A Dynamic Learning Environment: The Value Of Visible and Persistent Artefacts in Online Learning Environments
This presentation outlines the results of my doctoral research. This research project examined student's perspectives on the use and value of a dynamic learning archive. This presentation will explore different approaches to the implementation of such an archive and discuss how online environments might benefit with the use of visible and persistent artefacts.
The study documents the perceived impact that visible and persistent knowledge artefacts have on the process of learning within an online socially networked learning environment.
Significance and rationale for study

- Oakeshott (1989) indicates that the value of a conversation “lies in the relics it leaves behind in the minds of those who participate” (p. 60).

- The value in these relics exists by making these relic/artefacts available for current and future students. As a result of maintaining these artefacts we can offer learners an opportunity to stand on the shoulders of giants (John of Salisbury, 1955, p. 167).

- This study examines the benefit from the processes and the learning of those who came before.
Bridging domains

- Study is based upon elements of a business management theory -- Organizational Knowledge Creation Theory (OKCT).

- OKCT suggests that new knowledge is created from the coming together of individuals and the sharing of both tacit and explicit knowledge. Knowledge creation occurs within a context referred to as Ba. (Nonaka & Konno, 1998; Nonaka & Takeuchi, 1995)
Study context

- Study takes place within two consecutive iterations of an online Masters’ level course.
- Study environment exists within an online socially networked learning environment (Elgg).
Research questions

I want to understand:

1. If and how learners in a natural education context might use an archive.
2. If they see value in its use.
3. Are there barriers in the use of the archive, and what kinds of barriers might exist.
Methodology – (qualitative) 
Design-based research

- I chose design-based (DBR) model for my research in part because the researcher’s role in design-based research is as both the designer as well as the researcher taking an active role as a member in the project (Wang & Hannifan, 2005).
The intervention (Change an aspect of the environment and then study the affects of the change)

- The intervention is to attempt to change our understanding of what is needed to support learning and knowledge creation in online learning environments.

- This intervention takes the form of using a socially networked learning environment as an online classroom and capturing, retaining, and making available for current and future students a dynamic archive of everything that goes on in this online classroom.
My first cycle descriptive codes took the form of:

- **Use**
- **Value**
- **Challenges**
- **Custom Elgg**
- **Tacit**
The key areas of the “Use” code show that some students value the sharing of ideas and documents with each other as well as to and from the archive.

The “Use” code also brings forward issues around the limitations of the archive and frustration around its use.
Students speak in “Value” terms more than any of the other code areas. The many “value” examples serve to push forward the idea of the archive as a viable vehicle for future online courses.
The “Challenges” code primarily speaks about the mechanics of the archive in terms of navigation, the environment, solutions and time.

One of the more significant unintended consequences of this study surfaces within this coded area: This is the issue of personal efficacy.
Results

- The impact of the “Custom Elgg” or the socially networked learning environment on the learning process and the ability to support an archive as created and used within this study environment needs to be examined further.

- There were many challenges as students navigated through this environment, however most students in this study are supportive and engaged within this environment.
The “Tacit” code helps me to circle back to my hypothesis and see how the data supports the core ideas of OKCT.

Evidence of tacit knowledge or tacit knowing surfaces as students clearly speak about their understanding of the process of knowledge creation.
Summary Design principles

- The Learning Environment

This study shows that an online socially networked learning environment such as the Custom Elgg environment can offer the richness and flexibility needed to foster knowledge creation. The study does not directly show how to build this environment, however, elements that need to be considered and integrated into any such future design are outlined throughout the study.
Summary Design principles

- The Archive
  - The course must be situated within an environment that supports permeable boundaries, invites and allows for a cross section of attendees yet permits the user to have complete control over their contributions, and will allow for a dynamic permanence of participant contributions.
  - Technology supports must be sufficiently sophisticated to allow users both a seamless way of adding to the archive as well as equally seamless ways of finding, accessing, and using needed or desired material from the archive.
  - The instructional design needs to include the process of knowledge creation and the impact of creating and maintaining *ba* in these virtual environments.
Further research needs to be conducted on the use of socially networked learning environments as online classrooms to allow others to see how the changing landscape of social environments and online learning are converging and can come together in a meaningful way.

The larger challenge is in finding environments within which an archive could be built, supported, and made available with an ease that my study did not offer.
References


References

A Dynamic Learning Environment:
The Value Of Visible and Persistent Artefacts in Online Learning Environments

Thank You ..... Questions?

http://faculty.camosun.ca/stuberry/