

Partial

**Some of What's Happening
with
Online Learning**

Draft

Outside and at UBC

Rough

Please help fill out

Scope of Online Learning

Traditional Academic Players

- Bulletin boards, Google hangouts, virtual office hours, virtual team meetings
- Pre-lecture videos, reading and online quizzes
- Peer assessment
- “Dumping” lectures online
- Videos of working through problem sets, midterms
- Assigned viewing of MOOCs, Ted Talks, ...
- Producing MOOCs
 - most exciting?
 - but rapidly increasing quality/cost [videos]
 - how fast will shakeout happen?
 - all schools will be net importers of MOOCs
- Platforms (WebCT, edX, Stanford online)

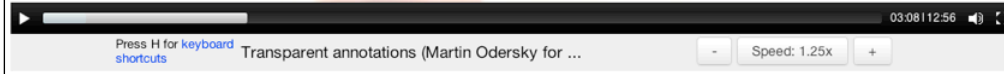
- some examples of recent classes showing how quickly the quality is improving

Example

Here is the evaluation of an arithmetic expression:

$(2 * \pi) * \text{radius}$

$(2 * 3.14159) * \text{radius}$



simple pointing at slides looks better now

No matter how small the output tolerance, there is a sufficient input tolerance to guarantee always striking within range of the limit...

Input Tolerance

Output Tolerance

00:48 | 02:09

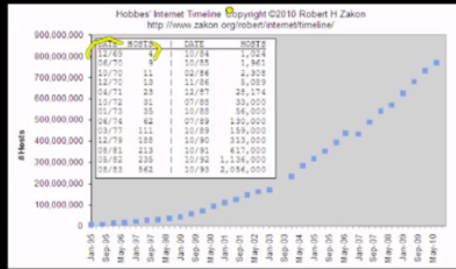
Press H for keyboard shortcuts

Animations and hand-drawn slides (Robert Ghrist ...)

Speed: 1.25x

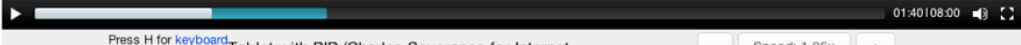
hand drawn slides and animations

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<http://www.zakon.org/robert/internet/timeline/>

- Application Layer
Web, E-Mail, File Transfer
- Transport Layer (TCP)
Reliable Connections
- Internetwork Layer (IP)
Simple, Unreliable
- Link Layer (Ethernet, WiFi)
Physical Connections



by setting up his tablet and camera properly this person looks like he is talking to you when he marks up slides



01:58 | 02:26

Press H for keyboard shortcuts


Live office hours (Charles Severance for Internet ...

Speed: 1.25x

a number of people are looking at ways to make the online students part of the course rather than spectators. In this course, the instructor holds office hours in different cities around the US, records them, and puts that online. This gets actual students into the videos.

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Google+



00:00:05 | 01:30:44

Press H for keyboard shortcuts

Modern Poetry Google Hangout (AI Filreis for ...)

Speed: 1.25x

Other people use Google hangouts to similar effect.

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Scope of Online Learning

New Players

- Platforms (of course)
 - MOOC/general (Udacity, Coursera, udemy, ...)
 - vertical
 - discussion, assessment, sharing, community...
 - Piazza, notesolution.com,
- Testing services, accreditation
- Search firms
- Online support campuses
- ...

http://www.washingtonmonthly.com/magazine/septemberoctober_2012/features/_its_three_oclock_in039373.php?page=all

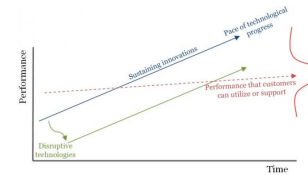
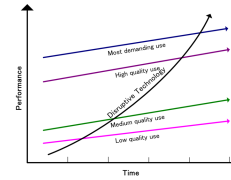
Scope of Online Learning

Other Established Players

- Old style electronic publishers
 - 80% off!
- Publishers of course
- Discovery Channel
- Mozilla Open Badges
- ...

Scope of Online Learning Investors

- edx (Harvard, MIT, Berkeley, UTexas)
- Stanford (as apart from spinouts)
- Learn Capital [web page]
- a number of angel, and later round firms
- Gates foundation
- ...
- \$429M education broadly 2011
- What do these investors see?
 - technical innovation
 - market innovation
 - disruptive innovation



Context

- Increasing university cost base
 - salaries, facilities ...
- Declining government support

- Increasing student debt loads
 - increasing tuition / decreasing aid
- Many university graduates un/under-employed

- All US/Canada schools chasing one golden egg
 - international students
 - at some point price discrimination may not hold?
- Universities are last non-restructured segment?

AGREED FDL PROJECT OBJECTIVE

How does UBC leverage its **current strengths** to **reshape the UBC experience** over the **next five years** through the development of **financially sustainable models** for the **flexible delivery of learning**?

Source: Discussions with Leadership Team

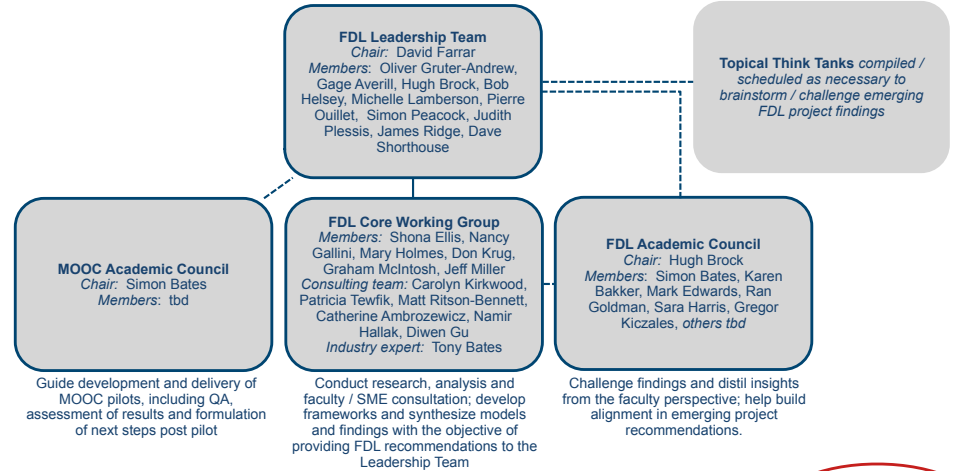
HUNTERKIRKWOOD

One Possible Model of Space



GOVERNANCE AND MANDATES IN FDL – STRATEGIC VISIONING PHASE

Shape the strategic direction of the project, providing leadership and approval for FDL recommendations developed by the CWG, ensuring project alignment with university priorities

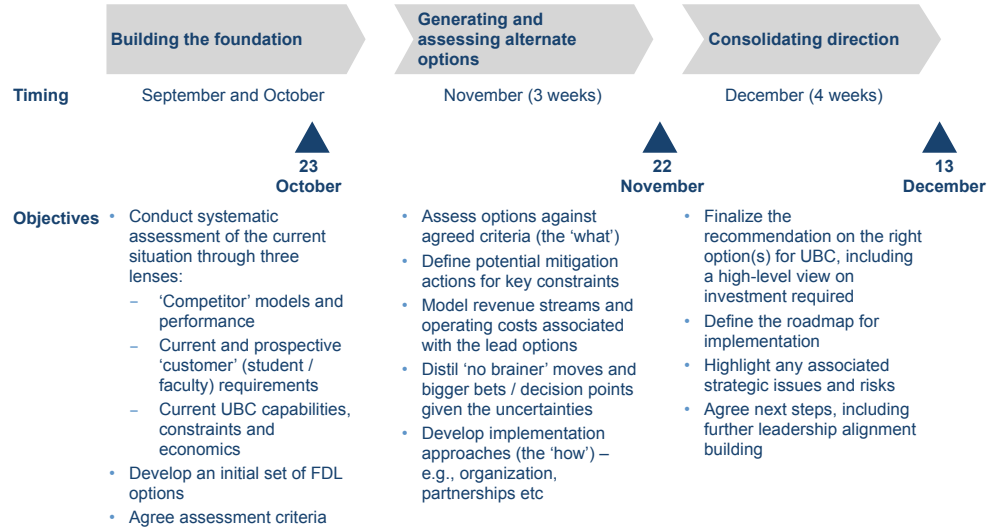


Source: Discussions with Leadership Team members

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PROJECT PHASING – STRATEGIC VISIONING

▲ Leadership Team review / workshop

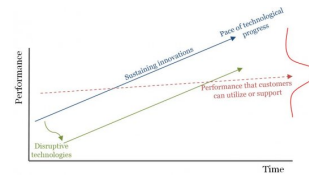
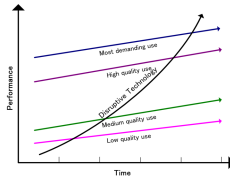


Source: Discussions with Leadership Team



Some Questions

- What does scaling do to quality and costs?
 - How many people will see improved course options?
 - More convenient, flexible, tailored... Less expensive...



- What will the demand-price curve be?
- Will market support price discrimination?
- Will Google (and peers) care about BSc degrees?

*Students anywhere are being offered free instruction online.
What will that do to the trillion-dollar education business?*

Some Questions

- What happens to offering space?
 - 1st and 2nd year at online campus?
 - courses come with placement service?
 - ...
- What does that mean for students and schools?
 - What will be highest value route to a good career?
 - How many of each kind of course will there be?
 - Will there be education superstars (Krugman effect)?

–

*Students anywhere are being offered free instruction online.
What will that do to the trillion-dollar education business?*

Some Questions

- As scaling restructure value space (as offering space disaggregates):
 - where can we (dept/UBC) provide value?
 - where can we no longer provide value?
 - what income and cost pressures will we face?
 - what will it cost to play in different segments?
 - what old offerings do we defend?
 - what new offerings do we invest in?

*Students anywhere are being offered free instruction online.
What will that do to the trillion-dollar education business?*