

Chapter 3.16

Use of Wikis to Support Collaboration among Online Students

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ABSTRACT

The emergence of Web 2.0 technologies with its emphasis on social networking has presented an opportunity for academic institutions to take advantage of new tools to support educational courses. One of these tools is a Wiki. This chapter discusses the merits and challenges of using a Wiki to support the activities of students during group projects. It shows the importance of student collaboration in online courses by fostering deeper learning, producing higher quality team products, and preparing students for today's collaborative workplace. The chapter focuses on the best practices of faculty from setting up the Wiki at the onset through the final phase of evaluating the group product and the individual contribution of individual team members. It also discusses a number of ways in which Wiki-supported collaborative activities can be introduced into online courses and the criteria for selecting particular Wiki products for an institution.

INTRODUCTION

Since its inception, online education has been a solitary endeavor for students working on course assignments. Their link to classmates distributed around the country and the world has often been limited to discussion forums, a useful but somewhat awkward device for working collaboratively. Online discussion forums by themselves seem a poor substitute for in-residence students working interactively across a table constructing a team response to a group assignment on flip-chart paper. The distinction between collaboration in the classroom and collaboration online has been narrowing with the recent advent of social networking software. The purpose of this chapter is to show how one of these social networking software applications – a *wiki* – can be introduced into an online course in order to better support collaboration among geographically dispersed students. More specifically, its objective is to enable faculty and administrators to understand how student collaboration can facilitate deep learning into an online course and to decide if and how a wiki can support collaboration among distributed students.

DOI: 10.4018/978-1-60566-729-4.ch007

BACKGROUND

Why Student Collaboration?

Some, maybe even many, students express an intense dislike for working collaboratively on class assignments, especially in online courses (Payne and Monk-Turner, 2006). “It takes more time than doing it alone” they say, and they loathe having to make up for the burden of *slackers* on the team. “It is just not fair” they claim “that we all get the same grade even though our individual contributions are quite unequal.” In spite of these misgivings, several good reasons exist for requiring collaboration among students in online classes. In fact, in graduate-level education, collaborative activities appear virtually required.

First and foremost, collaborative activities tend to foster *deep* learning. That is, the drive towards the consensus necessary to produce a single collective response to the group assignment demands multifaceted exploration and interaction among students. According to Warren Houghton,

...deep learning involves the critical analysis of new ideas, linking them to already known concepts and principles, and leads to understanding and long-term retention of concepts so that they can be used for problem solving in unfamiliar contexts. Deep learning promotes understanding and application for life. In contrast, surface learning is the tacit acceptance of information and memorization as isolated and unlinked facts. It leads to superficial retention of material for examinations and does not promote understanding or long-term retention of knowledge and information. (Houghton, 2004, p.9)

Experience suggests that superficial and uncritical acceptance of information does not typically occur in a group activity. New ideas are challenged for their underlying meanings and are perhaps modified to fit better into the cognitive structure of collective understandings. The dialog

in group activities aids students in investigating the underlying causal factors explaining phenomena rather than merely reporting the surface issues of who did what to whom. It should be noted that deep learning does not automatically happen merely when students are assigned to groups (Johnson, Johnson, and Rogers, 1998, p.31). A study by Vaughan (2008) determined that collaborative tools support deep approaches to learning “... only when the teaching strategies and assignments for a course are intentionally designed to facilitate and assess peer collaboration and self-reflection” (p.2863). Moreover, the students must be motivated both internally and externally to want more than just a passing grade from the course and to have access to a well structured base of knowledge related to the assignment. With these tenets of effective course design in place, the components of “activity” and especially “interactivity” with peers inherent in collaborative group assignments greatly facilitate deep learning.

A second benefit for collaboration among students online is that the group response to the assignment is usually better than any of the individual student responses. Collaboration taps into the notion of the “Wisdom of Crowds.” According to James Surowiecki (2004), for certain types of problems, the solution posed by a group of reasonably informed and engaged people is almost invariably better than any single expert’s answer. Think back to the *Who Wants to be a Millionaire* game show that was so popular on television several years ago. When the contestant was stymied by a question, he or she could call on any of three lifelines – reducing the four choices to just two, calling on an expert by telephone, or asking for a poll of the audience. The first lifeline tends to produce the correct answer fifty percent of the time (sort of a flip of the coin); the expert provided the correct answer a respectable two-thirds of the time; while the majority response of the audience – composed of a variety of people with diverse knowledge on the topic – was correct over ninety percent of the time. Of course, groups

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