Chapter 9

Using the Four Lenses of Critical Reflection to Promote Collaboration and Support Creative Adaptations of Web 2.0 Tools in an Online Environment

Katia González-Acvaro
Wagner College, USA

Stephen Preskill
Wagner College, USA

ABSTRACT

This chapter offers an in-depth narrative of how one instructor in an online environment used the four lenses of critical reflection introduced by Brookfield (1995) – (1) self, (2) student reactions, (3) colleagues’ perceptions, and (4) instructional theory – to adapt the use of Web 2.0 tools that have been found to be effective in promoting collaboration and constructivist learning. These tools can provide educators with the opportunity to examine collaboration and learning from multiple perspectives, while also serving as a way to rethink preconceived notions of how power is distributed in the classroom (Brookfield, 1995). In this chapter the authors share how the four lenses were used to design Web 2.0 activities based on the specific grouping techniques, with the aim to construct a rich online experience.

INTRODUCTION

The use of a theoretical framework in the development and implementation of learning activities for adult learners in a variety of classroom settings is not new. Concepts such as helping students become critical thinkers, collaborators, reflective practitioners are often mentioned in the literature (Brookfield, 1987; Mezirow, 1991) as essential for instructors to consider when thinking about instructional methods and materials that will increase students’ opportunities to be “producers of knowledge” (Scardamalia & Bereiter, 2003, p.1307) and not just passive learners.

DOI: 10.4018/978-1-61692-898-8.ch009
The challenge becomes how to “get students on that trajectory… in which knowledge is socially constructed, and best supported through collaborations designed so that participants share knowledge and tackle projects that incorporate features of adult teamwork, real world content, and the use of varied information sources” (Scardamalia & Bereiter 2003,p. 1370).

Over ten years ago, Jonassen (1996) introduced the idea that computer applications should be seen as powerful “Mindtools” that can help learners become skilled at “scaffold[ing] different forms of reasoning about content” (Jonassen, Carr, & Yueh, 1998, p.24). Jonassen, et al. (1998) argued that by reframing computer technologies as Mindtools that represent a “constructivist view of technology,” learners can become actively engaged in “interpreting the external world and reflecting on their interpretations” (p. 28). More recently, Jonassen, Howland, Marra, and Crismond (2008) explained that by seeing knowledge building as a social enterprise in which learners utilize instructional technologies as collaborative “construction tools,” learners are then able to increase shared knowledge that takes full advantage of the multiple perspectives found in any diverse group. Getting learners to engage in shared knowledge in an online learning environment can often be a challenge. Yet without such engagement the education of learners is frequently shortchanged. As Brookfield and Preskill (2005) have noted, “without broad participation, students do not get the practice in expressing their ideas cogently, and the group lacks the diversity of opinions it needs” (p. 234). Building on this literature, the present chapter tells the story of one instructor’s efforts to employ Brookfield’s 4 critical lenses to better harness the power of Web 2.0 tools with her students and promote the sort of rich, collaborative class participation that can result in deeper, more meaningful learning. Drawing on data culled from instructor self-reflection, student feedback, peer dialogue, and scholarly literature, an online community emerged that students experienced as not only broadly participatory, but also both intellectually engaging and productively collaborative.

**BACKGROUND**

National trends indicate that distance-learning courses in higher education are rapidly proliferating (NCES, 2008). The increasing availability of information technology coupled with the various needs of traditional and non-traditional students are shaping the extent to which credit and non-credit distance learning courses are viable options (Lim, Kim, Chen, & Ryder, 2008). Definitions of what constitutes distance learning have also evolved. According to a report by NCES (2008) distance education is “…defined as a formal education process in which the student and instructor are not in the same place. Thus, instruction may be synchronous or asynchronous, and it may involve communication through the use of video, audio, or computer technologies, or by correspondence (which may include both written correspondence and the use of technology such as CD-ROM)” (p.1).

Faculty interested in incorporating distance learning opportunities into their classes are often challenged by limited knowledge of software usage and technical requirements, as well as lack of opportunities to clearly establish a connection between learning goals, and technological environments and tools utilized (Notar, Wilson, & Montgomery, 2005). The difficulties inherent in learning about the tools can often hinder the inclusion of best instructional practices and limit the development of materials that can foster critical thinking skills and classroom discourse and collaboration.

Jonassen (2006) explained how “concepts are the basis for meaning making and communication”…and how “communicating without concepts is impossible” (p. 177). But he also described how research on instructional technology has often focused on the attainment of these...