TITLE:
Attitudes of Preservice Teachers Towards Infusion of Web-based Technologies

ABSTRACT:
This study examined preservice teacher attitudes towards technology and their self-perceptions of technology skills after creating web sites and multimedia in a general methodology course. A pre–survey was administered to 120 preservice teachers at the beginning of the course and a post-survey will be administered at the end of the course. In each instance, students rate their competencies on a 5-item Likert-type scale using the 41 performance profiles of the NETS for teacher preparation and a 30-item attitude towards technology survey. Results will be available in late November.

NARRATIVE:
This study examined preservice teacher attitudes towards technology and their self-perceptions of technology skills after creating web sites and multimedia in a general methodology course.

Findings from PT3 grant participants and research studies have reported that in order to prepare technology-savvy teachers, technology practices must be modeled and demonstrated by instructors in college classes. Additionally preservice teachers must be trained to use and apply new technologies. This study addresses both of these issues as preservice teachers in an introductory methodology course construct web sites and use multimedia (Microsoft Producer with PowerPoint, Digital Video, and MP’s) to create lesson plans, units, WebQuests, and make research presentations on various topics such as diversity and differentiated learning.

The objectives of this study were to determine if the integration of these technologies into a general methodology course would change the attitudes of preservice teachers and change self-perceptions of their ability to use and integrate technology into the curriculum.

The following questions were asked:
How can technology be modeled and infused into non-technology courses?
What are the issues in implementing technology throughout a teacher education program?
Does the teacher and student use of technology improve the attitudes of preservice teachers towards technology?
Are preservice teachers who are exposed to technology practices more likely to use technology in the future?
Using the NET Standards, how do preservice teachers perceive their technology skills after learning and implementing new technologies in a general methodology course?
This research is significant because our nation is graduating students from teacher education programs who know less about technology than the students that they will teach. This study examines strategies in which preservice teachers learn and integrate new technologies without jeopardizing the integrity of the curriculum in teacher preparation courses.

Preservice teachers are not going to use technology unless they perceive it as valuable and spend time using it. This notion is based on work by Gagne, Bandura, Weiner, Atkinson, and others and is rooted in cognition, goal-setting, and motivation theories.

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A reliability analysis will be conducted on to determine the reliability coefficients of each survey. A paired-samples t-test will be administered for each survey to determine if attitudes and self-perceptions change as a result of the course. Each survey will be analyzed item by item and by an overall average.

In addition to the questions asked (above), the main implication of this study is to determine best practices to help our preservice teachers use and integrate technology in meaningful ways that prepare 21st century learners.

“No Child Let Behind” has a large technology component that requires students to be technology competent. This cannot happen unless we prepare technology competent graduates. Although preliminary results indicate that PT3 institutions are preparing more technology-savvy teachers, the latest data from the National Center for Education Statistics indicates that the majority of new teachers do not feel well-prepared to use technology.

Results of this study will not be available until late November. My expectation is that student attitudes will be more favorable towards the use of technology at the end of the course as indicated by the attitude survey. I am not sure what to expect of the NETS survey since I don’t believe that students can interpret the language of the performance profiles.