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TECHNOLOGY IN CLASSROOM PLACEMENTS

Attitudes of Preservice Teachers
and Their Use of Technology
in Classroom Placements

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Abstract

This study attempted to understand the attitudes of preservice teachers toward technology integration at a major southeastern college as they finished their classroom placements. Technology is becoming more important with the realization that students must be taught how to use the technology to succeed in the global community. More computers are being put into school computer labs and classes. More money is being spent to network schools and to ensure that schools are “wired” for the Internet. More and more money is being earmarked for all areas of technology.

With all this attention and money being given to technology, there is still a major roadblock to the full integration of technology into classroom teaching: teachers are not using the technology available. Many preservice teachers, as well as inservice teachers are still not using technology. *It was hoped that the study would show that the attitude a preservice teacher had before entering the classroom placement had a significant impact on the use of technology, as did the attitude of the cooperating teacher and the current use of technology at the school.*

Attitudes of Preservice Teachers and The Use of Technology in Classroom Placements

The use of computers by individuals has drastically increased over the past twenty years. In a study conducted in 1996-97 of junior and senior students enrolled in a teacher-training program, 56% of the students reported having a computer at home (Abbott, 2000). In a similar survey completed in 2001, 97% of the students reported having at least one computer at home (Charp, 2002). Nearly every student entering universities and colleges now either own a computer or have been exposed enough to technology to have the basic skills required to function with simple word processing, email and Internet browsing. Some universities have even moved to issuing laptops to all incoming freshmen, and networking campus dormitories and student areas to allow for students to connect to the university intranet (e.g., Acadia University, Nova Scotia, Canada). However, many studies seem to say the same thing: teachers are still not integrating technology anymore today than they were 20 years ago when the technology band wagon first left the starting gate.

Attitudes of teachers toward using technology

Preservice teachers see technology as important only if their teacher-training institute has placed value on integrating technology. Yildirim points out that education majors who become teachers report that they hesitate to use technology and do not feel prepared to integrate technology into their instruction (p.480). Ropp further notes that even those preservice teachers who demonstrate proficiency integrating technology

will not do so if they do not believe that technology has a use in their classroom (p.403).

Electronic School (June 2001) reported findings of a Netday.org survey that expressed concerns that the majority of teachers say the World Wide Web has not changed the way they teach. Teachers still primarily see the Internet as a research tool. 78% of teachers stated that a lack of time prevents them from logging on. 73% stated that there was no pressure from administration to use technology and 50% reported that the lack of equipment and technical support hindered their use of technology (p.10). “The Internet is revolutionizing all parts of society, but its impact on education is just beginning to be understood” – Sen. Bob Kerry (Electronic School March 2001, p.4).

Abbott (2000) reported similar concerns that preservice teachers were uncomfortable with using technology prior to completing preservice literacy training in integrating technology. This study also reported that, following a semester-long literacy course, which required extensive use of technology preservice teachers demonstrated a statistically significant shift toward a more positive attitude toward using technology (p.156).

A major stumbling block for preservice teachers attempting to use technology in their classroom placements, and thereby gaining necessary hands-on development of this expertise, is the willingness and ability of the cooperating teacher to use technology. Even cooperating teachers who personally embrace technology may not actually be using it in their classroom. As Scott and Hannafin (2000), point out:

Teachers face many outside pressures each day that may prohibit, or at least discourage, fully embracing new methods of instruction. For

example, even with encouragement from administrators to consider alternative teaching methods, *teachers*, particularly those in higher grades, are still expected to prepare students to meet objectives of standardized achievement tests, to teach a certain amount of content to students to meet state or school curriculum guidelines or both. The cumulative effect of these external pressures surely affects the degree to which *teachers* adopt nontraditional teaching styles. Further, these other ongoing pressures may limit the likelihood that *teachers* may integrate technology into their curriculum. (p.411)

One would be led to conclude, if cooperating teachers are facing such pressures that limit their own use of technology, it will be even more discouraging for preservice teachers working under the same conditions.

Preservice learning needs and teacher's attitudes

Soner Yildirim (2000) points out that there is a large body of literature supporting “the idea that the biggest obstacle to teachers using technology in their classrooms is the lack of adequate teacher training” (p. 480). Too many teachers are graduating from education schools not knowing how to integrate technology into their classrooms. A large percentage of them report feeling ill prepared to use technologies in curriculum rich ways. Data from Education Week’s *Technology Counts 99* agree that teachers are not making widespread use of their networks. Most teachers say they are not well prepared to use new technologies.

However, John Hendrick, chairperson for the CEO Forum on Education and Technology states, “if we are to expect our children to leave school with technology skills and successfully compete in a global economy, then we must ensure their teachers are adequately prepared to integrate technology into the curriculum” (Electronic School, March 2000, p.18). We seem to be at a crossroads of understanding that teachers need to be prepared, however, little preparation is actually taking place.

Among the recommendations promoted by the Web Based Education Committee in their report to the Bush Administration entitled *The Power of the Internet for Learning: Moving from Promise to Practice* “provide continuous and relevant training and provide all learners with Internet resources”.

Electronic School, March 2001, reported findings from the commission that schools spend only 200 per student on technology where private corporations spend 5,500 per worker (p.4). This study also reported that the majority of American teachers receive less than 5 hours of technology related professional development annually and most of that seems to be simple training.

Preservice teachers need significant, relevant and ongoing training in technology, supportive classroom environments and access to adequate technology.

Professional Development Needs of Active Teachers

In trying to ensure that they get through a curriculum filled with basic skills, and having to satisfy a media and public to increase student reading, writing and math skills, teachers and schools find it difficult to also add computer literacy to the already

packed daily schedule. In a study conducted by Ertmer et al (1999) teachers reported that in a number of “cases technology was considered to be additional or supplementary to the existing curriculum” (p.8). Becker (1999) concurs that “computers have played a relatively limited role in schools--primarily, they have been used as a supplementary activity after more necessary work is done or in computer lab settings where students perform a uniform task” (p.362).

A few school districts have recognized the difficulty of getting teachers to use technology effectively and have taken steps to ensure that the money spent on developing technology is also used to get teachers to use the technology available. McCullen (2002) investigated three districts that are implementing successful professional development plans suggests key elements for success. Sustained, in-depth instruction, and accountability are two of the major elements that will help teachers effectively integrate technology. If teachers are not properly trained and are not fully supported by their schools, they will not use the technology. It is also feasible to conclude that if a teacher does not use technology in their own classroom, they are less likely to encourage new teachers or pre service teachers to use technology.

If technology is something that teachers regard as important then they will be more likely to follow through with it (Owens, 2002,p.65). However, Kathleen King (2002), makes an important point that even teachers who recognize the value of technology may still feel uncomfortable using it. “Truly technology skills are highly valued in our global community, and this can be one source of the extra stress teachers experience as they approach the learning of technology” (King, 2002, p.21). If teachers

are feeling stress toward technology they are less likely to use it and less likely to encourage preservice teachers to use it as well.

Inservice teachers only consider technology important if it directly affects them, if there is pressure from administration to use it or if they themselves are already using it. Cooperating teachers need to feel that what they are doing is important and they need to feel comfortable with their own technology skills to be able to pass these skills onto preservice teachers.

Conclusion

With all this realization and understanding of the need for teachers to receive appropriate professional development and for preservice teachers to receive adequate preparation in using technology, there needs to be a significant change in how universities, government agencies and school districts approach the technology issue.

It is vitally important that student in education programs, training to be the teachers of the students of the future, need be specifically trained to effectively use and integrate technology into the regular classroom curriculum and they must be given support by their schools to implement what they have learned once they enter the classroom. As well, it is equally important that all teachers receive constant and consistent support for professional development in order to enthusiastically embrace technology and its integration into the schools of today.

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