

Emphasizing Learning in the Use of Learning Technology

An aerial photograph of a coastal city, likely Victoria, British Columbia. The image shows a dense residential area with many houses, a large body of water (the harbor), and a prominent bridge with many tall, thin supports. In the foreground, there is a university campus with several buildings, including a large, white, triangular structure. The sky is clear and blue, and the overall scene is bright and sunny.

Gary Poole

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Richmond FC Stingrays



Vancouver Whitecaps



Presentation Overview

- A look at the use of learning theory and objectives in educational decision making
- Applications to a course I teach
 - Related learning theory
 - Course objectives
 - Implications for pedagogy
 - Implications for the use of learning technology

How would you complete this sentence?

- In my class, students learn best when they ...

An example: Teaching the fundamentals of epidemiology

- Students must learn the logic and steps of disease tracking and causal analysis
 - For example, determining *associations* between conditions and outcomes
- Best learned via practice using real-world examples
- That practice should be
 - Frequent
 - Supported by timely feedback

Considering How People Learn

Social Construction of Knowledge

- What I mean by social construction as a way of learning
 - “According to this view, we construct new knowledge rather than simply acquire it via memorization or through transmission from those who know to those who do not know.”
 - “Social constructivists believe that this process works best through discussion and social interaction, allowing us to test and challenge our own understandings with those other others.”
 - The psychological processes of social construction
 - Social comparison
 - Iterative reflection on one’s beliefs
- Why this perspective appeals to me
 - We are preparing students for academic or professional life in which knowledge is constructed socially more often than not

Considering How People Learn: Kuh's Notion of "high impact practices"

- What high impact practices look like

- Activities featuring engagement
- Collaboration
- Writing
- Inquiry based learning
- Self-direction

Kuh (2008)

- Placing learning in a context of personal meaning and relevance
- Allowing learners to be problem solvers rather than solution learners
 - e.g., How will you run your Journal Club group?

Considering Our Course Objectives

- Students will develop skills associated with:
 - Making a successful presentation about your thesis research and interests
 - Developing questions for reflection and discussion
 - Receiving feedback from student peers, and considering an appropriate response to the feedback
 - Learning to serve as a resource for peers
 - Learning to provide constructive feedback to peers, in both oral and written format, that can support improvement of their research
 - Developing and maintaining a plan for personal growth through graduate school

Implications for Pedagogy

- Independent group work
 - The establishment of group identity, trust and commitment
 - Moderately homogeneous groups should be formed based on common academic interests
- Reflection and peer feedback
 - On research and personal plan
 - To be monitored

Implications for the Use of Technology

- Collaborative tools
 - that allow for privacy when required, but that could still be monitored by the instructor
- Support for learning about the technology options
 - <http://elearning.ubc.ca/connect/instructor-resources/communicate-and-collaborate/>

A Quick Summary of Some Options

■ Blogs

- Ongoing commentary from one or more students, with room for comments from other students. This treats the course like a journey, and students enter highlights.

■ Discussion Boards

- This is like email messages that are organized under themes or “threads.” Students are interacting through their messages, which are organized via threads.

■ Journals

- Journals provide personal writing spaces that can be viewed by the instructor, but not by other students. This is a good space for personal reflections that the instructor would like to monitor.

■ Wikis

- Students work together to create and regularly modify a web site. Thus, wikis provide the opportunity for ongoing commentary that can be modified by others. Using wikis, students “build” knowledge.

A Summary of Interactive Tools

Blogs				
Discussions				
Journals				
Wikis				

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Some conclusions

- The tools we use and the support we need are determined directly by what we want our students to learn and how we believe they learn best.
- Like our students, we socially construct our understanding of technology and its uses. We shouldn't be doing this in relative isolation.