EDUCATIONAL TECHNOLOGY 2.0

Enabling Significant Learning

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Agenda

- Educational Technology 2.0
- Instructional Design (Significant Learning) Review
  - Backward Design
  - Castle Top
  - Taxonomy
- Technology Demonstrations and Discussions
  - Classroom Technology
  - Web Based
  - Mobile
  - Simulation
Web 2.0 applications facilitate

Web 1.0
- passive viewing of information

Web 2.0
- interactive information sharing
- interoperability
- user-centered design
- collaboration

http://en.wikipedia.org/wiki/Web_2.0
Backward Design

The 3-Column Table

1. Situational Factors - What are the factors and what influence they will have on your course design decisions?

2. Learning Goals
   What do you want students to learn?

3. Feedback/Assessment Activities
   What will students need to do, for you and them to know whether they have learned that?

4. Teaching/Learning Activities
   What will students need to do, to learn that?

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Learning Goals

Teaching and Learning Activities

Feedback and Assessment

Situational Factors

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Book the Room

and other Ed Tech Situational Factors

<table>
<thead>
<tr>
<th>Factor</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom</td>
<td>What’s in the room?</td>
</tr>
<tr>
<td>Web based</td>
<td>How will student access it?</td>
</tr>
<tr>
<td>Mobile</td>
<td>What kind of devices and connection?</td>
</tr>
<tr>
<td>Simulation</td>
<td>What kind of interaction is possible?</td>
</tr>
</tbody>
</table>
What do you want students to learn?

What was the most meaningful learning experience you participated in as a learner.

- Describe it.
- Who was involved.
- What are the one or two things that most made it effective?

What do you want students to learn?

- Can Technology help you be more effective?
  - Enable Interaction
  - Facilitate deeper learning
What are the obstacles you face to being more effective?

- Time
- Resources
- Expertise
- Support

Strategic Technology Activities

- Enabling important new technology based content to be taught:
- Changing who can learn:
- Improving teaching and learning activities:
- Lowering or controlling the costs of teaching and learning activities:

Photo by Allan Foster
Feedback and Assessment

- Summative
  - Online Testing
  - OSCE
- Formative
  - Practice Quizzes with Feedback
  - FOSCE
  - ePortfolio
### The Castle Top

#### Classroom Technology

- **Audience Response Systems (ARS) aka clickers**
  - **S** - Survey to get to know participants
  - **P** - Pretest to determine participants’ prior knowledge
  - **A** - Assess if participants can move on to new concepts?
  - **R** - Review important points at the end of a presentation
  - **K** - Knowledge and Application assessments test critical thinking

- **SMART Technology**
  - SMART Podiums
  - SMART Boards
Web Technology

- Learning Management Systems (LMS) aka Carmen
  - Content
  - Discussion
  - Drop Box
  - Quiz
- Online Video
- Web 2.0
  - Second Life
  - Wiki
  - Blog

Groundswell

- The groundswell is a social trend in which people use technology to get the things they need from each other, rather than from traditional institutions like corporations.

Li, C. Bernoff, J. Groundswell winning in a world transformed by social technology, 2008 Harvard Press
“I recently experienced my first "code blue" in the hospital. This was the first time that I had seen an ACLS protocol carried out on a living individual. Having simulated multiple ACLS algorithms on the iStan, I knew exactly what to expect as the code was performed.”

Clint Alred
Third year medical student
Mobile Apps

- AHRQ ePSSS
- Mediquations
- LexiComp
- ResponseWare

Illicit Drug Jeopardy

- Connect to the Wireless
  - Remember if accessing OSUMC Guest you must launch safari and click connect.
- Launch ResponseWare
- Join using the Session ID on the next screen and your name.
3/2/2011

ResponseWare Login

ResponseCard

Channels: NA

ResponseWare

Not Connected

vPad

Not Enabled

Rules of the Game

- You’ll have 60 seconds to answer each question.
- Correct answers are worth the number of points indicated on the game board.
- Incorrect answers will lose the number of points indicated on the game board.
- The person with the most points at the end will win a valuable prize.
### Participant Scores

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<thead>
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<th>Participant</th>
<th>Score</th>
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<tr>
<td>22</td>
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<table>
<thead>
<tr>
<th>Slang</th>
<th>Demographics</th>
<th>Chronic Health Effects</th>
<th>$$$$$</th>
<th>Presentation</th>
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</table>
This drug is also called "Chronic"

A. Cocaine
B. Ecstasy
C. Heroin
D. Marijuana
E. Methamphetamine

It is a drug that also goes by the name "Girlfriend".

A. Cocaine
B. Ecstasy
C. Heroin
D. Marijuana
E. Methamphetamine
It is the drug someone has taken if they’ve had some “Scooby Snacks”

1. Cocaine
2. Ecstasy
3. Heroin
4. Marijuana
5. Methamphetamine

It is the drug of choice for someone addicted to “Smack”.

1. Cocaine
2. Ecstasy
3. Heroin
4. Marijuana
5. Methamphetamine
It is a drug most commonly referred to by users as “Shit”.

A. Cocaine
B. Ecstasy
C. Heroin
D. Marijuana
E. Methamphetamine

It is a drug that leads to these oral findings:

1. Cocaine
2. Ecstasy
3. Heroin
4. Marijuana
5. Methamphetamine
Mobile App Exercise

- Explore the LexiCom App
  - How would you use this in your teaching?
    - What situational factors are there?
    - In a perfect world, what would the students learn or be able to do as a result?

Questions?

Thank You