

Portland State Presentation
June 3, 2016
Notes

Slide 1: Adventures in Technology and Learning

Today I'm going to introduce myself, my core principles, and a few examples of former projects, followed by a short learning experience in which we're going to review a concept together and discuss its implementation in GSE classrooms.

Diverse work history: educator, technologist (doing both faculty support & infrastructure/ policy support), research into tech and learning. →→ But **all driven by issues of access**: the belief that access to emerging technologies can improve everyone's educational experiences (all students, all faculty). Kinship between that central focal point and the four-part conceptual framework of the GSE.

Slide 2: A Set of Core Values

To that end I think there's a core set of cross-disciplinary values that I bring to all my work in this field:

- **Open**: Emphasis on open-source and open access resources, transparency
- **Collaborative**: Teamwork, collaboration, & a willingness to experiment
- **Iterative**: Small successes add up
- **Responsive**: Premium on user experience, and process-oriented pedagogy. Students as producers and makers of digital artifacts

I also think these core ideas are a good set of guidelines for the implementation of technology in learning environments that seek to serve diverse communities. There's an empowerment that technology can help to enable across the board—that's a feeling that can be grown and nurtured through evidence-based decision making in response to these guiding principles.

Slide 3: Three Experiments

The three BRIEF examples that follow – which are from my work at 3 different institutions – are these values in action. Chosen to demonstrate my range of experience.

Slide 4: Thesis Colloquium

Great example of iterative growth through a multi-year collaboration with a senior faculty member.

2009-10: "beginner" e-portfolio for the faculty member to send out announcements, student e-portfolios were a way of handing in response papers, reflective journaling, and the collection of multimedia sources

2010-13: rich presentation of thesis text, then content adapted for web audiences, then interactive elements that extended the core claims of the thesis

2013-14: faculty member retired, nominated me to build an experimental version of the course, students created semester-long projects that made secondary claims and involved a lot of creative work

Slide 5: Digital History Murals

A project from my own teaching that asked students to collaborate in their own virtual spaces outside of class, and then bring it back into the classroom. (Describe 1968 Nixon/Humphrey picture.) Mural.ly had a chat feature—students could message each other about the project while in the project space. It was

visually-oriented (in other words, adapted to my student population at FIT) and allowed the incorporation of streaming media.

Slide 6: Re-Imagining Ed Tech Cultures

Upon arrival at UO, tasked with undertaking an internal survey of the digital education landscape, which then expanded to include comparators. We started seeing enough commonalities in how other institutions were organized around the delivery of digital learning that we made a chart to go with our report that illustrates the most common relationships that exist between staff units at universities. It's generic, not meant to represent any one institution. But rather than just throw this chart up for local administrators and managers (as you can see, it's hard to read!), we made a card game out of it, asking people to organize the cards (a little like a tarot deck) based on how they *think* their institution is organized (and sometimes even that varied), and then how they think their institution *should be* organized. (Circulate one copy of game, use other to explain basics of rules. The idea behind this effort was to generate common vocabulary and provoke discussion.

Slide 7: Pedagogical Example: Meaningful Online Discussions

Online discussion forums have become ubiquitous regardless of course delivery modality. It's not terribly uncommon for faculty and students to see them as an extension of the in-person discussion, or a place to ask questions, and they are one of the primary modes of communication in hybrid or online delivery. So regardless of your preferred modality it's useful to think through best practices for facilitating productive and empathetic digital conversation.

I want to walk you through this topic in 3 brief segments:

- The basic pattern of a good discussion board post
- Setting expectations for high-quality for the duration of a course
- A promising alternative model coming out of a research group at SFU

Slide 8: Good Discussion Board Posts

Students are often posting to online discussion forums in response to a question posed by the instructor, or in response to an answer articulated by another student. In either case a good discussion board post essentially has three parts:

1. State your response
2. State why you think what you do (justification for the response is often a combination of research and experience)
3. State what you wish you knew, or what the next question would be, in order to extend the conversation.

Slide 9: Maintaining High-Quality Discussions

Maintaining high-quality online discussions for the duration of a full term relies on the development of **cognitive presence** (the extent to which students and instructor create shared meaning) in the digital course space.

- Steps to creating cognitive presence:
 - Begin with questions: state of puzzlement.
 - Information exchange

- Connection of ideas
- Concepts (idea clusters) are created
- Test solutions for viability

In addition to being concerned with this question of cognitive presence, there are some practical tips to deploy to maintain conversation quality throughout the term:

- Model the structure of a good post in your own postings, including a tripartite structure
- Consider when to take a passive role and when to take an active one—don't rely on students to do all of the heavy lifting, but do look for opportunities to encourage student-led conversation in the digital space
- You can further up the ante by integrating multimedia. There are several ways to do that, including:
 - Introducing video clips, images, or audio as artifacts for students to respond to
 - Asking students to respond to a question by posting a piece of multimedia and explaining how they think that video, image, or audio clip serves as an answer
 - Encouraging the use of audio and video as a means of responding, asking students to create in text, sound, or video as feels most natural to them, in response to a prompt.
- If you're posing questions you want students to answer as part of their discussion, keeping those questions exploratory (no single correct answer) adaptable (students will naturally respond from the basis of their own unique experiences; a-ha moments are good) and socratic, problem-solving, or oriented toward new knowledge (students can be expected to bring researched information into their answers)

Slide 10: Starburst Model

A tool in development as part of the E-Listening Research Project at SFU, which is a research project tracking students' passive and active behaviors in online learning spaces. It functions as a visually-oriented model rather than a list format, allowing students to quickly see the scope of an entire conversation and enter it at a place that makes most sense to them. This "fractal"-type image is in some ways a more natural reflection of the ways in which our in-person conversation patterns often happen. It also allows people to more readily go back to earlier points in the conversation, so there's less potential for loss. The analytics embedded in the tool also help researchers/teachers understand what behavior students engage in while "listening" online—reading but not responding. While this is only in beta at one institution, it's a promising marriage of learner analytics and a more holistic pedagogy. I'm excited about it!

Slide 11: References

Slide 12: Thank Yous and Questions