Open Educational Resources: Institutional Challenges

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One Framing Statement

It's about learning, and blessing the lives of many people through open education

Many Kinds Of Challenges

External and internal,
conceptual and concrete

Challenges from Outside the Institution

"Peer" pressures forcing education to
wrestle with openness, ready or not

Challenges from Within the Institution

Obstacles to adopting and embracing a spirit of openness

Conceptual Challenges

Assumptions we make unknowingly
that make our lives difficult

Concrete Challenges

Details and management that requiring quality planning and execution

We Largely Misunderstand Education

We believe it's about content

If All We Needed Were Free Content…

Libraries would never have evolved
into universities.

Education ÷ Content

Content is a necessary, but not sufficient, condition for education

Content Is The Campfire

People congregate around content.
But then what?

After Content, People Need…

- **Help** understanding what it means
- **Help** engaging in meaningful practice
- Feedback about their practice (more help)
- More practice
- More feedback
- A sense that someone cares how they do

Education = Content + Help + Care

And content is quickly becoming ubiquitous,
so our value-add is in help and care

This Misunderstanding Is Pervasive

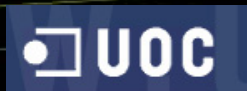It colors each of the rest of the
challenges in some way

"The World is Changed"

Galadriel, *Lord of the Rings*

It's Actually Worse (or Better)

The World is *Changing*

Analog ⇒ Digital

Music, Phones, TV, Newspapers,
Movies, Journals, Communications,
Intelligence, Defense

Tethered ⇒ Mobile

Phones, Internet Access,
Employment

Generic $\Rightarrow$ Personal

Cars, Computers, Mobile Phones

Consuming $\Rightarrow$ Creating

Radio / Podcasting, Newspapers / Blogs

Movies / Vodcasting

Closed $\Rightarrow$ Open

Software (OSs, Applications),
Data (Weather, GIS),
Content (Blogs, Wikis)

Education vs Everyday

Analog $\Rightarrow$ Digital

Tethered $\Rightarrow$ Mobile

Isolated $\Rightarrow$ Connected

Generic $\Rightarrow$ Personal

Consuming $\Rightarrow$ Creating

Closed $\Rightarrow$ Open

It's a Derivative Problem

The world's rate of change increases
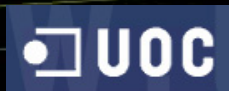while education's remains slow

The Disconnect Brings Challenges

And the wider the disconnect,
the bigger the challenge for our institutions

But Wait! We're *Education!*

Our historic monopoly is (gratefully)
being challenged on almost every front

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Content is Changing

Wikipedia, OpenCourseWares, etc.

Research is Changing

Public Library of Science, Arxiv.org, Google Scholar, etc.

Expertise is Changing

Listservs, Web Boards, Chat Rooms,
Email, Instant Messaging, etc.

Credentialing is Changing

Certifications can be worth more
than a university degree

The Monopoly Is Being Broken Apart

Content, research, expertise, and credentialing are becoming accessible to everyone

Without Historic Monopolies, Where Next?

We must innovate to stay relevant

What About E-learning?

Quite innovative in 1995!

Characteristics of Online Classes

Analog   or   **Digital**

Tethered   or   **Mobile**

Isolated   or   Connected

Generic   or   Personal

Consuming   or   Participating

Closed   or   Open

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Only the Channel Has Changed

Nothing about our pedagogy or our philosophy has - online classes are not "open"

Institutions Don't Understand "Online"

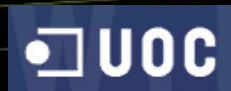Neither faculty nor administration are
natives in this land
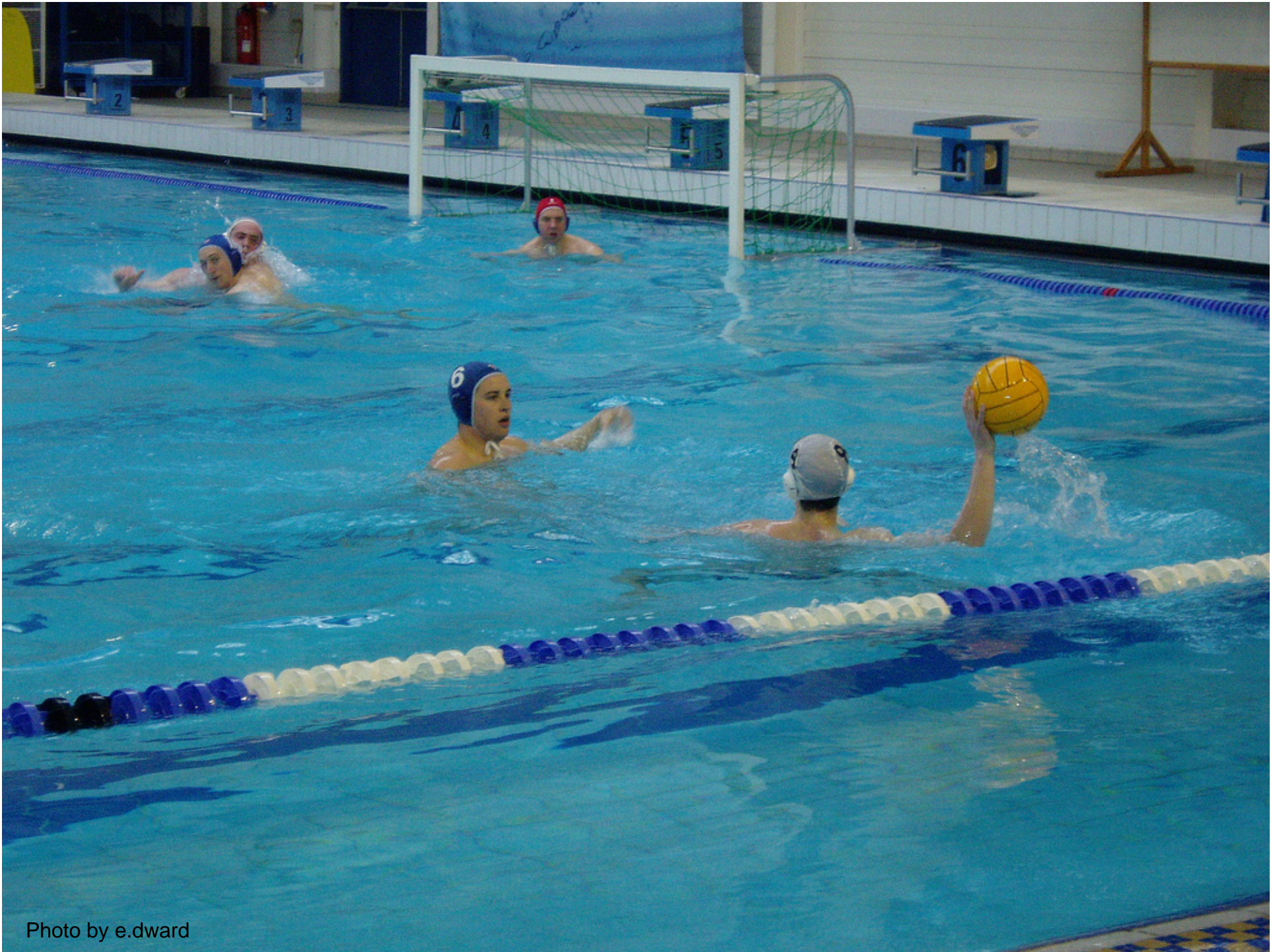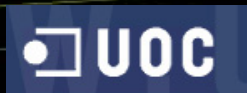
Photo by Christopher Henning

Photo by e.dward

We're Swimming on Horseback

And rather proud of ourselves,
I must say

Online is a Different Place

The goals of teaching are the same,
but the culture and rules in that space
are only *sort of* the same

Culture **Really** Matters

Another metaphor for going

online to teach

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We're Celebrating the Mass in Latin

And our students are expecting charismatic worship with guitars, drums, and "Amen!"s

It's About Respect

Valuing culture and designing for it just as we would if teaching in Paris, Beijing, Bangalore, or inner-city Los Angeles

Openness Is The Core Value

Openness underpins everything that is
happening online right now, and
will for the foreseeable future

Connecting, Creating, and Personalizing

"Web 2.0" - Flickr, Del.icio.us, YouTube, Digg, Google Maps, MySpace, Wikipedia, &c.

Connecting

You can't connect to something if you don't have access to it

Creating

You won't be creative if there's no outlet for your work

We Don't Appreciate The Extent

These values are integral to the
success of what's happening online

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We Don't Have To Leave Our Offices

To do this fieldwork - we need to learn more

Some Think Faculty Are Transmitters

That their value to our institutions comes from delivering content to students

We Need To Help Them Understand

A quality university library doesn't hurt classes,
it supports improves them

Fear That Faculty Will Be Overwhelmed

Sharing OERs can be an invitation to learners to request help by email and IM

There Are Others Who Can Help

It turns out that student study groups or peer support groups can do a pretty good job

Thinking OERs Are A "Silver Bullet"

For our students, for life-long learners in our countries, for those in the developing world

Content Is Infrastructure

It's the platform we build our innovations on,
but it's not the innovation itself

Project Management Issues

It can be a lot of work developing and managing
a large collection of OERs

Production Issues

We must creatively leverage existing processes and capacities to create and digitize OERs - "OER as byproduct"

Copyright Issues

We must put processes in place to limit legal
risks related to sharing OERs

Technical Issues

Software must be selected to support the development, management, and sharing of OERs

Temptation

"The last temptation is the greatest treason;
to do the right deed for the wrong reason."
Thomas Becket

Why Will We Engage?

To keep our jobs? As a grab for fame?
"Because all the cool schools are doing it?"

To Better Support Learning

In our classrooms and outside of them?
The results will be very different
depending on our motives

It's Not All Challenges!

There are great opportunities

People will make links between similar presentations written at different levels. Students will be able to read at a comfortable level, peeking at parallel discussions that reach a bit deeper. Hard material will grow easier to handle, because links to primers and basic definitions will let readers pause for review - instantly, privately, and without embarrassment. Other links will lead in all directions to related material… When we can gratify momentary interests almost instantly, learning will become more fun. More people might then find it addictive.

- Eric Drexler (**1986*!***)

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The Reusability Paradox

A CONFERENCE ROOM FULL OF PEOPLE

R: Good to see everyone again! S called ahead to say he was running a little late.

O: Good to be here again!

D: I don't think I've ever been part of a group where everyone showed up on time.

V: Well, this *is* only our second meeting. (General laughter)

R: I'm just glad you all came back. I was wondering if you got anything out of that first meeting.

V: Yes, of course! We wouldn't have taken time away from work to come back if we didn't expect this meeting to be extremely valuable.

C and D: (In unison) Riiiiiight.

D: (Trying to look angelic) I would *never* take time away from work if it weren't for something 'extremely valuable'... like World of Warcraft. (More laughter)

R: Ok, ok. I want to bring us back to the topic of learning objects tonight, and specifically, to the question of the size of learning objects. Also known as the granuilarity question.

O: I thought we agreed last time that our definition of learning object was going to depend on the specific situation we find ourselves in?

C: Are we going to find out tonight how big a learning object should be? My manager keeps asking me that question.

R: Well, I think we're going to talk through some of the key issues that help people make that decision...

V: But we're not going to make the decision for you.

R: I want to suggest a topic to get our conversation going tonight: the fundamental tension between using and reusing.

C: What on earth is that supposed to mean?

C: Honestly, for us it was purely a matter of being able to stay in business. With all the RFPs coming out of Defense ⤤ and Labor ⤤ wanting SCORM conformance lately, what else can we do?

O: Not that any of them understand what SCORM conformance means...

V: I'm not above saying that our motivation was similar. When you're a business, either you give your customers what they want or you go under. Everybody is hot about learning objects and SCORM and things like that right now. I expect I can speak for C in saying we're all just trying to figure out how to do this stuff without going bankrupt in the meantime.

(C nods knowingly)

O: So that's it? The whole field is being tossed to and fro, and carried about with every wind of doctrine ⤤ because someone decided this stuff is cool? Because 'learning objects' is the buzzword du jour? The emperor really is naked? And we're all the chamberlains walking with still greater dignity, as if we carried the train which did not exist ⤤?

R: Don't jump to that conclusion so quickly, O...

O: (Cutting in) Quickly? We've been talking for weeks now!

R: Let's think back a little. Why did you say you were interested in coming to these conversations in the first place?

O: (Caught off guard) Well, because I thought that if these things really were reusable, we might be able to provide them in an open access format for folks who really need them, and do it for free.

D: (Quietly) Forgetting the costs again...

O: Take a project like eGranery ⤤. They make agreements with individuals and organizations that build digital learning materials - learning objects by some definitions - to redistribute those materials in the developing world. The materials have already been developed for some other purpose - for profit purposes, in the case of the 278 participating publishers - and since the materials are already digital, the eGranery can make perfect copies and take those into universities in Africa at no cost to the publishers.

D: And who provides the copies to the eGranery people? Employees from the companies that could have been doing something else with their time, I expect.

O: Ok. At extremely low cost.

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Video lecture #22 error?

On Apr 15, 2005 Hitokiri wrote:

Hi there,

Just going through video lecture #22 here and I might be wrong, but I think prof. Strang made an error on the board there.

At about 32:32 he starts writing down this equation in matrix form of what he wrote above like this: L^100 * Sc (with L = lambda).

I wondered why the S was now after the L and started doing some calculations of my own and I think that what it should be is this: S * L^100 * c.
Well, I only did the calculation for L and not L^100 but I guess it'll come out the same. I don't have the book (yet) and my other books on algebra don't explicitely state this formula, so can someone correct or confirm this?

Thanks in advance.

Reply to this post

2 people found this helpful. Did you? Yes

Report an inappropriate message

re: Video lecture #22 error?

On Apr 20, 2005 ghersh wrote:

yes, you are right. in general, we want the diagonal matrix on the right, to get coefficients nicely and vertically aligned. So the correct formula is
S Lambda^k c
(rather than Lambda^k S c)
and so is in the textbook. thanks for pointing it out.

Reply to this post

2 people found this helpful. Did you? Yes

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Regarding Video

On Jan 29, 2005 fibonacci wrote:

Hi

I was wondering if it is possible to download the video lectures so that I can accsess the lectures off-line.

It would be great since I can't insure a internet connection at all times.

Thank you,

Reply to this post

Did you find this helpful? Yes   Report an inappropriate message

re: Regarding Video

On Feb 11, 2005 mishooax wrote:

Hi!

Check out the help section of the MIT OCW Website. There are instructions about how to download each of the available video lectures on your hard drive. I have downloaded all Walter Levin's 8.01 and 8.02 lectures, and some of professor Strang's. Careful though, each lecture is larger than 60 MB in size, so you need a fast connection.

Just to ease up things for you:

http://ocw.mit.edu/OcwWeb/Global/OCWHelp/help.htm#26

;)

Mihai.

Reply to this post

Did you find this helpful? Yes   Report an inappropriate message

what was going on in the midst of lecture 19?

On Apr 03, 2005 ghersh wrote:

was it a dog walking or something like that?

Thanks.

Reply to this post

Did you find this helpful? Yes

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re: what was going on in the midst of lecture 19?

On Apr 08, 2005 rucamus wrote:

It was an axe bearing Death / Grim Reaper, i.e. student in costume. I'm not sure if it was a Halloween inspired prank, or an old MIT tradition. "Keep walking away," Dr. Strang urges.

There's a good one in one of Dr. Lewin's Physics lectures: three students in black suits and sunglasses--al la Mod Squad or Reservoir Dogs--come in, clap 3 times, and shout "Don't be late. That means you (student's name goes here)."

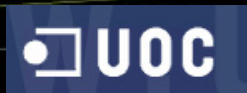Reply to this post

1 person found this helpful. Did you? Yes

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The Chance to Do What We Do Best

- Build relationships of trust
- Answer questions
- Work together
- Advise and counsel
- Commiserate
- Inspire
- The fun stuff! The rewarding stuff!

In Summary

Free Is The Least Important Part Of Open

Free is a necessary, but not sufficient
condition for openness

Open = Free + Adaptable

The ability to adapt and redistribute is key, and more threatening to our institutions than free

Openness Is A Core Cultural Value Online

It enables personalizing, participating,
and creating

We Should Be Culturally Sensitive

Not because it's politically correct, but because it's instructionally effective

The Challenges Can Be Overcome

Once the conceptual battles are won
the rest is logistics

Vest Asked If We Would Be Prometheans

We need to understand this question

Are OERs Fire?

Are pdfs, jpgs, xml, mp3s, and latex
what we would hand to mortality?

OERs Are Nonrivalrous Like Fire

"He who lights his taper at mine
receives light without darkening me."
Benjamin Franklin

The Spirit of Openness Is The Fire

Many of us have a belief in the power of openness burning deeply in our hearts

Congratulations To The Conveners

I hope that we can make tangible progress toward helping one another overcome these and other challenges in the coming days

And, Like Prometheus, Spread The Fire

Thank You

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