

P3T3 Spring 2003 Survey Results

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Methodology

A web-based survey was administered to faculty and students in the School of Education at Purdue in March 2003. One survey was specific to faculty and another was specific to students. The surveys used were almost identical to the ones used in the spring of 2002. The only differences were the addition of a couple of questions concerning the e-portfolio. The faculty in the School of Education and affiliated faculty in the Schools of Science and Liberal Arts were e-mailed the URL of the survey and asked to respond to the survey before spring break (March 14, 2003). After a few reminders a total of 40 faculty members completed the survey. This was consistent with the 39 responses in 2002.

The Spring 2003 P3T3 Student survey was also a web-based survey. A stratified random sample of 20 classes was selected. The instructors of these classes were asked to announce the survey and the survey's web address to their classes and encourage the students to respond to the survey. A total of 228 undergraduate students completed the survey. This was down by 20% from the previous year, but the demographics of those responding in both years remained fairly consistent.

Demographics

Faculty

The faculty represented the following schools:

School of Education 88% (35)

School of Liberal Arts 15% (6)

School of Science 2% (1)

Another School 2% (1)

(The percentages are greater than 100 because a few faculty represent more than one school.)

Faculty respondents had participated in the following P3T3 two-day start-up workshops:

October 2000 10% (4)

January 2001 8% (3)

May 2001 13% (5)

June 2001 13% (5)

August 2001 13% (5)

May 2002 5% (2)

June 2002 13% (5)

August 2002 17% (7)

October 2002 2% (1)

None 8% (3)

78% of the faculty respondents had attended a P3T3 technology workshop or had sought technical assistance from the P3T3 staff.

17.5% reported that they require students to use e-portfolios in one or more of their classes.

Students

The students who responded this year represented the following years and majors:

Freshman	35%	(80)
Sophomore	42%	(96)
Junior	14%	(32)
Senior	9%	(20)
Elementary	43%	(99)
English	12%	(28)
Social Studies	9%	(21)
Special Education	6%	(14)
Mathematics	5%	(11)
Physical Education	4%	(8)
Visual Arts	4%	(8)
Agriculture	3%	(7)
Consumer/Family Sci	3%	(7)
Industrial Tech/Educ	2%	(5)
Biology	2%	(4)
Chemistry	2%	(4)
Foreign Language	2%	(4)

The following majors were represented by 1% or less of the respondents: Early Childhood Education, Health and Safety, Physics Education, Speech Communication and Theater, and Vocational Trade, Industrial and Technical Laboratory

68% of the student respondents have used the e-portfolio system. The courses they have used the e-portfolio in are:

- Block I (58%)
- Block II (20%)
- EDCI 270 (45%)
- EDFA 200 (6%)
- Other (1%)

Responses

Technology Proficiency Assessment

Students and faculty were asked to rate their own proficiencies and each other's proficiencies in the following areas: general computer knowledge and skills, internet, e-mail, word processing, databases, spreadsheets, presentation software, instructional technology knowledge and use, and overall. For each technology they were able to rate themselves and then faculty rated their students and students rated their professors on an introductory, intermediate, or proficient level.

The results show that students and faculty rated themselves and each other fairly consistently, except that the faculty consistently rated the students much lower than the students rated themselves.

Over half of the faculty respondents regarded themselves as Proficient in the following areas:

- General Computer Knowledge and Skills (75%)
- Internet (60%)
- E-mail (93%)
- Word Processing (88%)
- Overall (50%)

The only area where more than 50% of the faculty rated students as proficient was in E-mail (58%).

More than 50% of the students who answered the survey rated themselves as proficient in the following areas:

- General Computer Knowledge and Skills (58%)
- Internet (55%)
- E-mail (64%)
- Word Processing (72%)
- Presentation Software (55%)

Over half of the students rated professors proficient in:

- E-mail (71%)
- Word Processing (68%)
- Presentation Software (61%)

And almost half found their professors proficient in:

- General Computer Knowledge and Skills (48%)
- Internet (48%)
- Overall (49%)

The charts at the end of this report offer a visual representation of the ratings compared to each other.

Technology Use and Access

Student Responses:

- 99% use technology for personal productivity and growth.
- 96% say their professors use technology in classes.
- 95% agree that they have sufficient access to facilities, hardware, and software on the Purdue campus to support their technology needs.

Faculty Responses:

- 89% found the two-day P3T3 start-up workshop beneficial.
- 94% found the P3T3-sponsored technology skills workshops and presentations beneficial.
- 91% agreed that the mentoring/support from the P3T3 team had been useful.
- 85% said that they have refined the use of technology in their classes as a result of participation in the P3T3 project.
- 90% use technology for personal productivity and growth.
- 83% agree that the School of Education has sufficient facilities and hardware to use technology as they would like.
- 90% say the School of Education has sufficient software to use technology as they would like.
- 82% agree that the School of Education has sufficient technical support to use technology as they would like.

Survey Comparison

E-Portfolio Use

Does the use of the e-portfolio increase student use and knowledge of technology? In order to begin to answer this question the Mann Whitney U was used to test for nonparametric differences between those who said they had used the e-portfolio in class and those who said they have not.

Those students who reported using the e-portfolio in class also reported a significantly higher proficiency in the following areas:

- Email
- Word Processing
- Databases
- Spreadsheets
- Presentation Software
- Instructional Knowledge and Use
- Overall

These students also had a higher level of agreement with the following statements:

- I use technology for personal productivity and growth.
- My professors use technology in class.

Finally students who have used the e-portfolio believe their professors have a higher proficiency in Spreadsheets than those who have not used e-portfolios.

Survey Years

In order to determine what, if any, change in responses had occurred between the 2002 survey results and the 2003 survey results the Wilcoxon Signed-Rank Test was performed. The results of this test show that there were significant changes in how the students and faculty rated themselves and each other after a year in all categories. Some of the results showed a positive gain while others were negative.

The students ranked themselves as significantly more knowledgeable about technology in 2003 than in 2002 in all areas.

The students ranked their professors as significantly more knowledgeable about technology in 2003 than in 2002 in all areas except Instructional Technology Knowledge and Use. In this category the students ranked the faculty as less proficient in 2003 than they did in 2002.

The faculty rated themselves as significantly more competent in 2003 in all areas except for databases.

The faculty rated the students as significantly more competent in 2003 in only presentation software and overall.

They rated the students as significantly less competent in 2003 than 2002 in all other areas.

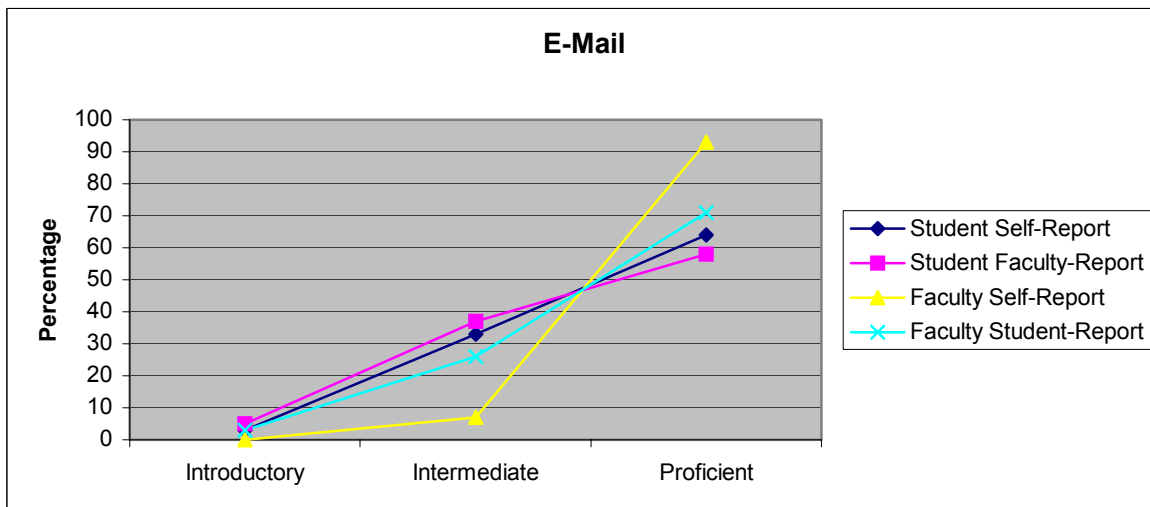
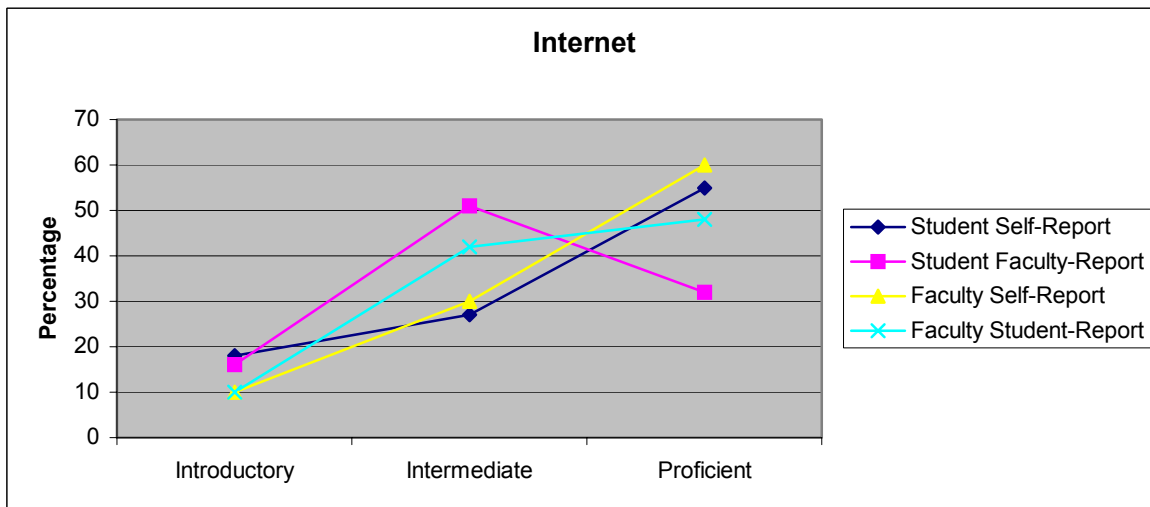
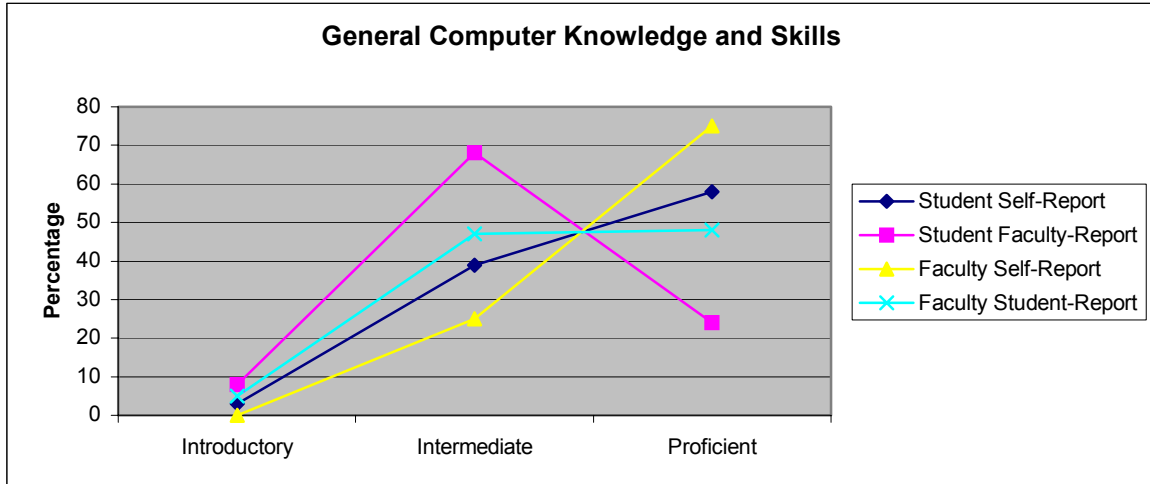
Graphic Comparisons of Student and Faculty Responses to Survey Questions

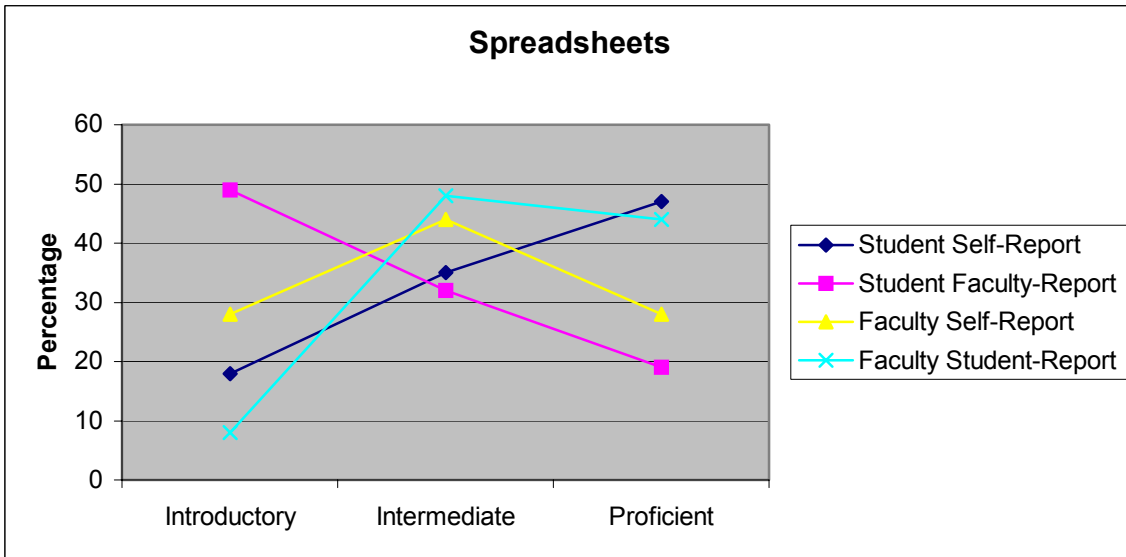
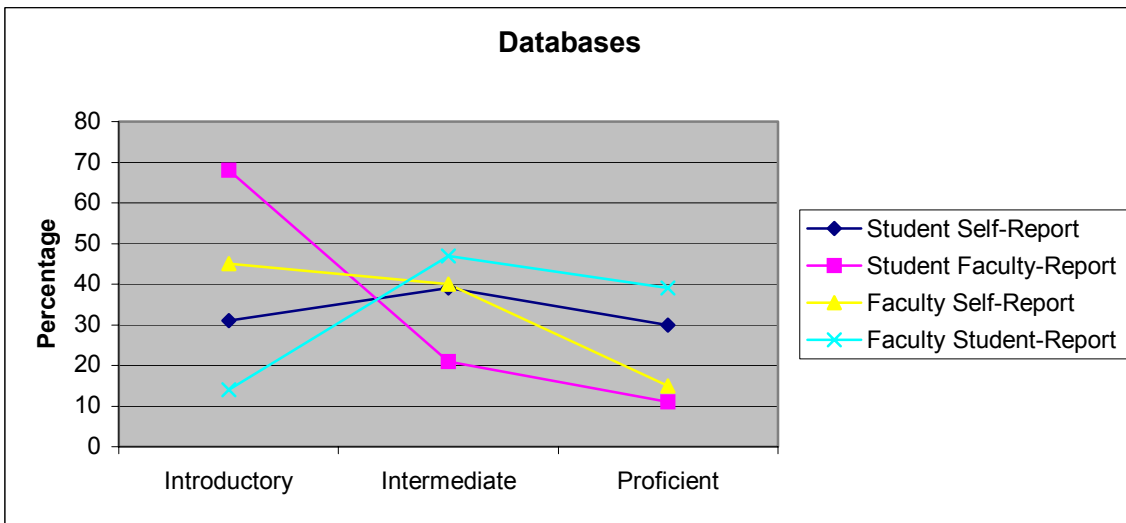
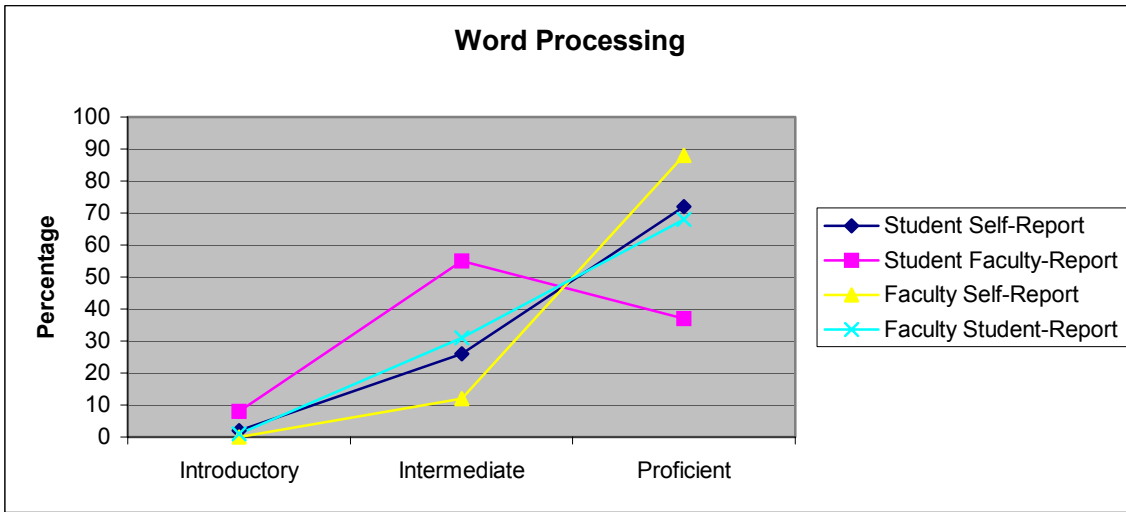
Student Self-Report refers to the student's assessment of his or her own proficiency.

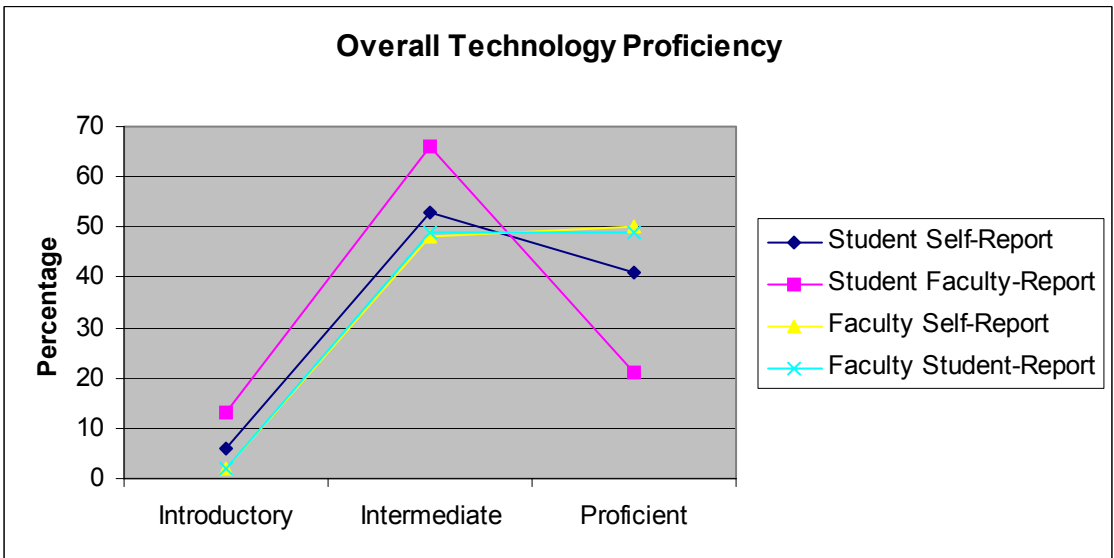
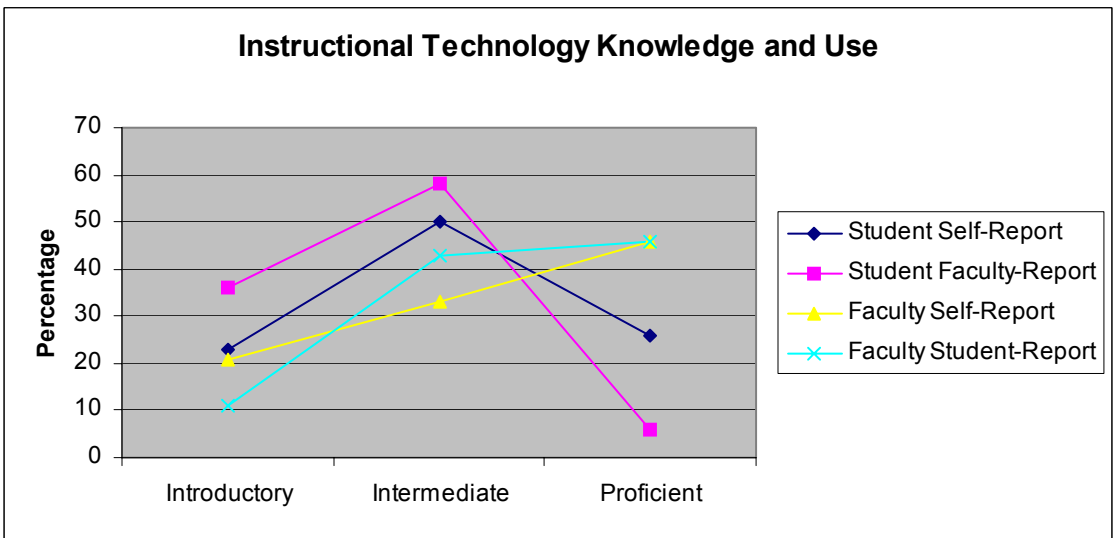
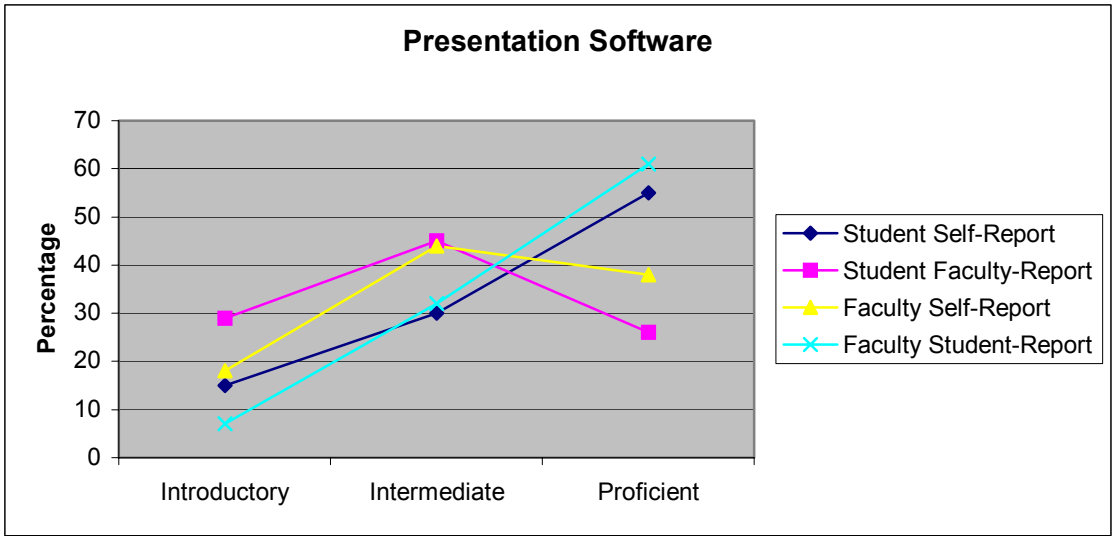
Student Faculty-Report refers to the faculty's assessment of student proficiency.

Faculty Self-Report refers to the faculty's assessment of his or her own proficiency.

Faculty Student-Report refers to the student's assessment of faculty proficiency.







P3T3: Technology Use in Education: Four Perspectives

A few students, TAs and faculty members were interviewed and questioned about their exposure and experience with the P3T3 grant over the past two years. All responses were made in confidence and so any reference that would identify them was omitted. Short summaries of their perspectives are provided here.

Pre-Service Student Using a Portfolio

I am a sophomore at Purdue in the School of Education. I am in the Elementary Education program. My first experience with the new e-portfolio system was last semester in the fall of 2002. I was in Block I and we were required to put our assignments on the e-portfolio. I think they told us about it at the beginning of the semester, but no one really knew what they were talking about and then they started talking about it again around the middle of the semester. I was not really sure why we had to hand in an assignment and then put it on-line too, but it was part of the grade, so I did it. It was kind of a pain in the beginning. Some of my friends had problems using the system, but our TA was really nice and got someone to figure out how to fix it. After it was done it was kind of cool to see.

This semester I am in Block II and we are using the e-portfolio again. Someone told me that we will have to use it in all of our classes. I didn't know that before. Last semester I just thought it was something that was only used in Block I.

I think the e-portfolio is a great idea. I like the idea of having all of my work in one place. I hope that I will be able to use it when I start looking for a job.

TA in a Block Course

I am a TA in one of the Block classes where I have had exposure to the e-portfolio system. Theoretically I think the e-portfolio system is excellent. It is a great showcase for the technology at Purdue. In reality though it is kind of a pain to deal with. I think we are going through a huge learning curve at the moment. We are trying to figure out how to use it, how to teach the students to use it, and then how to grade items that are in the e-portfolio. Once we get through all of that the system should be quite useful and easy to use. I doubt I will still be around when it happens, but I think it will be great for the school and the students.

Reluctant Faculty Member

I am a faculty member in the School of Education and have been here for a number of years. When Purdue received this P3T3 grant I did not realize that it would also be part of my life and work. I put off going to the workshop or worrying myself about this program. So many programs come and go, why should I take my precious time to deal with it?

Now the school wants us to incorporate technology and meet a number of technology standards. So, in the past year or so after much persistent e-mail, notes and calls I finally decided to attend a few sessions that were offered. I have to admit that I actually learned a few things and now incorporate some of the ideas in my teaching. Our students grew up in a very technological world and unfortunately to keep their attention we need to use this technology. I think that P3T3 has had an impact on the school and I know the faculty work hard on it, but in order for it to really make an impact they will have to offer time off or incentives for those of us who are not experts in technology to learn it and be able to teach with it. Technology changes so fast that if we are not constantly involved in the changes we are certainly to get lost again.

Excited Faculty Member

I was excited about P3T3 from the moment I first heard about it. Personally it has been nothing short of excellent. I have been able to experience and use cutting edge technology in both my teaching and my learning.

Would I have done this if P3T3 weren't available? Probably, but it would have taken a lot of time and effort on my part. I wouldn't have been able to just drop in on a workshop about a topic I was interested in, or ask a graduate assistant for help, or stop in on a noon meeting about teaching with technology. I also would not have been given the monetary assistance to help me increase my own specific technological need.

I really think that P3T3 energized our school and got our faculty excited about learning and using technology in the classroom. This excitement will be contagious. If our students see how energized the faculty is about using technology the students will also get excited about using it. I have heard what some faculty have been able to do with technology in their classrooms and it is just amazing what they are able to do. I hope we will hear more and be able to share our experiences and learn together. I thank P3T3 for what it has done for me professionally, personally, and how it will impact my current and future students.