## Open Educational Resource universitas

## Collaboration and Tranformation



Sagami Temple detail. Photo by <u>663highland</u>. Licensed under Creative Commons 3.0 BY-SA Unported.

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## What is the OERu?



- Global partnership of likeminded postsecondary institutions
   not university per se
- Committed to free courses and programs based on OERs
- Optional support, assessment and credible credentials through partner institutions
- Sponsored by a not-for-profit foundation in New Zealand (OERu Foundation)
- Virtual presence in WikiEducator wiki







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Join our WikiEducator discussion group 2.

#### Welcome to WikiEducator

Just Try It! Our community will support you Using WikiEducator About

**OERu OER** Foundation Content

Projects & Initiatives

Research

Networks

We're turning the digital divide into digital dividends using free content and open networks. We hope you will join us.

#### The purpose of WikiEducator

The WikiEducator is an evolving community intended for the collaborative:

- planning of education projects linked with the development of free content
- development of free content on Wikieducator for e-learning
- work on building open education resources (OERs) on how to create OERs
- networking on funding proposals developed as free content

#### Featured OER Foundation institution

STATE UNIVERSITY OF NEW YORK **EMPIRE STATE COLLEGE** 

Empire State College is one of the colleges of the State University of New York . Empire State College is a pioneer of distance education and world leader in the evolution of

open and online learning. "Open institutions around the world serve millions of learners" said Dr Alan Davis, President of Empire State College "and the importance of open education resources is rapidly growing". Empire State College is a founding gold member of the OER Foundation and is collaborating with institutions around the world in building the OER university network. Read more ...

See also Empire State College

#### Join us today ~ You'll be glad you did!

Please join us in developing free and open educational content for the world!

#### OER university launched worldwide (Meeting agenda)



#### Innovative education system to revolutionise tertiary learning

You can study world-class courses for free and count them towards real qualifications. This is the future of tertiary learning with the launch of the Open Educational Resource university @ (OERu), unveiled by Sir John Daniel on November 1, 2013.

#### In the news



Aspiring to be higher education's leading player in disruptive innovation, SNHU joins forces with OERu to re-envisage models using open education approaches. Read more ...

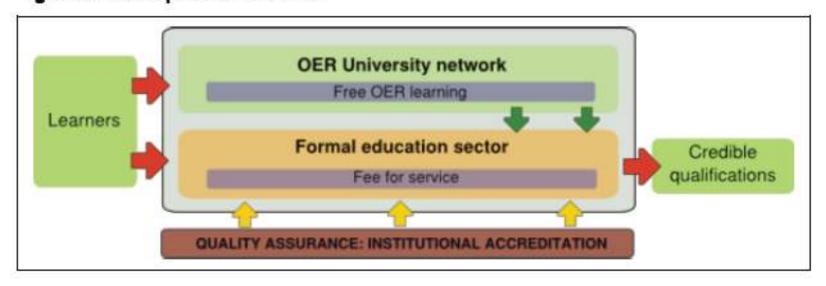
SUNY Empire State College leads the way as the first founding anchor partner of the OER university in the

United States. "By joining OERu, Empire State College will join the global community of learners who contribute to and benefit from open educational resources." said Alan Davis, President of SUNY Empire State College. Read more

## How does it work?

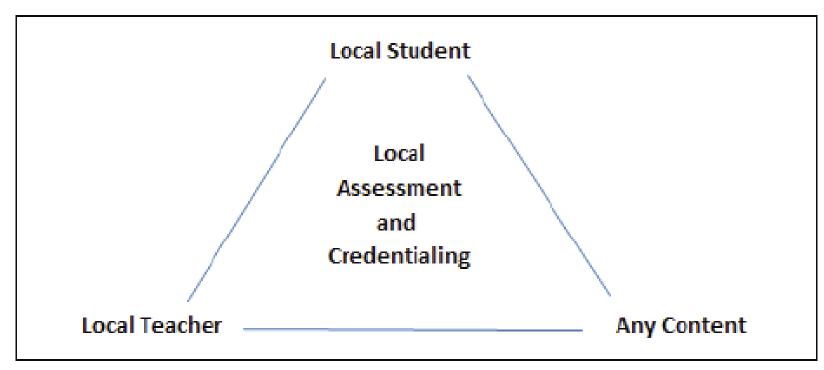
"Parallel learning universe" (Taylor, 2007)

Figure 1.3: OERu parallel structures



OERu logic high level. Wayne Mackintosh. Licensed under Creative Commons 3.0 BY-SA Unported.

# The "unbundling" concept



Model showing OER or OCW reuse ("any content"). Friesen & Murray (2011). Licensed under Creative Commons 3.0 BY-SA Unported.

## OERu collaborations

Figure 1.4: OERu collaborations

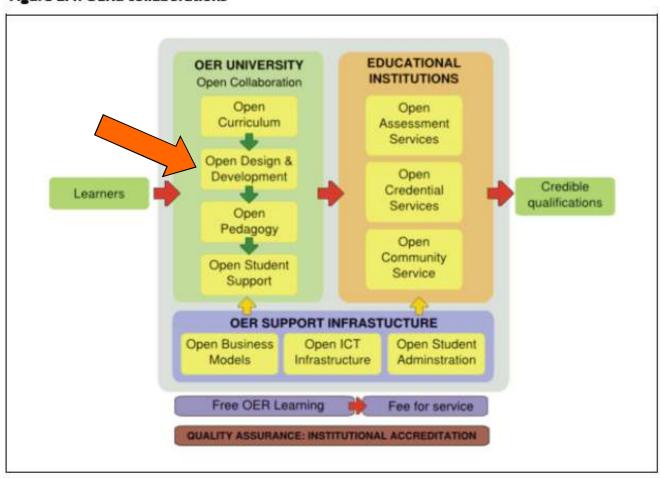


Diagram showing high-level logic model for OERu. By Wayne Macintosh. Licensed under Creative Commons 3.0 BY-SA Unported.

# Being open: What does it mean?

- Removing barriers from access to learning
- Being able to share & use educational content freely
- Moving toward open and collaborative processes
- Similar concepts to Free and Open SourceSoftware



# Open design and development



Pastels. Clementina. Licensed under Creative Commons BY-SA 3.0 Unported.

- Open educational resources (OER)
  - Using OER
  - Making OER
- Working in open collaborativeenvironments

# Open Educational Resources

"Teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use or re-purposing by others.

Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge"



Street Musicians. Eugène Atget. PD-US-1923.

Hewlitt - Atkins, Brown and Hammond (2007)

# Reusability

- □ The 4 R's of reusability
  - Reuse
  - Redistribute
  - Revise
  - Remix
- □ And #5...
  - **□** Retain



Stucco Gandhara figure. Photo by Michael Wai. Licensed under Creative Commons 3.0 BY-SA Unported.

# Beyond the 4/5 Rs

- From the "what" to the "how" of openness"
- Open Educational Practices (OEP)

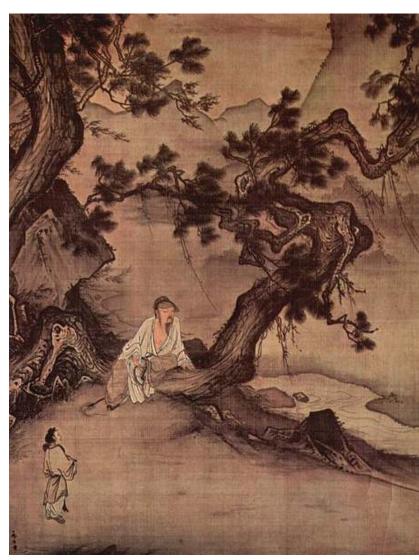
"a set of activities and support around the creation, use and repurposing of Open Educational Resources"

(Conole 2010)

# Sharing of learning design knowledge

- □ Learning design examples
  - What is (are) learning design(s)?
    - Structuring learning sequences (Britain, 2004)
    - Capturing learning design practice (Conole et al., 2007)
    - Representations of how to support learning (Goodyear, 2005)
    - Learning design patterns (Rohse & Anderson, 2006)
  - Sharing "pedagogical know-how"
    - From only content [] design knowledge
    - Tools and collaboration

# Sharing learning design knowledge



Quietly listening to the wind in the pines, 1246. Ma Lin. Public Domain.

"Traditionally design has been an implicit process, how do we shift to a process of design that is more explicit and hence shareable?"

(Conole, 2008)

# Working in collaboration

WikiEducator example

# Collaborative design in other fields

- Architecture, expert systems, telecommunications, engineering
  - Multiple points of negotiation and evaluation (Kvan, 2000)
  - Explicit sharing of design information using communication tools (Chiu, 2002)
  - Design teams need to explore and integrate differences (Sonnenwald, 1996)
  - Intentional communication processes are essential (Hixon, 2008)

# Traditional instructional design

- □ The generic design process, for instance, the ADDIE Model incorporating the five processes of Analysis, Design, Development, Implementation, and Evaluation as a dynamic system.
- □ Iterative and "messy" process (Conole 2010)

# OSS design and development

- Based on collaboration and communities of volunteers
  - Commitment to philosophy of sharing
  - Personal and professional benefits
  - Induction processes for newbies
  - Communication and versioning systems
  - Decentralized but with some leadership
  - Visible design rules



Masque aux lépreux Bwa. Village de Boni. By Ji-Ell. Licensed under Creative Commons 3.0 BY-SA Unported.

## Traditional/Open design and development comparison

Aspect	Open Design and Development	Traditional Instructional Design
Contributors	Volunteers, motivated by open philosophy and personal /organizational benefit	Paid faculty or staff
Makeup of design team	Distributed	Centralized
Induction into the development team	No specific method	Employment orientation and training
	Member community open to public including students downstream  Private — but some possible input by students	
Roles of design team members	Loosely defined, overlapping, broad skills	Specialized, clearly defined
Organizational structure	Flat, collaborative, representational, some meritocratic	Hierarchical or faculty based
Communication	lmailing lists wilki nages	Mostly business communication tools (email, meetings)
Intended uses	As originally intended or repurposed for multiple uses and settings	Defined purpose determined in learner, job, institutional or market analysis

## Traditional/Open design and development comparison

Aspect	Open Design and Development	Traditional Instructional Design
Content copyright	Open licensing (CC) with some rights reserved	Mostly rights reserved
Content versions	Multiple possible via forks	Official version
Design processes	IIntormal design processes	More formal design processes and documentation
Authoring environment	Open source social software	Proprietary
Delivery environment	Wiki, LMS, other options	Dedicated proprietary application
Pedagogy	individual development teams	Generally in line with overarching institutional model
Maintenance	Ongoing, community based	Episodic, managed

## Aspects of "traditional" instructional design

Aspect	Traditional Instructional Design
• Participants	Paid, institutionally based – usually individual designer
Makeup of design team	From within one organization
Roles of design team members	More clearly circumscribed
Content copyright	Mostly rights reserved
Content versions	Single official version
Intended learners	• Predefined
Design processes	Formal design processes
Authoring environment	Generally proprietary; e.g. Word, Photoshop
Delivery environment	<ul> <li>Usually a single dedicated platform – e.g.</li> <li>BlackBoard, Moodle</li> </ul>

# The open design process

## Sample processes

- Planning for OERu prototypes
- Learning design consultation
- Open planning
- Design artifacts



# ART100 prototype

- TRU's first contribution: ART100 Art Appreciation and Techniques
- □ Redesigned from existing OER
  - Course from Saylor.com via WA State Board of Community Colleges Open Course Library
  - Modified/revised/remixed content, activities, assessments, etc.
- Working to have it approved as a TRU OL course
- □ Next course is our own PSYCH course
  - Based on open textbook



## Art Appreciation and Techniques

- Overview
- Content

# Sample features of OERu ART100 design

- □ Ways to engage
- □ Units and assignments
- □ Art resources
- Sample unit Art Definitions, Artistic Roles, and Visual thinking

## Welcome and outcomes

< Art Appreciation and Techniques

# Art Appreciation and Techniques (#OERuART100) Course guide Welcome\_and\_outcomes | Ways to engage | Links to art resources | Assignments | Links to units and assignments | Development team HOME Copyright

#### Welcome

This course is intended for a very broad audience. You may never have studied art formally, and you may not be an artist yourself. On the other hand, you may already be involved in art production. Whatever your background, if you wish to learn about art appreciation and some of the basic techniques of art production, this course is for you.



There are only a few images that are not forced to provide meaning, or have to go through the filter of a specific idea.

—Jean Baudrillard<sup>[1]</sup>



# The design process

- Lessons learned
- Conclusion











Online Courses (mOOC) where micro refers to a subcomponent of a course, for example 30% of the learning outcomes and corresponding course credits. This establishes a pathway to implement OERu microcredentials where successful learners can earn partial credit towards a course, for example 1 credit for a 3 credit course in the North American system or 5 credits towards a 15 credit course in New Zealand. The design and development of the Ellite Sport Performance mOOC at the University of Southern Queensland combined with the experience of offering the SP4Ed mOOCs and reconfiguring the OCL4Ed workshop into mOOC format has highlighted the need for refining the OERu course structure and nomenclature of subcomponents of a course.

- 4. These developments have informed a proposed improvement to the OERu course structure and changes to the nomenclature used for the subcomponents of an OERu course. These refinements are necessary to accommodate the introduction of micro Open Online Courses. We propose that an OERu course is divided into three components:
  - Course landing page: The course landing page provides a brief overview of the course. This is the page where learners can register for the course. Registration is optional and used to email course announcements and instructions. OERu courses may award badges or optional certificates of participation. Certification for participation can be measured by contributions to the course using microblog, blog and forum posts. Consequently, registration of the social media sites learners are using should be incorporated into the registration form.
- Course Course information Landing page Registration Updating urls Course Course aim

  Teaching a Proposed refinements to OERu course str Guide Assessments Suggested resources Course Session A Learning Dashboard Activities sequence Learning Activities sequence Session B ctivities Proposed refinements to OERu course structure
- · Course guide: Provides overall information about the course. Learners should start with the course guide. The course guide provides information on the course aims, teaching approach, recommended resources, assessments and required assignment(s) for learners taking an OERu course for credit.
- Course dashboard: The course dashboard contains all the links needed for studying an OERu course. We propose that the course dashboard is divide: into sessions for cohort based courses. The learning sessions direct learners through one or more learning sequences. Learning activities including more comprehensive E-Activities should be embedded within the learning sequences.
- 5. We propose that the subcomponents of the Course landing page are divided into "Sessions" and "Learning sequences" to facilitate multiple reuse scenarios whereby mOOCs could be incorporated into different university courses.
- 6. The OER Foundation has developed a mockup of the proposed structure of using an iframe to remove redundant wiki navigation used by course developers and not needed for learning purposes.

T V C S

Course developers should not include institutional logos of the original contributors on OERu course pages or navigation templates.

## Guidelines for course components

#### Course guide

- Each OERu course should develop a generic introductory resource called a Course guide
- The Course guide should include a course overview, outcomes, list of resources and assignments.
- To facilitate reuse across the OERu network, the Course guide should not include institution specific information, for example, university contact These will be provided by the respective institutions who decide to reuse OERu courses locally.
- OERu partners are free to develop their own custom assessments. In cases where partners choose not to use the original assessments, they t
  responsibility for developing the customised assessments. (As a wiki, customised assessment pages can be incorporated into unique course of
  individual institutions.)

#### Community-based question and answer forum

- The OERu 2012 prototype courses will trial AskBot as a question and answer database for content specific and general student support.
- Further detail to be developed the wiki way.

## Guidelines for layout of wiki course pages

#### **Images**

- Images should be placed in a frame or thumbnail
- · Captions should be used within the frame or thumbnail
- Metadata relating to attribution, license, source etc. should be included on the image page (not on the content page).
- Layout considerations taking into account different screen sizes for viewing content and print-versions of the pages
  - Avoid placing images directly after each other -separate with text
  - When using photos or images and aligning these left or right, we recommend an image size of 350 400 pixels, unless the context justifies
    larger image. Larger images should be centered on the page.)
- Before uploading a new image to WikiEducator, consider searching and using an image from commons.wikimedia.org \$\mathbb{G}\$, as these images are for as to attribution, license, source, etc. and easy to add to any page on WikiEducator (see using an image from Wikimedia Commons). And of concouraged to upload openly copyrighted images to commons.wikimedia as a way to "share the wealth" (upload instructions \$\mathbb{G}\$).

# Research design

- Comparative case study
  - Scope: one course developed over a fixed period of time in OERu
  - □ Similar case study in OSS used for comparison: Freenet (von Krogh et al., 2003)
  - Highlight "relationships, contrasts and similarities
  - Extend learning from one case to the other (Khan & VanWynsberghe, 2008)

# Data analysis

- □ Collection of content in ATLAS.ti QDA
- □ Initial coding of content (Soldaña, 2009)
- Secondary grouping, multiple iterations generating themes
- Qualitative, narrative portrait (Auerbach and Silverstein, 2003)
- Frequent cross-checks back and forth
- Trustworthiness: Triangulation, overlapping, member checks, audit trail (Guba,1981; Guba & Lincoln, 1982; Yin, 2009)

# Methodology



# Findings

- Two over-arching themes
  - Designing for openness
  - A community of volunteers



Street Musicians. Eugène Atget. PD-US-1923.

## Lessons learned

- □ Ways to engage multiple methods, multiple audiences
- □ Towards a developer community



## Lessons learned

- Designing with OERs
  - File formats
  - LMS
  - Multiple versions
  - Schedules and timetables
  - Embedded cohort model
  - Copyright issues
  - Cultural biases



- Developing as OERs
  - Maintain editable source files
  - Open environment
  - Transparent versions/forks
  - Maintain flexibility
  - Design for choices
  - □ Go CC!
  - Consider cultural diversity

## New interfaces

- □ OCLEd example
- Extracted from wiki outline
- □ Wordpress concept
- □ For the geeks...



- Importance of developer community
  - Developer motivations (want to make a contribution)
  - A community of volunteers (attrition) needs to grow
  - Division of labor developer specializations (multiple roles)
  - Mentoring
  - Shared and standardized communication habits (essential for shared understanding of project)
  - Mediating artifacts

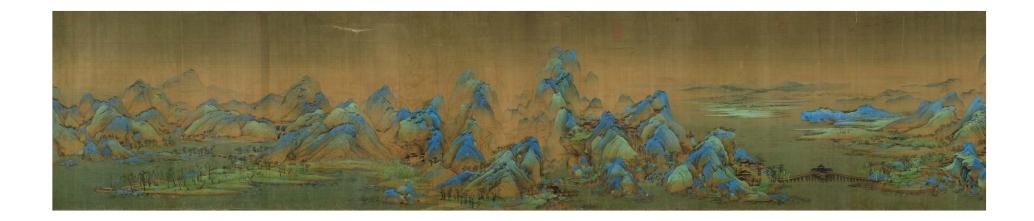
"When code [open curriculum] and community do not develop in parallel, the learning curve can be steep" (O'Mahoney, 2007)

 Institutional constraints – assessment and credit, curricular oversight

	http://wikieducator.org/Art_Appreciation_and_Techniques/Module_3a			
	Upon successful completion of this course, students will be able to:			
		PICK 3 Assignments (Summative)		
	Interpret examples of visual art using a five-step critical process that includes description, analysis,	Also use Module 4 Assignment 3	3	
1	context, meaning, and judgment.	(Saylor)		
2	Identify and describe the elements and principles of art.	Assignment "Worksheet 3"  Module 3 (Saylor) - tweak it -		
3	Use analytical skills to connect formal attributes of art with their meaning and expression.	Assignment 5 0 Module 7 (Saylor)		
4	Explain the role and effect of the visual arts in societies, history, and other world cultures.	Assignment 1 (Saylor) Module 1 -		
5	Articulate the political, social, cultural, and aesthetic themes and issues that artists examine in their work	Assignment 4, Module 5 (Saylor	)	
6	Identify the processes and materials involved in art and architectural production.	Formative quiz in relevant modules		
7	Utilize information to locate, evaluate, and communicate information about visual art in its various forms.	Worksheet 6 - Module 6 (Saylor and Discussion Question 12 from Module 8 (Saylor) and Worksheet 10, Module 10 (Saylor)	)	
End of course	Final comprehensive assignment	Build portfolio through course - integrate as final portfolio piece - Curatorial statements - Assignment 6, Module 10 (Saylor)		
		Activities		
	Module Goals	Individual	Group	
	Define 'art' within a cultural perspective.	Quizzes for each Module Reflective questions	(Optional) Discussion questions	

- Wiki environment
  - Wiki challenges

- □ Wiki environment
  - Training in Wiki use is essential



- Communication habits, use of appropriate channels and protocols is essential
  - Decision histories for later joiners
  - Shared understandings and approaches

#### Active

- OERu Communications
- OERu Master plan (To be updated)
- OERu project evaluation (Ongoing)
  - · POERUP OERu case study
- Open planning for OERu 2013.11 meeting of anchor partners

## Completed

- TOUCANS Research questionnaire consultation
- · Brainstorm page for project planning
- OERu context evaluation.
- · Open Praxis OERu paper

### Quicklinks to resources

Wiki text for OERu developers

OERu style guide

OERu reuse pages

## Open curriculum

edit

#### Active

None

### Completed

- Activities for Selecting 2012 prototype: Brainstorm on criteria for course contributions | Process for selecting initial courses for 2012 prototype | Ranking criteria for selection of 2012 prototype | List of nominations for 2012 prototype | Rough consensus poll for 2012 prototype | Proposed decision for 2012 Prototype
- Activities for 2nd instalment of prototypes: Process for selecting 2nd installment of prototype courses | List of nominations for 2nd installment of prototype courses
- Activity for nominating courses for the launch website: Course nominations for listing on OERu launch website
   Screenshot, WikiEducator, Licensed by Creative Commons 3.0 BY-SA Unported.

## Open credential services

edit

#### Active

- OERu assessment, credit-transfer, credentialing and course reuse scenarios
- · OERu open badge scoping activity

#### Dormant"

Brainstorm of summative assessment issues

## Open community service

edit

### Active

## Open business models

edit

zot

5 WEnotes

## Mailing lists

List	Purpose	Archives	Post
OERu 🗗	Discussion and planning list for OERu partners.	archives 🗗	email 🙆
OER-university	Open discussion by anyone interested in the OERu initiative.	archives 🤒	email 🙉 web 🤒
WikiEducator-tech 🧁	Announcements and discussion about WikiEducator and other OER Foundation technology.	archives 🤒	email 🗟 web 🧯
WikiEducator 🧐	Main WikiEducator community list.	archives 🤒	email 🙉 web 🥛

N.B. Posting to the mailing lists requires being a member (subscriber) of the list.

#### Forums

Forum	Purpose
OERu Planning Group 🧁	Planning the implementation of the OERu
OER university	Public discussion forum (and target of links from the official website 🗗

## **Future Plans**

Want to organize a workgroup? Find a critical mass of people on the mailing lists or forums. Once established, you can create your own mailing list or forum to advance your efforts.

## Twitter

Handle	Description
@OERuniversity 🗗	Official Twitter account of the OER university initiative
@Mackiwg 🗗	Wayne Mackintosh, Director of the OER Foundation (frequently tweets about #OERu 🥯 and #WikiEducator 🦫)

## **WEnotes**

Tag	Description			
#oeru 🗗	Aggregate feed of #OERu from Twitter, g+, WikiEducator, blogs			

Category: OER University

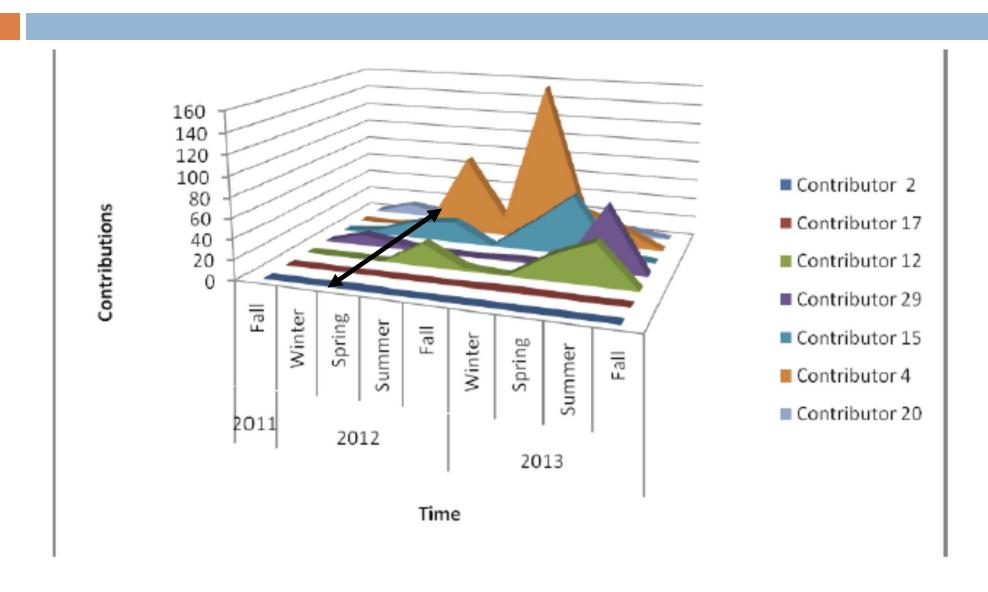
Table 4.1: Development project comparisons

Aspect	Open Design and Development	Traditional Instructional Design	Open Source Software	Freenet Case Study (as in2002)
Contributors	Volunteers, motivated by open philosophy and personal /organizational benefit	Paid faculty or staff	Volunteers, motivated by open philosophy and personal benefit	Volunteers, motivated by open philosophy and personal benefit
Makeup of design team	Distributed	Centralized	Distributed	Distributed
Induction into the development team	No specific method	Employment orientation and training	Based on skill and level of involvement	Graduated based skill and level of involvement
Access to contribute	Member community open to public including students downstream	Private — but some possible input by students	Member com- munity open to public — access to committing code versions varies	Member commun- ity open to public — controlled access to committing code versions
Roles of design team members	Loosely defined, overlapping, broad skills	Specialized, clearly defined	Varied, overlapping, specialized skills	Specialized skills
Organizational structure	Flat, collaborative, representational, some meritocratic	Hierarchical or faculty based	Meritocratic	Meritocratic
Communication	F-F and virtual meetings, mailing lists, wiki pages, microblogs	Mostly business communication tools (email, meetings)	Mailing lists, forums, USENET, IRC, conferences, local user groups	Mainly email lists, also concurrent versions system (CVS)

Table 4.1: Development project comparisons

Aspect	Open Design and Development	Traditional Instructional Design	Open Source Software	Freenet Case Study (as in2002)
Intended uses	As originally intended or repurposed for multiple uses and settings	Defined purpose determined in learner, job, institutional or market analysis	As is or modified for other needs, for open public and personal or employer use	For specific intended purpose by project administrators and community
Content copyright	Open licensing (cc) with some rights reserved	Mostly rights reserved	Free cultural works licensing, mostly GPL	Free cultural works licensing, mostly GPL
Content versions	Multiple possible via forks	Official version	Multiple possible via forks	Multiple possible via forks
Design processes	Informal design processes	More formal design processes and docu- mentation	Informal design processes	Informal design processes
Authoring environment	Open source social software	Proprietary	Open source CVS management tools	Open source CVS management tools
Delivery environment	Wiki, LMS, other options	Dedicated proprie- tary application	Varies	Peer-to-peer networks
Pedagogy	Varied, depending on individual devel- opment teams and their preferences	Generally in line with overarching institutional model	N/A	N/A
Structure	Modular	Generally more linear	Modular	Modular
Maintenance	Ongoing, community based	Episodic, managed	Ongoing, community based	Ongoing, community based

# Developer contributions



# Potential and promises

- Collaboration towards open learning opportunities beyond traditional constraints
- Develop global community of OEP @ instructional design and development expertise using OER
- Messaging about access and student costs
- □ See OER from viewpoints of creation and reuse
- A new way of thinking and working together
- Process stays grounded at grassroots level
- Use OER projects as catalyst for institutional innovation

## Limitations

- Differences betweenFreenet comparator andOERu cases
- Bracketing of other developments both within and outside OERu
- □ Limited timespan of study
- Small developer sample



Sagami Temple detail. Photo by <u>663highland</u>. Licensed under Creative Commons 3.0 BY-SA Unported.

# Areas needing more exploration

- Partner institutions' perceptions/acceptance of differently structured courses for credit
- Recruitment and retention of volunteer developers outside institutional volunteers
- Developer roles and responsibilities
- □ Further integration/use of Web 2.0 tools
- Alternative collaborations e.g. sprints, hackathons
- Design research specific to course design

# Ways to engage

Next steps

- □ Participate in management committee
- □ Create an account in WikiEducator
- □ Join a mail list
- □ Enrol in OCL4Ed
- Develop a course

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# Sharing learning design knowledge

- Rationalistic tradition of instructional design models (Richey et al., 2011)
- Situated, iterative nature of practice / instructional design (e.g. Rowland, 1992;
   Suchman, 2007)
- Reusability: conduit and encapsulation metaphors (Griffiths and Garcia, 2003)
- "In order to achieve a convergence of meaning, knowledge has to be acquired by doing and experiencing: becoming a reflective practitioner" (Brown, Collins & Duguid, 1991)

