An Assemblage of Technologies for Multidisciplinary Online Health Informatics Education

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Conflict of Interest Disclosure

• No conflict of interests to disclose for this presentation.
Learning Objective

• The learner will be able to compare and contrast social media and commercial education technology.

• The learner will be able to discuss the need for an assemblage of technology for online student engagement
Introduction and Purpose

• The course management system is often viewed as the mainstay for online education.

• However, online education requires a more comprehensive assemblage of technologies to facilitate active engagement and learning for the online students.

• The assemblage of technologies can be formed using a combination of social media and commercial applications.

• The purpose of this project was to systematically identify and catalog technology used in the multidisciplinary online health informatics program offered by the School of Biomedical Informatics (SBMI) and School of Nursing.
Philosophies

Experiential learning is learning through reflection on doing

Experiential activities are among the most powerful teaching and learning tools available

The learner must

○ be willing to be actively involved in the experience;

○ be able to reflect on the experience;

○ possess and use analytical skills to conceptualize the experience;

○ possess decision making and problem solving skills in order to use the new ideas gained from the experience.

George Siemens, 2004

Connectivism is a learning theory for the digital age.

Principles of connectivism:

Learning and knowledge rests in diversity of opinions.

Learning is a process of connecting specialized nodes or information sources.

Capacity to know more is more critical than what is currently known.

Nurturing and maintaining connections is needed to facilitate continual learning.

Ability to see connections between fields, ideas, and concepts is a core skill.

Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities.

Learning is a knowledge creation process...not only knowledge consumption.

http://connectivism.ca/about.html
Commercial Applications

- Commercial applications typically have the advantage of technical support and permanence.
- Commercial applications typically necessitate licensing agreements as well as annual renewal fees.
- In selecting and forming an assemblage of technologies, the primary goal should be to enhance student engagement and learning.
Social Media

- “forms of electronic communication (as Web sites for social networking and microblogging) through which users create online communities to
  - share information
  - ideas
  - personal messages
  - and other content (as videos)”

- Social media applications have the benefit of enduring connections
- Most social media applications are free of charge
  - This is a financial benefit to both students and the university
- Security settings to ensure the privacy of students
  - Students can create screen names to remain anonymous from general public

http://www.merriam-webster.com/dictionary/social%20media
Social Media

- collaborating
- sharing
- modifying
- participating
- open source code
- social
- free
- wikis
- podcasting
- videblogs
- blogs
- social networking
- social book marking
- RSS feeds
- remixing/mashing
Education Software for Online Learning
Educational Technology

Center for Education and Information Resources (CEIR)

Classroom Faculty Support
- Room 2084
- Classroom Training
- Classroom Scheduling
- Exam Scheduling
- Testing Laptop Reservations (100 laptops, 32 desktops)
- Classroom intercom system in each room
- Room 306 Hours
- M-F 8:00 to 4:30

Classroom Student Support
- Computer Lab Support (rooms 310, 311, 312)
- Scanners (1 in 310, 311, and 312)
- SPHS in 3111
- Printers (32) color and black and white
- Copiers (32) color and black and white
- SON wireless support
- SON email to mobile device support
- Room 306 Hours
- M-F 8:00 to 4:30

Educational Technology Applications and Support
- Email smib@uth.tmc.edu for support in any of these areas:
  - ExamSoft
  - Foresight
  - TurningPoint Clickers
  - wizlounge
  - Canvas
  - Flipordinary
  - ProctorU
  - Evalise
  - EvalKit
  - SurveyMonkey
  - Typen
- Web-based video conferencing software (Skype, Google Hangouts, Acano, Adobe Connect)
Technologies for Online Learning: UT SBMI and School of Nursing
Second Life

• 3-D virtual world
• Second Life is an interactive environment of user created content for designing:
  ▪ Patient care areas
  ▪ Specific course simulations
  ▪ Poster sessions
  ▪ Student course projects
  ▪ Social activities
• Interactions occur through avatars
• An avatar is an animated 3-D characters that can communicate through:
  ▪ Gestures
  ▪ Instant chat
  ▪ Voice chat

http://secondlife.com/
Second Life: SBMI Clinic
Poster Display
One World Was Not Enough
AvayaLive: Inpatient Room
AvayaLive: Inpatient Restroom
Conclusions

- The continuous advancement of technology requires constant awareness, evaluation, and appropriate incorporation into course curriculum to maximize student engagement.
- Technology should enhance learning and not burden either students or faculty.
- Social media applications are selected by the course faculty.
- Commercial products are selected by the Distance Education, the Office of Academic Affairs along with input from course faculty.
- Incorporation of social media and commercial products into course curriculum is at the expertise and discretion of course faculty.
- Students report positive learning experiences in using the application in completing course activities.
Challenges
Lessons Learned
Future
Challenges Encountered: Students and Faculty

- Technology (computer and internet)
- Fear of technology
- Complete clear explanation using the technology
- Fitting technology to the course assignment
- Fear of a public presence
Lessons Learned

• Requires creativity by faculty
• Flexibility
• Always outside comfort zone
• Always looking forward for the next new, cool
• Time consuming in creating learning activities
• Selling to students and faculty there is value
• Need to have a plan to evaluate
Future
Contact Information

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- Second Life
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Questions