**Purdue University School of Education
P3T3 Project: Year Three Evaluation Report**

by

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Report of the External Evaluation Team
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Introduction

Purdue University's School of Education is in the third year of its U.S. Department of Education funded P3T3 grant. Directed by Professor James D. Lehman the Purdue Program for Preparing Tomorrow's Teachers to use Technology (P3T3) has two major goals:

(1) to prepare teacher education faculty in Education, Science and Liberal Arts to teach pre-service teachers in technology-rich environments, modeling approaches that future teachers should use themselves; and
(2) to prepare pre-service teachers to demonstrate fundamental technology competencies, to use technology as a tool for teaching/learning, personal productivity, and communication, and to reflect on their teaching.

To meet these goals three mutually supportive activities were developed. These are:

(1) faculty take part in a comprehensive faculty development program in which they learn new teaching/learning technologies and practice these new skills with mentoring and technical support in their teacher education courses,
(2) pre-service teachers participate in rich and diverse field experiences enabled and enhanced by the use of technology; and
(3) a technology-enhanced assessment system (digital multimedia portfolio) provides the pre-service teacher and the teacher education professor the tools to select multiple ways of viewing their evolving teacher practice, to reflect on that practice, and to use digital representations to meet performance-based assessments.

This third visit took place on April 28-30, 2003, and represents the final visit for the team. During this visit the team met with faculty, staff, and students, and viewed a 30 minute video from the PT3 NOW series.

General Observations

It is the conclusion of the review team that the P3T3 project has made substantial progress towards meeting the major goals of the project. Members were impressed with the progress since the 2001 site visit and the continued commitment to the project by faculty and staff. This progress has taken place during a two year period in which the college was without a dean and at least one

faculty member who participated in core activities left the college. Support also remains strong from central administration and the college has received funding to hire two new positions, an electronic portfolio coordinator and a teacher education assessment coordinator. Both should provide important contributions to the teacher education program and the goals of P3T3.

P3T3 has continued to provide a variety of a technology-related activities for faculty, staff, students, and PK-12 teachers. During the past year over 200 teachers were involved in technology workshops on campus, nine start-up workshops were provided for faculty. Ninety-five percent of the School of Education faculty have participated in technology workshops and 14 faculty from outside the School have also participated. Faculty continue to take advantage of P3T3 mini-grants and to infuse technology into their courses. Data collected by the project evaluator documents this continues progress toward P3T3 goals.

The review team believes that the P3T3 grant has developed an exemplary electronic portfolio to support its teacher education program. Moreover, we find convincing evidence that the project has established a faculty development model that should enable the college to continue to meet the needs of faculty. Further, the project has implemented a model for linking with distant PK-12 schools that has the potential for emulation in all teacher education programs. These conclusions are based on our analysis of project material, data collected during our interviews with faculty, staff, and students, and review of a videotape produced by PT3NOW by WHRO public television of Norfolk, Virginia. More detail for these conclusions are presented below.

Project Objectives: Assessment of Progress

The School of Education has been in the process of renewing its teacher education program. The core program, the curriculum and field placements structure, have been completed and students are matriculating through the program. The P3T3 grant seeks to integrate technology into this emerging program by providing in-service for faculty, staff, and PK-12 teachers, creating an electronic portfolio to document and monitor student progress, and to expand the opportunities for students to work with a more diverse student population.

<u>Faculty, staff, and teacher development</u>: The continuation of workshops for faculty is yielding excellent results. Faculty surveyed in the 2003 survey were overwhelmingly positive in their assessment of start-up workshops and skills workshops (P3T3 Spring 2003 Survey Results, p. 7). Faculty now regard themselves as being proficient in their general computer knowledge, E-mail use, word processing, and the Internet. Eighty-five percent of those surveyed indicated that they have refined the use of technology in their classes as a result of faculty development efforts. While there is still a small number of faculty who may be reluctant, the number is smaller than in the past. The hiring of new faculty has also brought new skills, energy, and ideas into the School.

Evidence of increased faculty use of technology is also found in the data from student surveys in which they were asked about the proficiency of their professors to use technology. Whereas in 2002 students believed that the faculty lacked technology skills, those in 2003 rated faculty proficient in using E-mail, word processing, and presentation software.

Another critical activity by P3T3 has been the mini-grants provided to faculty who seek to integrate technology into their classes. These grants, usually less than $1000, provide faculty with technical assistance and some specialized equipment for a particular class project. Projects include ways to integrate technology into web sites for project-based learning to utilizing digital pictures of an inquiry lesson based on the use of lab probes. Both neophyte and experienced faculty have benefited from these small grants.

Key to the success of the faculty development efforts is the ability to have specialized support (a technical person who was often a graduate student) to answer project-related questions on an as-needed basis. Having this support enabled the individual faculty member to enhance personal skills and yet have assistance when needed.

The review members strongly encourage the School to continue to provide such grants to faculty. The payoff in faculty interest, integration of technology into course work, and potential for research far outstrips the relatively small amount of money involved. We believe that some technical support is critical if faculty are to continue to grow and explore interesting teaching and learning issues. In fact, it is through issues surrounding teaching and learning that faculty will be interested in technology.

In the coming year, the P3T3 staff will need to be attentive to the following issues: (1) faculty development related to preparing faculty for Gate C (final major program area) of the new program; (2) seeking out faculty who can extend current models and/or research critical issues; and (3) providing appropriate in-service for new graduate students as they enter their graduate studies in order to maintain a high level of programmatic and technical support.

Providing a Diverse Learning Experience Utilizing Technology P3T3 is exploring the use of interactive technology to link the Lafayette campus with an elementary school in East Chicago, Illinois. Last year's site visit demonstrated the potential. This year a more detailed distance field experience schedule has been put into practice involving the East Chicago site and another in Crawfordsville, Indiana. Additional faculty are also involved. Professors Mark Balschweid, Paul Miller, JoAnn Phillion, and Terry Wood have involved students in distance learning experiences.

The work in East Chicago has been documented in a PT3NOW video produced by PBS station WHRO, Norfolk, Virginia. The video documents the work of Professor JoAnn Phillion and and East Chicago teacher Ms. Sue Gombus. The

video is available nationally and should provide excellent publicity for the P3T3 project.

<u>Electronic Portfolio</u> The e-portfolio, teacher education's response to the demand for evidence of teacher effectiveness is the center piece of the School's system to document student performance in the certification program. The 2003 version has been revised and should emerge as an effective monitoring system for teacher education program. For example, the INTASC principles have been incorporated and a "course coordinator" can monitor individual student progress across all course sections. The system will be tested more fully when students move into their semester of studies.

Project Objectives: Additional Questions to Consider

While reviewing the work associated with each of the core objectives, a number of questions were raised by the review team. The questions presented below are provided as a stimulus for further thinking as the P3T3 project continues its work.

<u>Faculty and Staff Development</u> It is evident that the faculty workshops have been successful. It is also clear that technical support for individual faculty and the distance learning experiences is critical. Therefore, as the project looks to the future the following questions are worth considering: (1) How will new faculty be brought up-to-speed with the use of technology in the program and for participation in the distance learning efforts? (2) How can the individual technical support be maintained? (3) What specific roles will the new electronic portfolio coordinator and teacher education assessment coordinator play in faculty development? (4) Given that funds to pay faculty to attend workshops and to incorporate technologies into their classrooms will be sharply reduced, what strategies can be used to ensure that faculty continue to utilize emerging technologies? (5) Given that use of technology is also related to personal beliefs about teaching and learning, what strategies are being developed to have faculty engage in discussions about these philosophical issues? (6) What specific research projects are needed to substantiate the impact of technology on faculty performance and student learning? And, (7) how best can the P3T3 faculty development model be used in the emerging Teaching and Learning Center that will be established for the University?

<u>Providing a Diverse Learning Experience Utilizing Technology</u> The P3T3 model provides a very interesting and potentially powerful tool for linking a campus to a school site. There are, however, a number of questions for future consideration. These include: (1) What is the impact of such an experience on student teacher attitudes toward the children in these classroom? (2) Is the payoff (learning of effective pedagogical skills) for teacher education students worth the time and effort needed to connect the two classrooms? (3) How long can the classroom teacher sustain her participation? (4) What is the balance between face-to-face interactions between student teachers and elementary students and distance

learning experiences? (5) Can this one-classroom model extended to other sections in the teacher education program? And, (6) how can students in the public school benefit more from the interaction with the university students?

In addition to these questions, P3T3 staff may want to explore issues related to how this technology can be utilized to link partner schools for continuing professional education and for follow-up with their graduates.

Electronic Portfolio E-portfolios may be the logical transition of the paper portfolio; however, they are not with a number of critical issues. The review team recommends the P3T3 staff continue to discuss the following: (1) How will the program insure that all teaching faculty have a uniform understanding of the meaning of "artifact", "standards", and "rubrics"? (2) How will the program insure that there is uniformity across the various sections of a particular course? (3) Is the portfolio documenting student teacher impact on student learning? (4) Is the current method of classifying a document as a "model" artifact appropriate? (5) What plans can be developed to anticipate the impact of emerging technologies such a digital pictures and digital video will have on the portfolio system? And (6) How are enrollment policies impacting the program and the portfolio system?

Looking to the Future

The P3T3 project has made significant progress toward meeting the project goals. However, the long term value of the project will be whether or not the efforts made during the last three years become institutionalized and the program continues to infuse effective use of technology into its programs and its graduates are able use technology effectively have an impact on student learning. As the project staff and faculty look to the future, we recommend that the project ...

- keep in the forefront of their thinking and planning the core goals of improving teacher education and the performance of its graduates.
- seek out faculty and graduate students who can extend the models and demonstrate impact.
- additional sources of support be sought out. For example, can resources be secured from 4-H, the Gates Foundation, and other extension activities?
- develop a major report in which all the work completed to date be presented in a readable fashion.
- collect data from public school building administrators and central office personnel about the partnerships and the video links.

The School of Education is entering into a new era. A new dean has joined the faculty. The renewal of the teacher education program is complete. Support from central administration appears to be strong. A new Teaching and Learning center is being developed and provides an opportunity for the School to take a University-wide leadership role. And, the P3T3 grant has provided substantial leadership in the renewal process. The future looks positive for the School.