Chapter 19

Knowledge Acquisition in a Hybrid Graduate Teacher Training Program

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ABSTRACT

How can one leverage the technological benefits of an online classroom without losing both the interpersonal advantages of face-to-face contact and pedagogically sound classroom management techniques? A blended learning environment, combining both traditional face-to-face and online interaction, is a valid higher-education solution that many instructors are adopting in place of 100% online teaching environments. Like total online courses, blended courses offer students the convenience of online access to both lecture/course materials and asynchronous classroom discussions. However, the key feature of a blended learning environment is the ability to use traditional face-to-face sessions to foster and stimulate an online social culture that facilitates knowledge acquisition through interpersonal and group discussion and disclosure. This study examines pedagogical, social and demographic factors that contribute to students’ knowledge acquisition in an 80-20 (80% online and 20% in-class) blended learning environment.

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KNOWLEDGE ACQUISITION THROUGH ONGOING DISCOURSE

Knowledge acquisition is not a stand-alone entity but, rather, is constructed over time through social engagements and ongoing discourses within cultural contexts and value systems. Based on assumptions of the social constructivism theory, an individual acquires knowledge only through his or her engaged social activities. When members of a community get together and interpret a world as their shared world, they form a set of beliefs and culture, and, over time, knowledge about their world. In this social negotiation process or a “zone of proximal development (ZPD),” students contribute to and learn from each other’s pragmatic knowledge while adjusting to a group consensus on a topic (Kim, B., 2001, Vygotsky, 1978).
In a traditional, face-to-face, classroom, communication and human connections are great assets for knowledge acquisition and the construction of the learning community. Exchanges between teachers and students and among students happen spontaneously. Teachers can recognize non-verbal cues and are able to motivate each student on an individual basis. These connections are necessary for students and teachers to share values, ideas, and goals. When a course moves online, communication dynamics are altered. Non-verbal communication cues disappear and, since students converse asynchronously, spontaneous interaction is impossible. However, taking into consideration that online education allows students opportunities to learn independently – from anywhere at any time – and to construct and acquire learning at their own pace, online education provides many advantages for students beyond the classroom walls (Coates & Humphreys, 2001).

In designing an online instruction, educators relied on brain research looking at how complex and interconnected the brain is and how the mind constructs meaning. Because the brain seeks meaning through different patterns, instructions should be designed with the process of reflective inquiry that allows students to connect problems directly to their lives (Gibson & McKay, 1999). Since learning is influenced not only by new information but also by emotions and personal biases, “the need for social interaction… is somewhat like the weather. (It is) ongoing and the emotional impact of any lesson or life experience may continue to reverberate long after the specific event.” (Caine and Canine, 1991, p. 82)

In teacher training programs, it is particularly crucial for teacher candidates to understand and be able to share their personal emotions and biases in group discussions. Candidates must be able to justify their thoughts through spontaneous interactions and feedback in a traditional face-to-face classroom. Over a period of time, candidates are hoped to alter or form their new sets of values in responding to diverse learners. This traditional model has worked for full time students who can form their own study groups beyond class time. Unfortunately, in graduate teacher education programs in the United States, many teacher candidates are already teaching in schools but required to take courses for teaching certification. Taking into consideration of their limited time, can a blended learning environment still provide candidates a place where they can share their personal emotion, values and beliefs?

THE 80-20 BLENDED LEARNING ENVIRONMENT

The 80-20 Blended Learning Environment Model was developed in the early 1990s by Rensselaer Polytechnic Institute’s Anderson Center for Innovation in Undergraduate Education in response to the lack of interaction in distance learning for corporate training courses. This model allows students to spend 80 percent of their time to engage with online materials at their pace and 20 percent to interact synchronously with the instructor and other students (Lister, et. al, 1999). The 80-20 model attempted to build its format on social activities that would capture all the benefits of interactive online tools for students to construct their own knowledge through discourses that would mimic hands-on activities in a face-to-face classroom (Wilson and Mosher, 1994). In examining student perceptions, Black (2001) found that students preferred and were more satisfied with hybrid courses than either online-only or classroom-only courses, especially when the students’ level of computer expertise increased. When an online classroom is blended into a face-to-face classroom, a higher achievement rate is realized in comparison with similar face-to-face or fully online courses (Dziuban and Moskal, 2001).

In designing a blended learning environment, instructors assumingly must plan their courses differently than for either a traditional or 100%