**What the Evidence Says
about Teaching Online**

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Objective

Address ten common concerns about e-learning voiced by faculty and administrators in higher education.

In the process of addressing those concerns, I hope to challenge your assumptions about e-learning.

Format

1. I'll present a statement.
2. You indicate whether you think it is a myth (not supported by the research evidence) or reality (supported).
3. We'll discuss the different points of view.
4. I'll provide a definitive response, along with evidence to support it.

Myth or Reality 1

e-Learning is less effective than classroom teaching.

What is e-learning?

Instructional materials delivered to students through an intelligent device, such as a computer or smart phone.

The types of instructional materials vary widely, from individual reference guides to entire courses.

Myth.
Several *meta-analyses* validate the effectiveness of e-Learning.

Several meta-analyses exploring every educational context concluded:

No significant difference between classroom and online instruction

(US Department of Education, 2010; Sitzmann, et al., 2006; Bernard, et al., 2004).

(See FAQs and www.nosignificantdifference.org.)

Myth or Reality 2

Several types of e-learning exist, ranging from "live" online classes to self-study simulations.


Reality.

A continuum of uses exists for delivering courses, enhancing teaching, and supporting students.

Uses of technology to enhance teaching and support students, in addition to delivering courses.
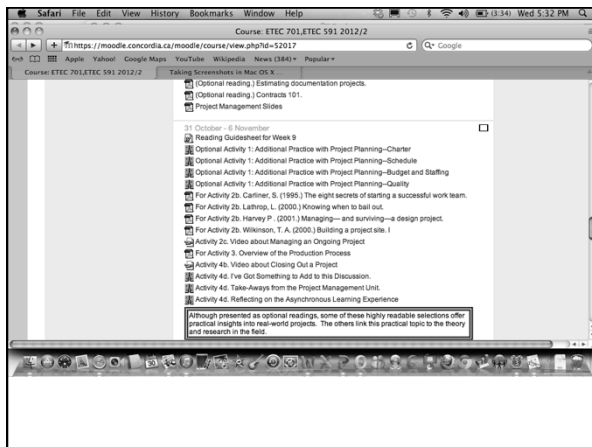
No technology support	Some technology to augment teaching	Blended (hybrid) courses, such as *flipped* courses	Courses taught and supported exclusively online either *synchronously* or *asynchronously.*

Campus-Wide App
(University of Auckland)
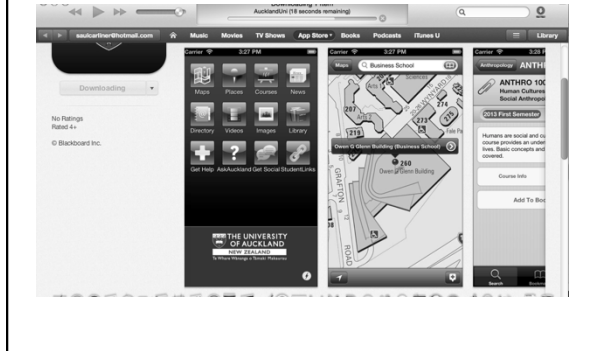
Example of a *Flipped* Class
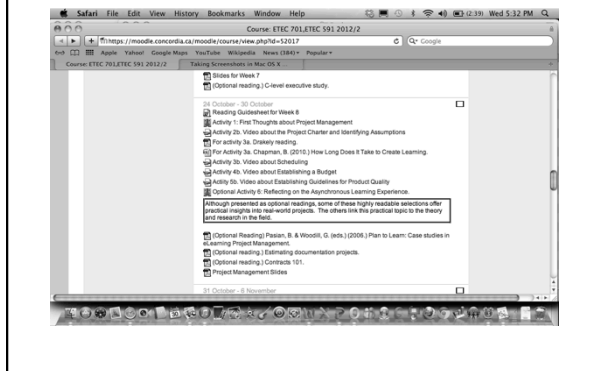
**Continuing the What do they cost?
Discussion.**

What is the going rate for an moderately
experienced contract instructional
designer per hour?

(a) $25
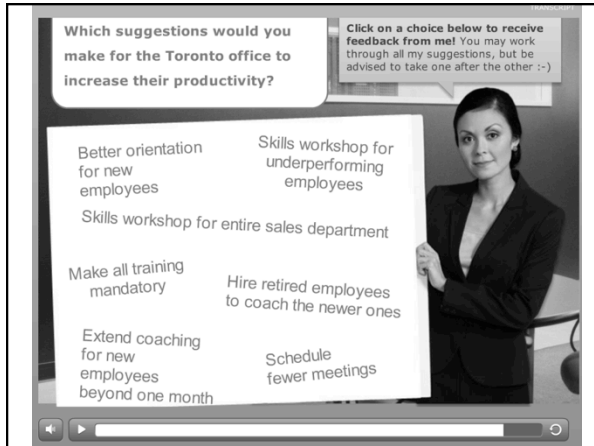(b) $50
(c) $65
(d) $80

Example of a *Synchronous* Class

Example of an *Asynchronous* Class

Question 1:
I understand that you are having **produ**... the office. Any idea what may be causing...

Question 1 for Rhonda

Sarah, your HR-coach:

I understand that you are having productivity issues at the office. Any idea what may be causing them?

Rhonda, training manager:

Well, I think it has something to do with the turnover that we have had this year. Many of our senior sales people have either retired or left the company and I think that the recruits are having trouble coping with the elevated expectations.

We have quite a bit of information to digest here...
Let's take a moment to review what we've learned.

Who is the *intended audience* for the workshop on best practices and sales techniques that Rhonda is currently putting together?

- ● Underperforming employees
- ● New recruits
- ● Veteran sales people
- ○ Entire sales team

SUBMIT

Which of the following is a problem that has been identified by Nick and Rhonda at the Toronto office?

Incorrect

The current problems were identified as

- **Absenteeism:** rise in sick days
- **Productivity:** as demonstrated with the overall numbers
- **Time management:** they are complaining that they don't have enough time
- **High turnover rate:** many new recruits lately

Continue

☑ **High turnover rate**

SUBMIT

Each type of e-learning presents challenges.

Type of e-Learning	Advantages	Challenges
Synchronous e-learning	Short development time. Direct interaction.	Two-way video (and audio). Logistics.
Level 1 asynchronous e-learning	Leverage existing presentations. Short development time. Most common.	Does not take advantage of the computer. Without design, "death by Powerpoint."
Level 2 asynchronous e-learning	Offers personalization options. Of	More development time and cost.
Level 3 asynchronous e-learning	Characterized by personalization and high engagement.	High cost. Long development times.
Performance support or informal learning	Requires little to no development effort.	Relies on individual initiative. Replaces formal training in some organizations.

Myth or Reality 3

Online instructors have less contact with their students than classroom instructors.

The number one complaint of most of our online instructors is related to interaction with learners...

…but their complaint is not about the lack of interaction.

In other words, this is a myth.

- The level of interaction is a matter of the design of the course, not of the delivery medium.
- E-Learning allows for many types of interaction.

Consider the difference between *interactivity* and *interaction.*

|	
Interactivity	A reciprocal exchange between the technology and the learner. Wagner adds that it focuses on the characteristics of the technology.
Interaction	The behavior of participating in a reciprocal exchange

<div align="right">(Wagner)</div>

Consider, too, the types of interactions available.

- Between learners and instructors
- Between learners and the content
- Among learners

"It's not the technology—it's the opportunity to express their opinion"

Eric Mazur, 1 February 2013

Satisfaction with our online courses is similar to satisfaction with classroom courses
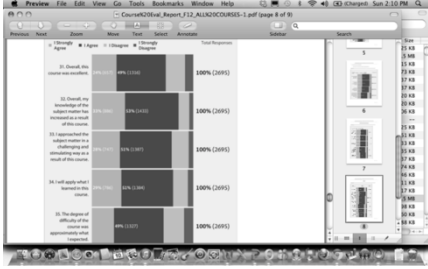
Myth or Reality 4

In general, the pedagogical quality of online courses is inferior to the quality of classroom courses.

Who said that all classroom courses were effective?

According to the US Department of Education, the issue is not the *medium* of instruction (classroom or online), but the *design of that instructional experience*.

Myth. Controls in place for tutorial-style e-learning to ensure as strong a learning experience as possible.

- An instructional design team advises on instructional strategy
- Design guidelines in place to ensure:
  - Completeness
  - That known trouble areas are addressed
- Technical and editorial reviews to ensure operational and editorial accuracy.

- The nature of the medium requires more up-front thought about the use of time and nature of interactions
- Instructors are more likely to rehearse live virtual sessions than classroom sessions

Teaching online often results in a fundamental re-think of the purpose and design of a course.
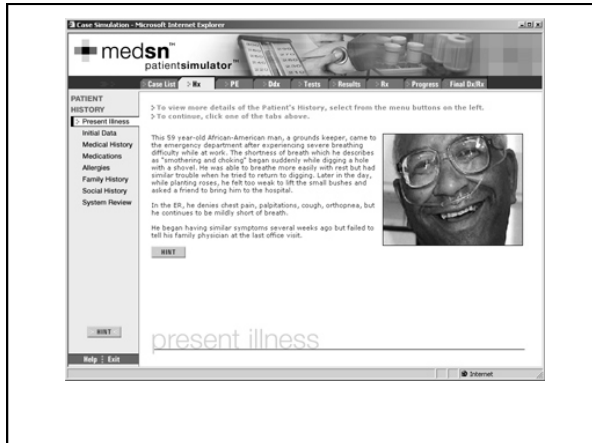
Teaching online offers many opportunities to rethink the structure of the course.
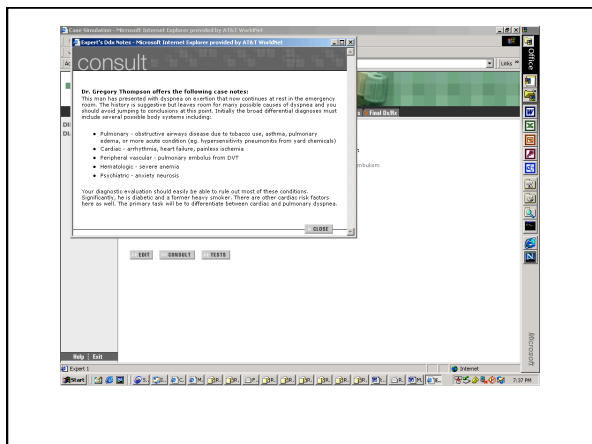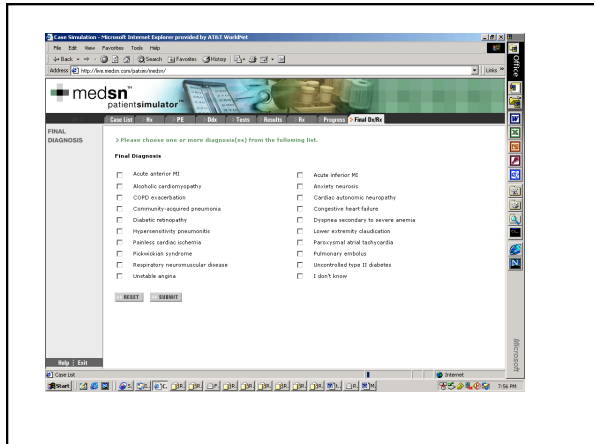
Myth or Reality 5

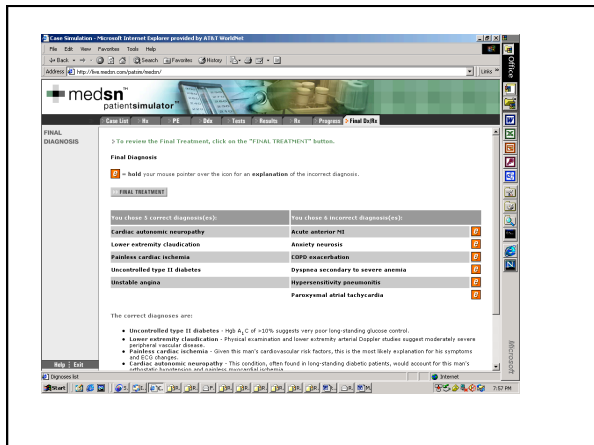E-Learning is better suited to some subjects than others.

Myth.

- Prevailing thinking, however, assumes that e-learning is best suited to teaching *declarative* and *procedural* knowledge.
- But we use it to tackle a variety of topics.

Myth or Reality 6

e-Learning is better suited to some students than others.

True.

(but not the ones you think)

E-Learning is best suited to goal-oriented students.

Without intervention, some undergraduates take e-learning courses assuming that they'll lead to "easy A's" (Devey 2009).

Myth or Reality 7

Tests in e-learning courses are limited to multiple-choice and similar types of objective tests.

Myth.

- You can use any type of test in e-learning courses.
- Examples:
  - Writing assignments
  - Essays
  - Personal marketing plan
- The catch: they might require manual grading.

Along with testing, many people raise concerns about fraud in e-learning courses.

Myth or Reality 8

Students have no interest in e-courses.

Myth.
e-Courses already represent a significant number of enrolments in Quebec universities.

University	Impact on Enrolment
Université du Québec à Trois-Rivières	Number of registrations in online courses increased five times in five years (2010)
Université Laval	36,047 registration in its online courses in 2010-2011
Concordia University	30,990 enrolments in the current academic year (approximately 15 percent of all enrolments)
Moving forward: Université de Montréal, Université Laval, Université de Sherbrooke and UQAM all plan to substantially increase their online course offerings	

Myth or Reality 9

Massive Open Online Courses (MOOCs) pose a threat to universities like Concordia.

Unclear.

- MOOCs are in their experimental phases.
- Current experience:
  - "Opportunistic" course offerings
  - Primarily tier-one schools
  - No credits
  - High signup rates, low retention (about 95 percent drop out)
  - Dominant student is a working professional (not undergraduate, credit-seeking)
  - Limited to no opportunities to earn academic credit
  - No clear revenue model
  - Mixed reviews for course quality

But we should not ignore MOOCs.

- Efforts to recognize credits continue.
- "Course curation" through licensing agreements arising as a viable model
- Experts believe they force universities to focus on our "value added" to the university experience
- Instructional designs will evolve (EdX approach)
- Likely to play some role in higher education *and lifelong learning* though the exact role is unclear

My prediction

They'll be integrated into e-textbooks that students "read" using tablets like the iPad, Nexus, and Surface.

Myth or Reality 10

I am going to be replaced by a computer.

Myth. Probably not.

(But those computers are likely to give us a run for our money.)

Questions

Take-Aways

Name 1 or 2 insights about e-learning that you'll take away from this session.

Learn More about e-Learning

Still investigating this phenomenon of e-learning?

Visit:
- Designing e-learning blog (http://designingelearning.wordpress.com)
- Educause (educause.edu)
- eLearning Guild (elearningguild.com)
- eConcordia (econcordia.com)