

Chapter 3.17

A Case of Using Wikis to Foster Collaborative Learning: Pedagogical Potential and Recommendations

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ABSTRACT

In recent years, Wikis, an open Web-based editing tool, have increasingly been used for collaborative writing projects in classrooms. Hailed as a collaborative learning and writing tool that is more powerful than blogs and e-mail, the pedagogical impact of using Wikis in the classroom is underrepresented in the literature. This case reviews the design and implementation of a Wikibook project for graduate students at a major land-grant university in the mid-South United States. Our findings challenge idealistic hypotheses that work using Wikis, without careful design and implementation, is naturally beneficial. The case also provides design recommendations for educators who are interested in using Wikis to enhance collaborative writing.

BACKGROUND

Wiki, as one of the Web 2.0 tools, provides Web-based features to co-write and edit. As such, Wikis have increasingly been used in classrooms to foster collaborative writing and learning in recent years. Emerging literature also documents studies on pedagogical effectiveness of using Wikis for collaborative learning. This case summarizes the design and development, students' adjustment, and perspectives of collaborative learning in a Wiki environment. It also shares recommendations for educators who are interested in adopting Wikis in their classrooms.

This case was conducted at a major public land-grant university in the mid-South United States. The university is a research extensive institution that offers degrees through the Doctor of Philosophy. The university is considered a traditional university, offering the majority of coursework face-to-face at five campuses. Distance education technologies and innovative technological teaching methods are a

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recent addition to traditional course offerings and constitute less than five percent of courses taught. By November 2008, the university offered over 650 online courses via its course management system Desire2Learn®. In addition to online courses, many distance education courses are enhanced by videoconference. CDs and DVDs are available to distant students as well. The university highly values teaching as a central mission of the land-grant university. University administration encourages faculty to adopt technology integration across the curricula and provides continuing support for pedagogical training and technological assistance as a result of the demand of online and blended instruction in recent years.

At the course level, more faculty members are using emerging technologies such as Podcasts, Wikis, Camtasia, Google Apps, and Voicethread in their teaching and learning. Among these tools, Wikis have received increasing attention for collaborative writing, which often poses particular challenges for instructors and students alike in traditional writing classes or courses that aspire to improve collaborative learning. Prior to the initiation of this case study, Wikis were lauded in the literature as an emerging instructional technology tool that could be used to enhance collaborative writing in the classroom. This case study concludes with implications for design and implementation of technological tools to facilitate writing and collaborative learning.

Overall, university administration and faculty see the need to reach both traditional and non-traditional students by providing quality educational experiences using a variety of media. To this end, instructional technology is used as a tool for increasing the reach of the university and improving instructional design and delivery. This case is a snapshot of how a faculty member used innovative technology to add value to the curriculum by using Wikis for collaborative learning in a graduate level course.

SETTING THE STAGE

Collaborative Learning

Collaborative learning is defined as “an instructional method in which students at various performance levels work together in small groups toward a common goal” (Coutinho & Bottentuit, 2007, p. 1787). Collaborative learning asks students not only to be responsible for their own learning, but also to be responsible for working with other students to co-create knowledge. In collaborative learning, knowledge transfer and creating is not a one-way transmission in which the instructor is the only source of knowledge. Instead, instruction is student-centered and knowledge is viewed as a social construct which is enhanced by both the instructor and peers (Harasim, 2000).

As such, the concept of learning shifts from instructor-oriented instruction to student-oriented collaboration. Collaborative learning emphasizes that students and teachers are not simply engaged in developing their own information but actively involved in creating knowledge that will benefit others, hence, constructing knowledge for the community, not just the self, a concept presented by Holmes et al. (2001) and referred to as communal constructivism.

There is a growing body of literature that discusses using new technologies, for example, blogs, Wikis, social networks, tagging, mash ups, and cloud computing, to foster collaborative learning. Some researchers note the advantages of using these technologies to create social and educational experiences beyond the classroom. Reigeluth (1994) and Romiszowski and Ravitz (1997) indicated that computer technology had changed the traditional *instructional* model to an information-age *conversational* model of learning where the learner is actively engaged in co-creating meaning and knowledge with peers. Jonassen, Peck, and Willson (1999) stated that new technologies make individualized learning more powerful and more important in that students participate in

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