

Connectivism: 21st Century Learning in Action

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Background

"Teaching in the Virtual World" was a Masters level course in the Faculty of Education, delivered entirely online through WebCT Owl. There were 18 participants including the instructor. Each student created and taught one module on a topic in which they had experience or interest. Each module contained curriculum materials prepared by the student and a discussion that they facilitated and moderated.

Purpose

To explore the practical application of Connectivist learning theory in a Masters course called "Teaching in the Virtual World" from the viewpoints of three course participants – the instructor and two students.

Application

The application of connectivist principles transformed the curriculum. Each student's choice of subject matter to teach to the class created an overall course curriculum but each student's choice of which 10 modules to study created that student's personal learning experience. The teacher's experience was one of loss of control over the curriculum as well as one of intense work effort.

Course Content

The student-chosen modules included a wide variety of topics related to online teaching. Some of these were Communication, Web 2.0, Assessment, Content Development, Time Management, Academic Dishonesty, Second Language Acquisition, Tablet Computing, and Exceptional Children.

Conceptual Framework: Connectivism

Enhancing one's knowledge is in developing new connections (neural, social, academic) more than remembering facts, ideas, or concepts. Networks (whether human or electronic) are the basis of knowledge. Knowing requires being able to do. Learning is thus situated and distributed, practical and theoretical.

Results

Emergent theory corresponded to Schwab's (1973) four commonplaces of curriculum. Schwab's milieu occurred in exactly the same way. However, the online course had its own milieu: the networked community replaced the classroom while the instructor was both teacher and learner. Schwab's argument that none of the four commonplaces are the proper "centre" of education appears to have been embodied.

Methodology

Connected Reflection (phenomenography): Rigorous qualitative online conversations by three participants in the course using Instant Messaging to capture the conversations in text. Data coded by each researcher separately using constant comparative method. A Wiki was then used to merge codes until all agreed that the codes captured their joint experience. The conversations were coded to create a theoretical understanding of the researchers' joint experience.

Conclusions

Relative diversity of the group was a source of growth, enrichment and cognitive dissonance — in short, each person was important to the learning environment. The idea that learning occurred as a result of this diversity is in line with network theory and specifically the theory of interpersonal ties, which postulates that "weak ties" between individuals are more likely to facilitate the flow of new information than "strong ties."