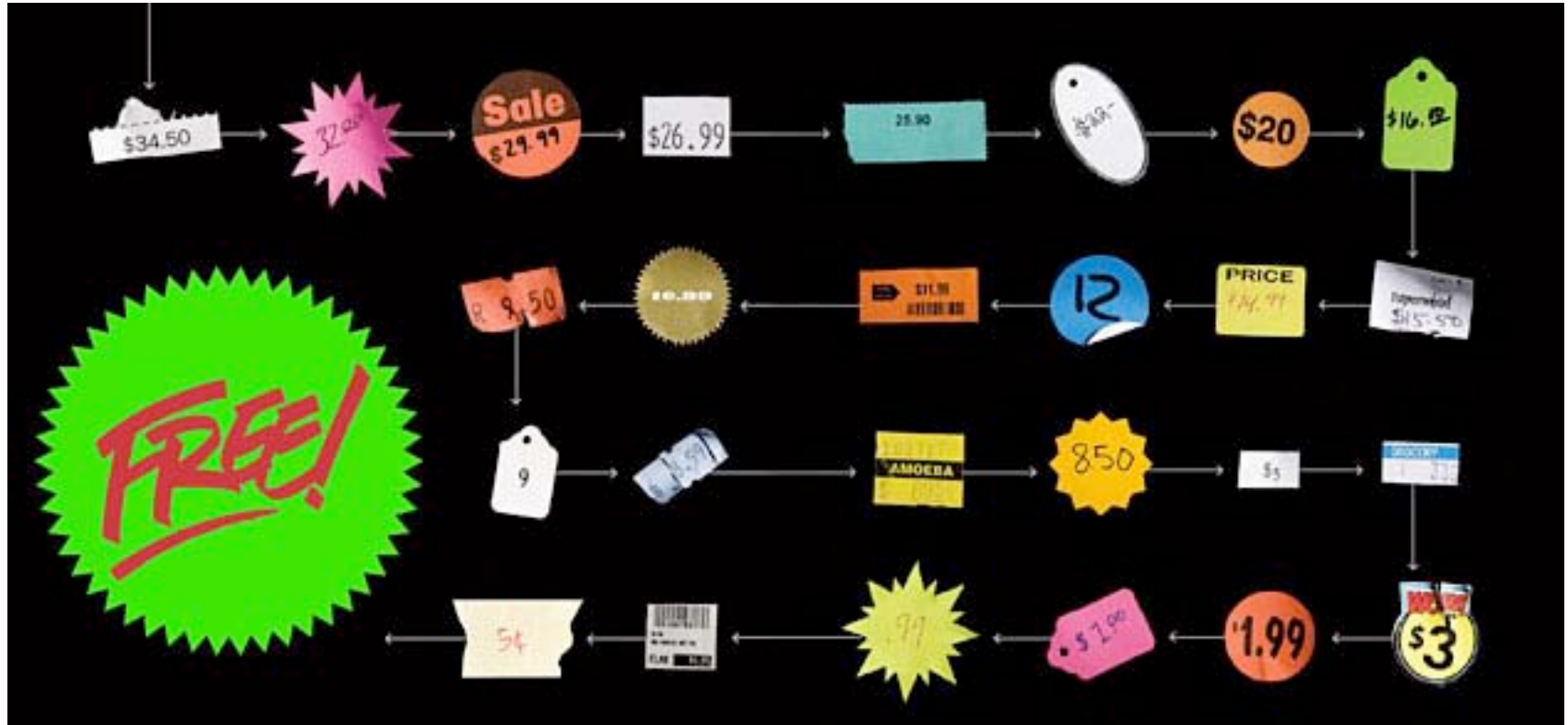
The Political Economy of Peer Production
Michael Bauwens

- **produce use-value through the free cooperation of producers**
- **a 'third mode of production' neither for-profit or public**
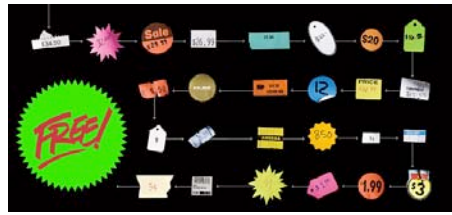- **NOT exchange value for a market, but use-value for a community**

www.ctheory.net/articles.aspx?id=499

Athabasca University

Canada's Open University™

Chris Anderson's Taxonomy of Free

Athabasca University

Canada's Open University™

Chris Anderson's Taxonomy of Free

1. **'Freemium:** free & "pro" versions

   1. 1% of users support all the rest

2. **Advertising:** provide a special audience

3. **Cross-Subsidies:** free lunch if you buy beer

4. **Zero-Marginal Cost:** online music

5. **Labor Exchange:** Digg or Google 411

6. **Gift Economy:** $$$ aren't everything

Wired: http://www.wired.com/techbiz/it/magazine/16-03/ff_free?currentPage=all

Athabasca University

Canada's Open University™

Prod-Users:
From production to produsage

Axel Bruns 2008

- **Users as active participants in production of artifacts:**

- **Examples:**

  - **Open source movement**

  - **Wikipedia**

  - **Citizen journalism (blogs)**

  - **Immersive worlds**

  - **Distributed creativity - music, video, Flickr**

PRODUSAGE.org

From Production to Produsage: Research into User-Led Content Creation

Produsage
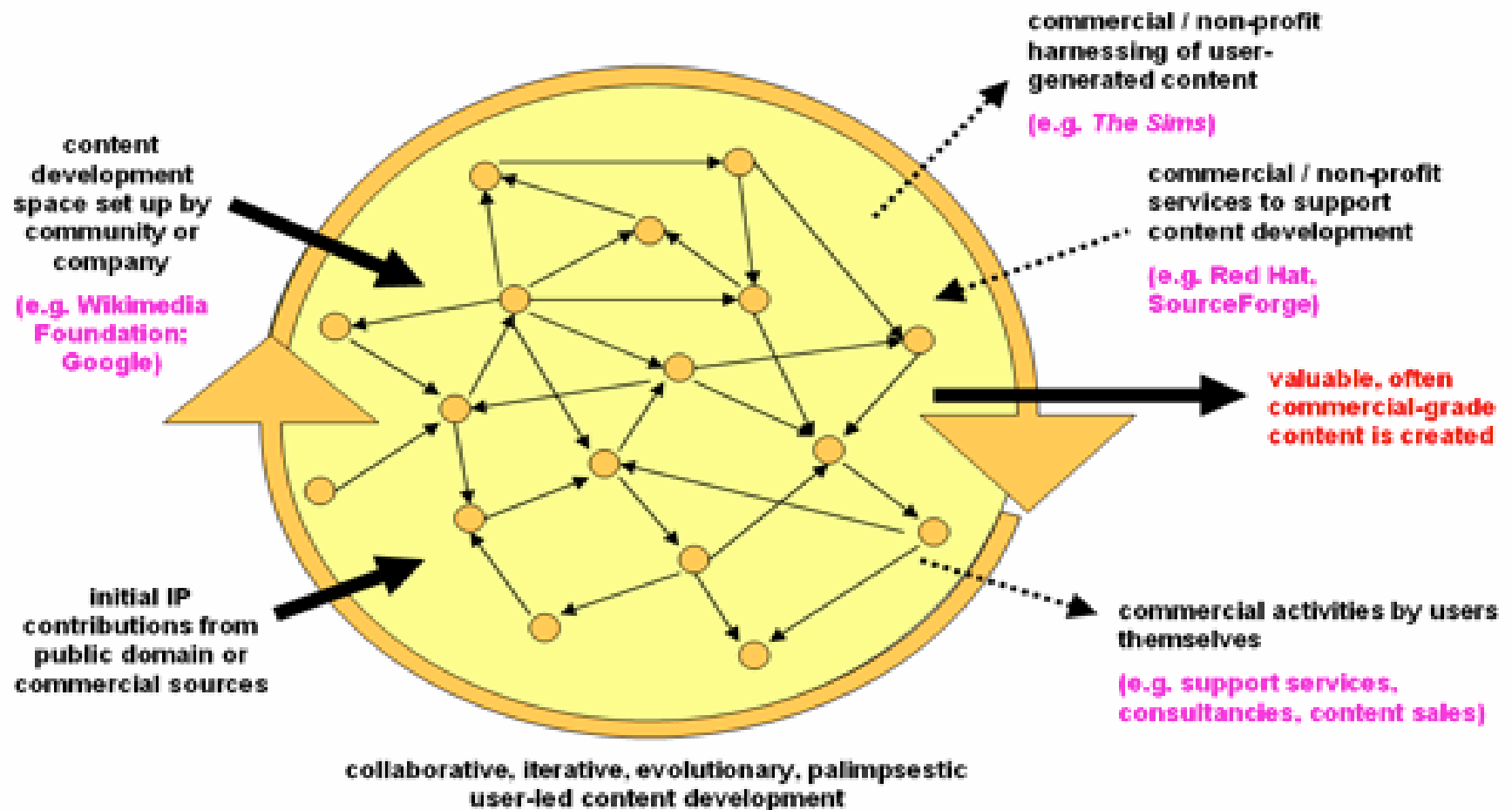

content development space set up by community or company

(e.g. Wikimedia Foundation; Google)

initial IP contributions from public domain or commercial sources

commercial / non-profit harnessing of user-generated content

(e.g. The Sims)

commercial / non-profit services to support content development

(e.g. Red Hat, SourceForge)

valuable, often commercial-grade content is created

commercial activities by users themselves

(e.g. support services, consultancies, content sales)

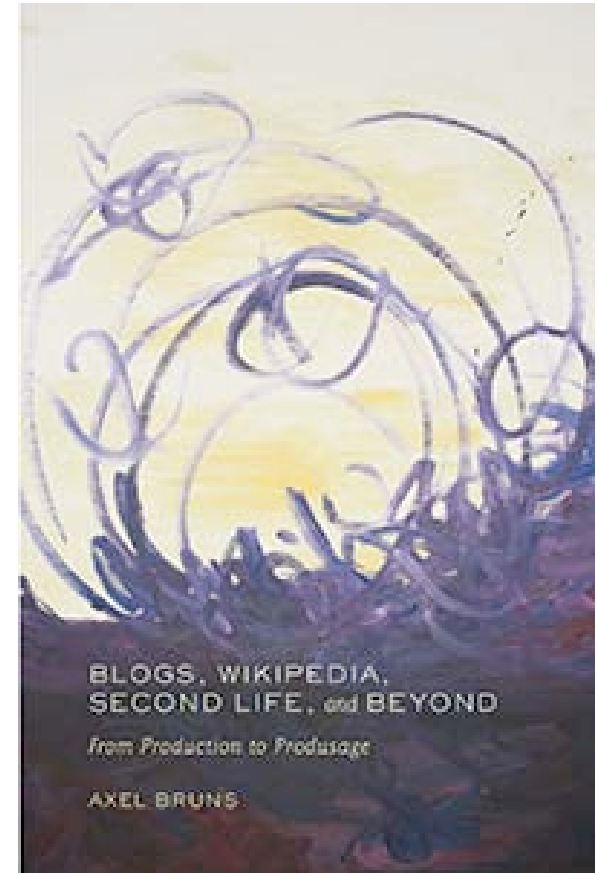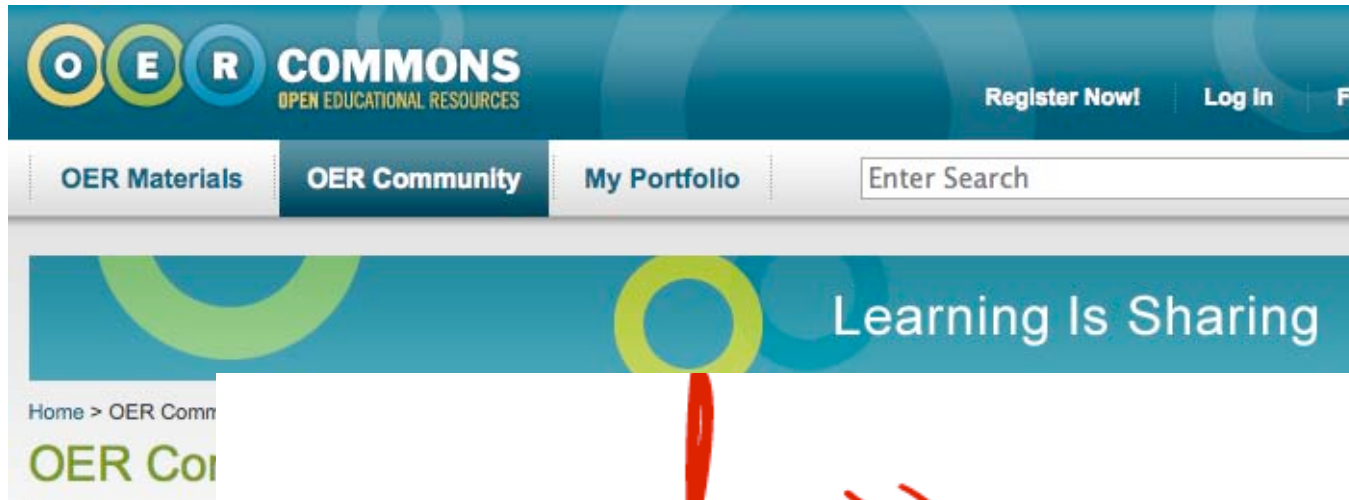collaborative, iterative, evolutionary, palimpsestic user-led content development

Produsage Principles

produsage.org

- **Community-Based** – contributes more than closed team

- **Fluid Heterarchy** –appropriate to personal skills/interests in loose sub-groups focusing on specific problems

- **Unfinished Artifacts** –projects are continually under development; development follows evolutionary, iterative, palimpsestic paths

- **Common Property, Individual Rewards** – contributors permit (non-commercial) community use, adaptation, and further development, and are rewarded by status capital

BLOGS, WIKIPEDIA, SECOND LIFE, and BEYOND

From Production to Produsage

AXEL BRUNS

OER Profit making

http://www.flatworldknowledge.com

Flatworld Knowledge

Athabasca University

Canada's Open University™

About Us

Our Story »
How It Works
Our Team
Join Friends List
Join Our Team
Webinars

Our Story

A New Approach to College Textbooks. Finally.

We preserve the best of the old – books by leading experts, rigorously reviewed and developed to the highest standards. **Then we flip it** *all* **on its head.**

Our books are **free** online. We offer **convenient, low-cost choices** for students – softcovers for under $30, audio books and chapters, self-print options, and more. Our books are **open** for instructors to modify and make their own (for their own course – not for anybody else's). Our books are the hub of a **social learning network** where students learn from the book *and* each other.

Flat World Knowledge. *Because great minds are evenly distributed. Great textbooks are not. Until Now.*

Flat World Knowledge Is …

▶ **Free Textbooks.** Online. Anytime. Anywhere.   expand all | collapse all
▶ **Convenient Choices.** Instructors adopt the book. Students choose the format.
▶ **Open Textbooks.** It's your course. Now make it *your* book. *Your* call.
▶ **Social Learning.** It happens already. We just make it easier.
▶ **A Smarter Way to Do Business.** So what's the catch?

http://www.flatworldknowledge.com/about

Athabasca University

Canada's Open University™

Will Educators and Learners Produse?

- **Social software affords, but "build it and they shall come" rarely works**
- **Is recognition by peers enough reward?**
- **Will students use OERs with accreditation?**

(as producer)

content → produser (as user) → content

Social Software

- **Tools allowing users to get to know each other, produce artifacts, share information and generate knowledge together**

Social Software

Athabasca University

Canada's Open University™

Culturally Appropriate OER's

"e-learning courses are cultural artifacts, embedded with the cultural values, preferences, characteristics, and nuances of the culture that designed them, and inherently creating challenges for learners from other cultures." Edmunsdon, 2009

Culturally Accessible E-Learning:
Cultural Adaptation Process Model

Edmunsdon, A. 2009

Low

Subject Complexity

High

- **Translation** - **Globalized English**

- **Localization** – **relevant examples**

- **Modularization** –**reusable objects, lower levels of granularity**

- **Origination** – **re design by locals for local applications**

Athabasca University

Canada's Open University™

Pres. Obama & open education

- **$500 million for OER in US colleges**

Canada's Open University™

MITOPENCOURSEWARE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

OCW Accredication Agency grants OCW Degree

Participating OCWC Members grant credit

Assessment on Demand from Participating OCWC Members

Open Academic Support

Academic Volunteers International

Learners access OpenCourseWare

Athabasca University

Canada's Open University™

- http://cnx.org/content/m15211/latest/

UNESCO OER Community

- **OER Wiki**
- **OER Discussion group**
- **International**

https://communities.unesco.org/wws/info/iiep-oer-opencontent

Athabasca University

Canada's Open University™

Technology Enhanced
Knowledge Research
Institute (TEKRI)

- **Adaptivity and personalisation**
- **Mobile learning**
- **Social networking**

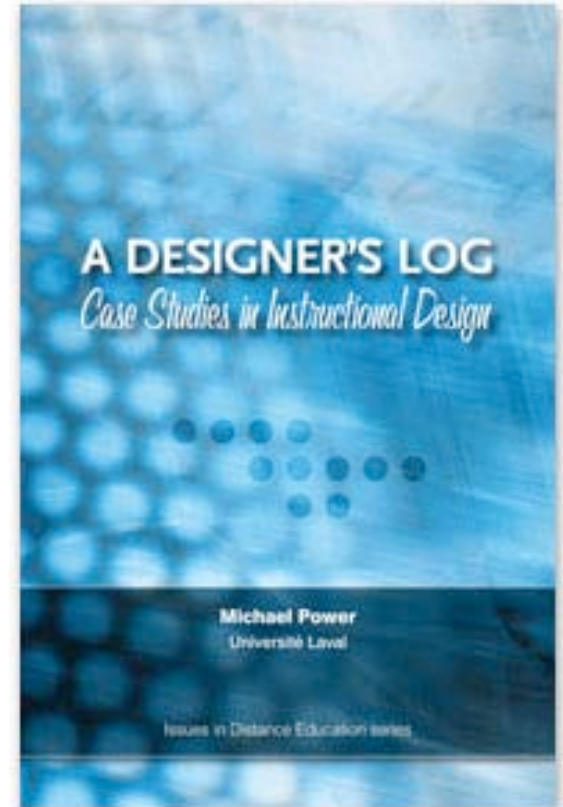http://tekri.athabascau.ca/

griff@athabascau.ca

New online/paper texts from Athabasca University Press

Terry Anderson Ed.

Mobile Learning

The Theory and Practice of Online Learning

Second Edition

Award Winning Book

A DESIGNER'S LOG
Case Studies in Instructional Design

Michael Power
Université Laval

Issues in Distance Education Series

Mohamed Ally Ed.

www.aupress.ca

Michael Power

Athabasca University

Change

"Let's put all this hype about change and transformation in perspective. It's underhyped."

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

Danny Hillis, Wired

Athabasca University

Canada's Open University™

Change

"**Let's put all this hype abou**[...]
transformation in persp[...] **[...]erhyped.**"

[...]mething
[...]g after us, and I
[...]agine it is something
wonderful." "

Danny Hillis, Wired

« le changement s'impose, la survie est une option; faites le bon choix »

François Tavenas, ancien recteur de l'Université Laval

Athabasca University

Canada's Open University™

Change

"Let's put all this hype about transformation in persp... ...rhyped."

...omething ...g after us, and I ...gine 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

Athabasca University

Canada's Open University™

Whither OER?

- **Do you use OER products in your teaching programs?**

- **Have you created an OER product for use by others?**

- **Why don't your colleagues use OER resources?**

- **Will students use OER and avoid using your institution's programs?**

Athabasca University

Canada's Open University™