Moving from Acquisition to Integration: Refocusing the Lens on Technology in Teacher Education

A. Context/Motivation

Teacher education programs are faced with increasing demands from the public and from accreditation bodies to document the integration of technology into teacher preparation curriculum. In addition, some K-12 schools, both public and private, are beginning to offer their students alternatives to “traditional instruction.” Online instruction is becoming more popular with each passing school year, and promises to become a means by which the needs of some individual students may be met in a cost-effective manner. In addition, these students, born after 1982 (called “millennial”), are technology-savvy and accustomed to utilizing technology from birth.

Despite student and parental interest in opportunities for online learning and technology usage, most teachers are unfamiliar with the advantages and potential pitfalls of many of the currently available technologies (iPods, PDA’s, online instruction), and most have had no experience with the technology required for the effective development and delivery of technology-enhanced or technology-based instruction. Few, if any, teacher education preparation programs include coursework or experiences for their candidates related to online teaching dispositions and/or skills or true technology integration into the instructional planning process.

B. Relevant professional literature

Technology is not new to education. Throughout the past century, the introduction of television, tape recorders, movie projectors, and other “technology” were heralded as potentially changing teaching and learning forever. They did so; however, they did so without significantly impacting the presentation of information in our classrooms. The Internet and other current technologies have a much greater potential to significantly and permanently impact on learning and instruction in K-16 education. Students born after 1982, often called “millennial” because they began graduating from high school at the turn of the millennium, have never known a world without personal computers. Their expectations for learning are drastically different than those of previous generations.

Referring to these “millennials,” Hardy (2004) indicated that “they and their friends live on the Internet,” “expect to use technology in the classroom and in the workplace,” and “expect us to understand the way they want to receive information—and for us to adapt our methods to meet their needs (p. 45).

Lipscomb (2003) agreed, adding that “although new initiatives have significantly increased the number of ‘wired’ schools across the country, teachers’ practices have remained relatively unchanged. Rather than engaging with the new technology in dynamic classroom settings, students continue to learn in traditional ways and rarely use computers for anything more than word processing and simple research…” (p. 152).

There are few published articles relating to online instruction for K-12 students and the impact of online instruction on what we know about effective pedagogy. Most published articles relate to higher education or having teacher education candidates use technology for electronic portfolios, rather than to the learning of K-12 students.
C. Major Aspects
This presentation will address issues related to what K-12 students are going to have to know and be able to do in the future, and what forms of literacy they will need in order to be multi-literate citizens. The impact on and implications of these student needs for teacher education curricula will be explored. In particular, the discussion will focus on online instruction of K-12 students.

D. Conclusions
If we are to continue to improve teacher education programs, we must be aware of and address advances in technology and the impact of these advances on teacher preparation curricula and assessment. For too long, “integrating technology into teacher education” has been focused on purchasing hardware and/or software for candidate use, rather than on actual applications of technology for new instructional formats, such as online teaching. This lens needs to be refocused.

Session Content (What will be shown/demonstrated?)
1. Skills and dispositions that will be required of future teachers who will be teaching students online.

2. Benefits of online instruction, as related to the opportunity for development of students’ multiple literacy skills

3. Sample online “lessons,” student work, and instructional materials utilized by the presenter in the teaching of an online middle school language arts course for public school students that was coupled with a graduate-level literacy education methods course

References