Chapter 4
Virtual Tutor Training:
Learning to Teach in a Multi-User Virtual Environment

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ABSTRACT

In this study, the experiences and beliefs of volunteer tutors using a multi-user virtual environment to teach literacy instruction are examined to get a better understanding of the benefits and challenges of learning within this environment. Literacy tutors who were teaching adults with poor reading skills served as participants. During the study, participants delivered direct instruction reading lessons to researchers in Second Life and adult learners during live face-to-face tutoring sessions. Immediately following each session in Second Life, tutors were provided with corrective feedback on specific teaching behaviors. Data on rate of acquisition and generalization from the virtual environment to the natural environment was collected for each participant. At the conclusion of the study, tutors were asked to describe their experiences of learning to teach in a multi-user virtual environment. Results indicate that effective teaching behaviors trained in a virtual environment generalize to face-to-face instruction. However, tutors tended to disagree with the researchers’ perceptions of what constitutes effective teaching practices.

INTRODUCTION

Providing realistic, hands-on practice opportunities has long been a major challenge for special education training programs (The Holmes Group, 1986; Ysseldyke, Dawson, Lehr, Reschly, Reynolds, & Telzrow, 1997). For teacher trainers, it can often be difficult to ensure that all pre-service, special education teachers will have sufficient opportunities to practice effective teaching skills within the context of scheduled field-based experiences. Worthy (2005) remarks that beginning teachers are expected to instruct and manage a full contingent of students from the first day on the job. She goes on to note that, “teacher education programs are often blamed for the fact that many teachers are unprepared for their roles” (Worthy, 2005, p. 380). Given the complexity of teachers’
roles, organizing field placements to adequately demonstrate curriculum development, appropriate instructional techniques, and effective classroom management can be challenging.

Feiman-Nemser (2001) adds support to these claims, stating that, in addition to their classroom responsibilities, new teachers must also learn how to teach. Although one would be hard-pressed to find a teacher education program that did not incorporate some kind of practica or student teaching requirement, it appears these field-based experiences are insufficient to equip first-year teachers with the necessary skills to effectively manage their classrooms (Connelly & Graham, 2009; Keigher, 2010). One reason for this may be that certain teaching behaviors can only be shaped on a per-opportunity basis. For instance, correcting student errors can only happen as often as a student provides an incorrect response. Thus, the limited amount of time that pre-service teachers spend in the classroom may not be enough to build some of these skills into their repertoire. Simulated role-play activities can be a useful vehicle for developing certain research-based teaching practices prior to entering the classroom (Werts, Mamlin, & Pogoloff, 2002).

**Multi-User Virtual Environments**

Practicing effective teaching in a multi-user virtual environment (MUVE) such as Second Life, River City, or ActiveWorlds may hold promise for participants in distance special education teacher training programs. This is particularly true for those from rural and remote areas who tend to encounter additional barriers to traditional classroom instruction, such as lengthy commutes, parking challenges, travel costs, poor road and weather conditions, lack of child-care, and time constraints (Koch, 2007; The Chronicle Review, 2006).

MUVEs are interactive computer simulations, in which features of the environment are represented by computer graphics (Blaisdell, 2006). MUVE simulations can range from the reality-based small town environment of Anytown (Warren, Stein, Dondlinger, & Barab, 2009) to the some of the fantasy-based settings of Quest Atlantis (Warren, Dondlinger, & Barab, 2008). These online virtual worlds provide a desktop platform for interacting with others. Participants in Second Life create avatars that become virtual manifestations of themselves (Messinger, Ge, Stroulia, Lyons, Smirnov, & Bone, 2008; Baylor, 2001; Kim & Baylor, 2008). Within Second Life, avatars can engage in a full range of activities including interacting with other avatars, constructing buildings, and assuming various jobs.

Originally developed for recreational use, more than 150 colleges and universities worldwide now use Second Life to offer virtual educational experiences (Foster, 2007). Sometimes, these experiences are limited to orientation uses, such as San Jose State University’s virtual reproduction of their campus, or as a virtual meeting space for users who are geographically removed. The adaptability of MUVEs also allows them to be transformed into authentic learning environments, replicating the stresses and demands of an actual classroom. However, the extent to which MUVEs are effective tools for training teachers - including the properties and values they afford as a teaching and learning tool - has yet to be fully evaluated.

**LITERATURE REVIEW**

To get a better idea of how multi-user virtual environments can be used to structure authentic student learning, the current literature on educational uses of MUVEs was reviewed. While the literature covers a broad range of topics related to the application of MUVEs in education, three common themes were found: user engagement, transfer of training, and scaffolding of instruction.