# Supporting Open Access

Stephen Downes TLt Summit Saskatoon, May 16, 2008

# 1. Open Access

# May, 1995

# AOL, Prodigy, CompuServe join the internet... why?

"Gradually, people are coming to realize that the term 'free' has to do with access, not with price. . ." – GNN's Tim O'Reilly

http://www.december.com/cmc/mag/1995/jul/cutting.html

# But he also said...

"In looking to start up its Internet service, AOL is certainly hedging its bets, half-hoping perhaps that the Net will go away and leave them their proprietary business."

# The tension has never gone away...

# Open vs. Closed

### Broadcast vs. Conversation

# Institution vs. Individual

## Hierarchy vs. Network

## Centralized vs. Decentralized

## Product vs. Remix

## Planned vs. Chaotic

# Static vs. Dynamic

## Push vs. Pull

What is an Open Educational Resource?

- fees
- subscriptions
- tuitions
- registrations
- obligations
- etc.

at a minimum,
no cost to the
consumer or
user of the
resource

**Conditions?** 

OFR

Attribution Share-Alike Non-commercial No-modify Educational



Matter more in conditions of scarcity, not abundance

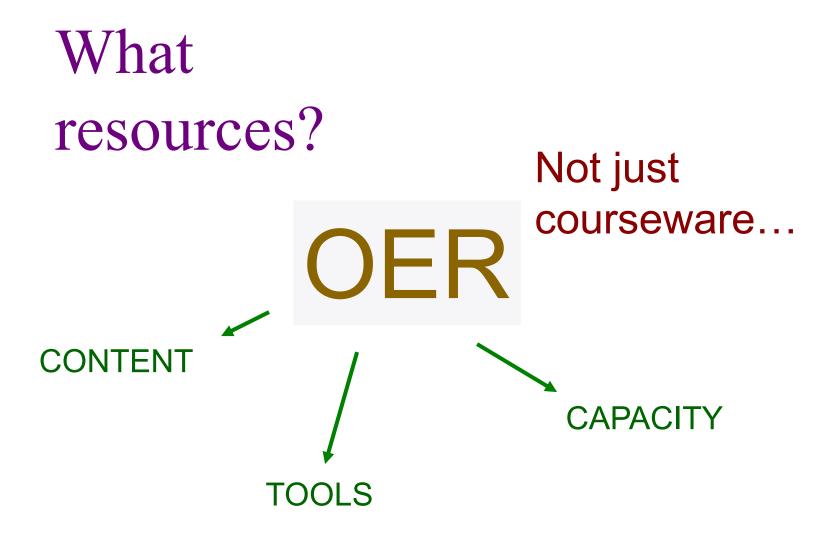
Foote 2005, Doyle 2005

- modify

access

redistribute

Freedom to



# What is Sustainability?

- Sustainable...
- -Costs exist and may be significant
- Sustainability is measured from *provider* perspective... but providers vary
  - are there models for *cheaper* providers?

More than just cost...

we need to consider:

- usability
- durability
- accessibility
- effectiveness

-Alternate objective: free as in freedom

# 2. Grounds and Motivations

# Why Support Closed Access?

- Privacy people are more likely to communicate openly
- Property closed access as a way to protect IPR
- Faculty skills faculty are used to teaching in traditional classroom environments

Mentor, 2007 <u>http://www.westga.edu/~distance/ojdla/spring101/mentor101.htm</u>

What prompted open access?

When the internet came to the desktop, people gained a great new capacity

### New technologies...

Text editors, email clients, HTML, web servers, digital media, blogs...

#### New markets...

A global reach via greater connectivity, peer to peer, disintermediation... Traditional media and services, quite correctly, perceive this as a threat...

## The fax machine...

vs. courier services

# The internet

vs. television

# Skype

#### vs. the telephone

# Blogging

vs. newspapers

In general, new technology is introduced in two stages...First, it duplicates existing products and services...Second, it obliterates them...

## 3. Business Models

### Business Models...

# Proprietary and commercial vs. free and open source

Windows vs. Linux PDF vs. Plain Text Elsevier vs. Open Archives

## **Business Models**

Numerous business models... these vary mostly by funding *source* but models have other implications who authors (whose point of view)? who controls (funds, resources) who distributes?

# Endowment Model

- Single large grant
- Managed by fund-holder
- Funding via interest

Eg. Stanford Encyclopedia of Philosophy

\$US 3 to 4 million fund \$190,000 budget

# Membership Model

Eg. Sakai Eg. MERLOT Eg. OCW Consortium

# **Donations Model**

- Donations solicited from public
- May involve project membership (by individuals)
- Project manged by a board

Eg. Wikipedia foundation Apache foundation "In the Conversion model, you give something away for free and then convert the consumer of the freebie to a paying customer."

# Contributor Pay

- Creators of resources pay for 'publication'
- Resources are managed by the publisher

charges for this process will be met by funding bodies, such as the Wellcome Trust - 1% of their annual spend.

Eg. Public Library of Science But also Think about YouTube, Blogger, Flickr (pro) Sponsorship Model

- The 'public television' model
- Resources are 'sponsored' by donors
- Usually in return for sponsorship spot

Advertising....?

MIT iCampus Outreach Initiative (Microsoft) (CORE, 2005) Stanford on iTunes project (Apple)

# Institutional Model

- Examples: OpenCourseWare Open Knowledge Initiative OPLC All from MIT
- Sponsoring organization pays costs
- Considered part of its 'mandate'

It usually manages it, too... and there may be side-benefits

# Government Funding Model

- Government funds
- Usually managed by arms-length board (but not always)
- Intended to serve government objectives...

OLPC (again) Canada SchoolNet Universities, colleges, schools

# 4. Production Models

Traditional models of production, business models, and distribution channels are threatened

# Production...

# Demand vs. Volunteer

Enclyclopedia Britannica vs. Wikipedia

# Content Models

The type of content produced is heavily influenced by the funder

- universities produce courses
- governments produce institutions
- publishers produce books, journals

What would the recipients produce?

# **Content Models** 'Sustainable' often means 'localizable' and tantemount to 'reusable'

so people can meet their own needs

What you produce might not mean the same thing to the people reading it....

Not merely an issue of culture - also one of semantics

Rethinking the Provider / Consumer relationship

-Content may reflect values of the provider -- cultural imperialism We need to think of OERs from the perspective of the user... and the user's community

Not just a needs assessment

Because you always find what you're looking for

## **Traditional Model**

hiring of professional staff to design and produce OERs

Question of cost, use of volunteers (This raises the question of motives and again changes 'sustainable') Non-financial incentives?

### **Volunteer Organization**

Community model – emphasis on individual members (eg. OSS) -Emergent model – emphasis on process (eg., Slashdot, eBay) -Producer-consumer model vs coproducer moder – Web 2.0 -Traditional – design, use, evaluation Quality: peer review? MERLOT

-Rethink the idea of 'producing' -Decentralize, disaggregate

The 'use' of a resource constitutes the 'production' of a new resource 5. Distribution Models

Even as we bring our local forms of interaction – conversations, friends, sharing –into the global arena... ... the global forms of interaction are being brought into our homes... copyright, points clubs & air miles, profiling, tracking, authentication

# Distribution models...

# Broadcast vs. network

MPAA vs. Gnutella NY Times Editorial vs Instapundit CD-ROM vs. online

"If 'technology' means 'everything is a copy' which, of course, is the design of the network and if the consequence is that everything is copyrighted - then all remix today presumptively requires the permission of someone first." (paraphrase)

# Air Parce Or

### Lawrence Lessig

http://www.downes.ca/cgibin/website/view.cgi?dbs=Article&key=1094072167 ... infiltrating not only our homes and our lives but even our language...

> Aspirin, xerox, coke, just do it, piracy, collateral damage, ethnic cleansing...

Even as we become more free, the calls for a closed network are becoming more insistent and more pervasive...

# Bundles...

Music albums, preformatted radio, Elsevier (again), image libraries, cable packages, Windows, 'enterprise solutions'

# Closed Spaces and Markets...

Friendster, Orkut, site registration, federated search, the LCMS...

# Learning Design...

The analogy of the play vs. the analogy of a game... direction vs action, package vs. materials

# Media Formats...

# PDF vs. HTML/XML, Real or WMF vs MP3

# Digital Rights...

XrML and ODRL (whatever is not expressedly permitted is prohibited)



Dan Rehak: 'Behaviours, services, etc: identification, authorization, authentication, digital rights, etc., all have to be worked out and all have to be defined in the system.' (paraphrase)

http://www.downes.ca/cgi-bin/website/view.cgi?dbs=Article&key=1094171195

### Really? Did RSS work that way? Blogs?

We need not just a mechanism but a *model* of production, use, distribution

### **Existing structures**

- centralized management, funding
- hierarchical, 'outcomes'

are often *barriers* to OERs - we feel this in our communities

# 6. Barriers

Most of the barriers to the sustainability of OERs have nothing to do with money

There are *billions* of free resources out there

# billions

The problem is control

... and ownership

# Who gets funded

- individual vs institution
- first vs third world

Type of product funded...

producer focused ? (eg. Requires Windows, English)

Centralized eg. 'we decide, you follow'

Can 'grassroots' initiatives get funded?

Overhead...?

What is the cost of 'free' content?

- licenses that expire
- technology that needs service
- power costs

Justification, Quality...

-- are recipients required to 'report'?-- must projects demonstrate 'outcomes'?

These are not simply overhead but they speak directly to the issue of control

Whose project is it?

Distribution barriers...

### Lock-out

Subscription access, user registration, passwords, network authentication...

### Lock-in

Proprietary content and software, closed markets, 'solutions'

### High Bar

APIs and interoperability, web services, Java, metadata

### Flooding

#### Starbucks and AOL, spam

### Legal

### The attack on fair use, the attack on free software, SCO, DMCA

... and we, as a community, are complying...

### IMS Metadata

Why 87 fields and detailed taxonomies? Why not Dublin core... or even RSS? Why metadata at all?

### SCORM

Why a content (resource) based independent study mode based on commercial content (and providers, and LMSs) and no interaction?

### Learning Design

... wherein we tell people what they ought to do, rather than provide what they need when they need it... directed play vs. improv

### Digital Repositories

Why would we adopt a federated system characterized by closed gates, instead of a harvest system characterized by open access?

### CORDRA

Object identification and handles... and permissions and authentication built into the backbone of the network?

### 7. Successful Models

In the history of the internet, ask yourself, what has been successful, what worked?

### FTP, email, Usenet, the web, blogs, RSS...

### What did these have in common?

They were... - simple - decentralized - open - free... etc.

- Adobe: "we want to be the toolmaker"
- Google: GEAR, open source tools

OERs today are about giving people the means to create

And then stepping out of the way

Flickr Facebook YouTube Blogger MySpace Yahoo-Groups Revver Writely Wikipedia LiveJournal WordPress Drupal PHP Giving knowledge for free...?

So long as we think of OERs as charity... as something we create and that we *give* to the indigent OERs will never be sustainable

http://www.oecd.org/document/41/0,3343,de\_2649\_201185\_38659497\_1\_1\_1\_1,00.html

### IMS landed on my desk in 1997 or so...

# Where is my 'blogger' of e-learning? Where is my RSS?

Connexions...?

http://connexions.rice.edu

One view... the market will do it for us (Lessig?)...software companies, publishers...

On this view, open resources must be commercialized...

I have no faith...

It is worth noting – none of these major waves were commercial innovations – commercialization only came after – html and web pages, simple, easy to use... mailing lists... blogs.... RSS.... Photo blogs....



http://www.downes.ca/cgi-bin/website/view.cgi?dbs=Article&key=1094172221

#### We have to do it ourselves...

Existing institutional structures – yes, including universities – will tend to throw up barriers rather than open access...



### Why?

### the idea that new media is like a vocuabulary...

but nobody can learn only by listening, nobody can teach only by speaking

We need to be able to speak, to use the syntax of our new langauge...

'There are two ways to do it. Wrap everything up in one bundle, call it a folder, and you just drag and drop the folder. It's prepackaged. The other way to do it is that it's not prepackaged, it's just there.' (paraphrase)



'Programs are to digital media what syntax is to language. With one, it's a package, signed, sealed and delivered. With the other, it's open. The conceptual way in which you deal with it in an instructional sense is open. In the prepackaged way, the decision has been made. In the open mode, I deal with it as it arises.'

### We have to have conversations

- need negotiation, for example

### We have to have diversity

- access across multiple communities, new resources, new ways of thinking

### We have to have symbiosis

- shared resources, elimination of redundancy (otherwise, we will be paying for all those features in Word forever...)

### We have to have feedback, checks and balances

back propagationrecommenders and reviews

### We have to have emergence

'The wisdom of crowds', the idea of democracy, the marketplace

'So the pedagogy of peer to peer process, we get the concept of 'regotiation' - is a term that captures this process of posting a need, responding to a need, posting a resource, etc, the iterative process that meets the need...

The more diverse the community, the more stable it tends to be. Boundary members are especially important - creates links with other groups. ' (paraphrase)



#### Erin Brewer http://www.downes.ca/cgi-bin/website/view.cgi?dbs=Article&key=1094170319

### The mechanism...

- filter

repurpose remix feed forward

### We want layers, not channels

Instead of trying to organize the network, we should be looking at how it can organize itself...

### We are now at the point where we have pretty much replicated the non-digital environment – online courses, class, newspapers, etc.

But the potential of the net is as a communications tool... speaking not only in the old language, but in the new language We have to gain our voice, to speak for ourselves, to reclaim our language, our media, our culture

### Go fast, go cheap, and let it go out of control...

#### Lamb, Levine, Norman – Small Pieces Loosely Joined

http://careo.elearning.ubc.ca/cgi-bin/wiki.pl?SmallPiecesLooselyJoined

#### Marie Jasinski ~Educhaos

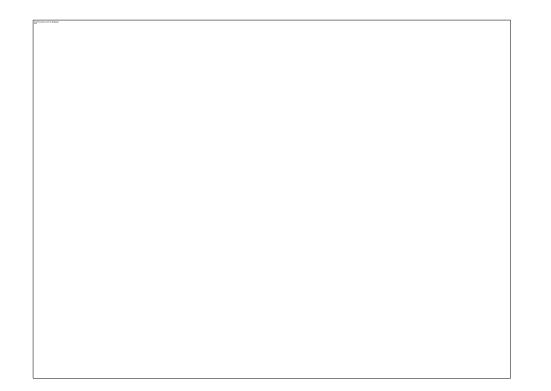
http://elearn.ucalgary.ca/showcase/presentations/pres3.html

## Reusable media – we need a blogger of learning content

Social software – we need a way to support conversations and not just content Learning – we need to leverage the principles of self-organizing networks...

### We need to transform learning...

from something we do for people to something they do for themselves...



### http://www.downes.ca