

Understanding Pre-Service Teachers' Impressions of Technology's Role in Education

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Background

- Teachers expected to integrate technology in specific ways
 - NETS Standards (ISTE, 2000)
 - Technology competency for teacher licensure (NCLB, 2001; NCATE, 2002)
 - Content standards (NCTM, 2000; NRC, 1996; NCTE, 1996)
- Survey studies on teacher preparation
 - Teachers don't feel prepared (NCES, 1999)
 - Technology is used for drill and practice (Becker, 2001)

Background

- Pre-service teachers learn about technology (Schrum, 1999)
 - Stand-alone technology course
 - Methods courses
 - Field experiences
- Problems that occur
 - Lack of transfer from the technology course
 - Lack of modeling in the methods course
 - Lack of access and support in the field

Research Study

- Purpose
 - To examine preservice teachers' perceptions of technology's role in schools and factors that influence those perceptions
- Design
 - Five interview periods over a two-year period
 - April, 2004 (before entering the program)
 - February, 2005

Participants

- Selected from an Introduction to Computers for Education course
 - 6 Caucasian females
 - Undergraduates in the Early Childhood Program at UGA
 - Expected graduation (May, 2006)

Analysis of Data

- Open coding
- Memoing
- Constant comparison analysis

Findings

- Uncertainty about students using technology
 - "Is it better than markers or manipulatives?"
 - Naïve student-centered approaches
 - Shift from Year 1-2
 - Creating PowerPoint summaries, Internet research
 - Age-appropriate
 - "I want to teach 2nd grade and I haven't learned what levels [of technology] children are able to use..." --Elaine

Findings

- Student uses of technology
 - Internet-based research and games
 - PowerPoint presentations
 - Some value in students using technology
 - "[Technology] is just a different way of learning...you can go find information for yourself or come up with your own ideas and you can capture what you find rather than having the teacher give the information." --Melissa

Findings

- Uncertainty about using technology
 - Still expecting to learn in field experiences
 - "I'm thinking that I'll figure out [how to integrate technology] once I start going to more schools and start getting more experience in schools. Last semester I was only in schools one day a week for an hour, but now I'll be there 5 days a week for 8 hours a day. It will become clearer to me how to use [technology]." --Lucy

Findings

- Uncertainty about using technology
 - Limited modeling in methods courses
 - Little discussion about technology
 - Finding websites, not how to integrate them

Influences on Technology Perceptions

- Pre-college experiences
 - Technology uses in school (Melissa)
 - Technology uses at home (Elaine)
- College experiences
 - Technology course
 - Methods courses
 - Field experiences

Directions of Future Research

- Continue to examine perceptions
 - Do their perceptions of technology shift during the program?
 - What causes these shifts?
- Examine methods courses
 - Is technology being discussed or modeled?
 - In what courses?
 - Perspectives of preservice teachers and faculty

Directions of Future Research

- Examine field experiences
 - Are preservice teachers able to integrate technology into their teaching?
 - What is the access to technology like?
 - What kind of support is offered by the classroom teacher?
- Individual case examinations

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