

Title: Infusing Technology Into Teacher Preparation: An Interim Report  
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## PT3, Technology and Teacher Preparation

### Introduction

This report will present the results of the first year of a three-year PT3 grant supported project designed to enhance teaching and learning through the use of technology in a teacher education program and regional consortium. The consortium is composed of three colleges within the university, Professional Development schools (PDS) in three local school systems and a local community college.

Many educational organizations including ISTE, NCATE, and discipline related associations recommend the use and infusion of technology within teacher preparation programs. The Department of Education's Preparing Tomorrow's Teachers to Use Technology (PT3) Grant program addresses this issue. The PT3 grant program asserts that although nearly all elementary and secondary schools are "wired" to the Internet, most teachers still feel uncomfortable using technology in their teaching. The purpose of the PT3 grant program is to support organizational change in teacher education programs so that future teachers (i.e. pre-service teachers) are able to use interactive information and communication technologies for improved learning and achievement. Since 1999, the \$337.5 million program has awarded 441 grants.

Within the consortium the strategy for infusing technology into teaching and learning is a faculty-to-faculty mentor-protégé staff development model combined with on-going electronic communications for the purpose of modeling effective uses of technology integration in the classroom to pre-service teachers. The key elements of this model are (a) the on-going work and assistance of a mentor to help each faculty protégé integrate technology into their teaching, (b) a supportive environment for collaboration and learning for each protégé, (c) a requirement that all faculty involved as protégés were to use technology in their teaching with a focus on student learning, and, (d) clear and specific rewards for integrating technology into teaching. In addition, an electronic learning community (ELC) was established to enable on-going discussion among the consortium partners. The online collaborative workspace provided a vehicle for on-going digital communications, reflection and networking opportunities that encouraged communication and intellectual inquiry among university faculty and teachers in the Professional Development Schools.

The degree of attainment of the following goals is the focus of this report;

GOAL I. Assist University faculty who teach required courses for pre-service teachers to become proficient users of technology and to incorporate applications of technology into the classroom.

Goal II: Infuse the use of technology in a range of teacher education courses.

Goal III: Prepare pre-service teachers to use and teach with technologies

## Sample and Data Collection Procedures

After applications from prospective mentors and protégés were reviewed; 23 mentor/protégé pairs were selected (12 higher education pairs and 11 PDS pairs). All selected participants received a stipend. Payment of the stipend to participants was contingent upon completion of their project and submission the required data collection forms and reports. The major forms included a 50-item pre and post survey of information technology skills and attitudes, logs of mentor/protégé meetings, two classroom observation checklists, end-of-year participant evaluation of the overall PT3 grant and an end-of-year structured reflective essay.

## Results and Conclusions

All protégés reported significant growth in their basic information technology skills, as well their ability to use these skills to enhance their teaching. Many reported actual or planned changes in course syllabi or lesson plans. They also reported a high level of satisfaction with the overall project. The mentors reported similar results, albeit at a less positive level. A reported total of 860 pre-service teachers in various classes were exposed to effective uses of technology in the classroom. This number must be viewed with caution since it is likely that some students were enrolled in more than one class connected with this project

The first-year results provide strong evidence that mentor/protégé strategy can effectively infuse information technology skills into classroom teaching. An issue that needs to be studied is the long term effects of this project.

## References

Abdal-Haqq I. Infusing Technology into Pre-service Teacher Education. ERIC Digest. ERIC Clearinghouse on Teaching and Teacher Education, Washington, DC, 1995. ED389699. Accessed 6/20/02 [http://www.ed.gov/databases/ERIC\\_Digests/ed389699.html](http://www.ed.gov/databases/ERIC_Digests/ed389699.html)

Anderson RE, Dexter SL. Teaching, Learning and Computing: 1998 National Survey Report 6. Center for Research on Information Technology and Organizations, University of California at Irvine and University of Minnesota, December 2000.

Cradler J. Implementing Technology in Education: Recent Findings from Research and Evaluation Studies. Accessed 12/4/2000. <http://www.wested.org/techpolicy/recaapproach.html>

National Educational Technology Standards (NETS Project. Accessed 7/12/02. <http://cnets.iste.org/index.html>

Preparing Tomorrow's Teachers to Use Technology. U.S. Department of Education. Office of Postsecondary Education, Washington, DC. 20006-8526. [Teacher.Technology@ed.gov](mailto:Teacher.Technology@ed.gov)

Technology and the New Professional Teacher: Preparing for the 21st Century Classroom. Task Force on Technology and Teacher Education, NCATE, 1997. Accessed 4/18/02. <http://www.ncate.org/accred/projects/tech/tech-21.htm>