Cover Page for
TEAM Planning, Implementation, and Evaluation (PIE) Grant Application

Submitted by: CEPS indicate name of college or unit(s)

Primary Author (Contact Person)
Name: Tom Grissom
Title: Asst. to Dean of Acad. Computing
Office: Buzzard Hall, Room 1436
Phone: (217) 581-3823
Email: csgtg@eiu.edu

Names of Co-Author(s):

CEPS Technology Committee:
Sheila Simons-HST, Jake Emmett-PED,
Pat Fewell-SED, French Fraker-CSD,
Judy Barford-ELE, Bev Findley-EDA,
in consultation with CEPS Department Chairs

Abstract:
The College of Education & Professional Studies (CEPS) is requesting Planning, Implementation, and Evaluation (PIE) funding (maximum level - $20,000 each year for the next three years) to support our efforts in providing technology-related equipment, software, and services for CEPS faculty, staff, and students. We propose to pursue several projects over the course of the next three years including the addition of two Technology Enhanced Classrooms, updating student technology proficiencies with digital and document camera equipment, providing color laser printing for students in the Instructional Technology Center, improving availability and use of software, updating wireless laptops for our mobile computer lab, and exploring new and innovative uses of video conferencing equipment for CEPS departments and programs.

Fiscal year(s) in which application covers (check all that apply):

- ✔ FY05 Amount Requested: $ 20,000
- ✔ FY06 Amount Requested: $ 20,000
- ✔ FY07 Amount Requested: $ 20,000

Total Amount Requested: $ 60,000
Total Matching Funds: $ 60,000

Signature of Author for PIE Proposal: Tom Grissom
Date: 3/31/2004

Signature of Dean or Director: Charles Rohn
Date: 3/31/2004
TEAM Planning, Implementation, and Evaluation (PIE) Grant

Application for: Planning, Implementation, and Evaluation (PIE) Grant for FY05, FY06, and FY07 (maximum funding requested)

Submitted by: College of Education and Professional Studies

Goals and Objectives:
The College of Education & Professional Studies is requesting Planning, Implementation, and Evaluation (PIE) funding (maximum level) to support the following goals and objectives:

1. Increased Technology Opportunities and Related Services for CEPS Faculty, Staff, and Students.
   a. Technology Enhanced Classroom Additions
   b. Updating student technology access and technology proficiencies - Digital Cameras, Document Cameras, Uniprint color printing for students in the ITC Lab
   c. Increased availability and use of software titles for CEPS faculty, staff, and students
   d. Purchase of wireless laptops to update mobile lab for classroom use

2. Staying current with new technologies and emerging trends. (CEPS Video Conferencing Project)
   a. Video Conferencing use for improving access to diverse settings and experiences
   b. Video Conferencing use in practicum/observation experiences
   c. Video Conferencing use for distance education experiences
   d. Video Conferencing use for increased communication with stakeholders (Student Teaching Coordinators, Regional Offices of Education, Community Colleges, CEPS cohort groups, business and industry, Continuing Education, K-12 School Districts, etc…)
   e. Video Conferencing use for advising purposes

All PIE goals identified above were based upon existing goals listed in the CEPS Technology Plan: Goal Numbers 105, 106, 107, 108, 109, and 113.

Short-term Goals (Year 1)
Short-term goals for the College of Education and Professional Studies PIE grant application include the addition of two Technology Enhanced Classrooms (TEC’s) in Buzzard Hall for year one. The rooms identified for year one for technology enhancement are Buzzard Hall, Room 1441 (seats 29 students) and Buzzard Hall, Room 2430 (seats 30 students). The second short-term goal for year one is the purchase of digital cameras and a color laser printer for use in the Instructional Technology Center (ITC). Each semester the ITC administers two types of student technology proficiencies. The first is the beginner-level student technology proficiency required

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for all students prior to the admission to the EIU teacher education program (approximately 500+ students per semester). The second is the media proficiency for selected elementary and secondary courses (approximately 250+ students per semester). Adding the requested equipment will provide updated proficiencies and access to color printing for students via the Uniprint system in the ITC.

**Long-term Goals**
The main thrust of this proposal is to investigate and implement video conferencing technologies to address the needs of various CEPS departments/programs. The CEPS Technology Plan has identified the need for staying current with new technologies and emerging trends (Goal #113 - CEPS Technology Plan). Video Conferencing Technologies are becoming economically feasible and of sufficient quality and reliability to invest time and resources into exploring new and innovative uses for our CEPS programs. CEPS has been a leader on campus in video conferencing technologies and by leveraging monies made available through the Illinois Virtual High School (IVHS) project and PIE grant funding CEPS will continue to be a leader in the application of IP based video conferencing technologies. This grant application is not asking for year one PIE grant money for video conferencing equipment but instead will devote year one video conferencing activities to planning, policy, and implementation issues. Year one video conferencing activities will take advantage of current IVHS video conferencing equipment to work out policy and technical issues involved with placing video conferencing equipment in the field for years two and three.

CEPS is also requesting $2500 per year for software purchases/upgrades (matched with $2500 per year of CEPS monies for all three years). Software is constantly being improved and by consistently devoting monies for purchase/upgrades in each of the three years we hope to provide CEPS faculty, staff, and students with software that is up-to-date and expand the access of titles available to CEPS faculty, staff, and students. Having software is of no use unless faculty, staff, and students know how to utilize it. CEPS as part of required matching requirements will devote staff time to workshops/presentations on various software and technology applications for CEPS faculty, staff, and students, using ISTE standards where appropriate.

CEPS currently utilizes two mobile Gateway Wireless Laptop Carts for faculty checkout. The wireless mobile labs have worked out very well for faculty/students and allow for a mobile lab of up to 32 wireless laptops to be setup in any classroom in Buzzard Hall for student use on special projects. Updating this equipment will meet the goal of providing up-to-date equipment for faculty/student use. The new laptops will continue to provide students with access for special projects that require use of a laptop and/or other network resources including the Internet.

**Timeline:**

**Year 1**
Technology Enhanced Classrooms Installation
It is desired to order and install the Technology Enhanced Classrooms (Buzzard Hall, Rooms 1441 and 2430) as soon as funding becomes available. As funding is awarded and approved we would like equipment installed by the electricians before the beginning of Fall 2004 classes. This is desirable to prevent the rescheduling of rooms during the Fall 2004 session and to avoid inconveniencing faculty and students who would have to be moved for two days for the
equipment to be installed (see Appendix A for room schedules). It is also preferred to have the equipment installed and ready to go for faculty and student use for the first day of class. If monies become available to CEPS for year end purchases in the April/May/June 2004 timeframe we would like the flexibility of ordering the podiums and possibly other TEC equipment (with CEPS match monies) for early arrival; podiums often take three to four months for delivery. This will put us on track for installation prior to the beginning of fall semester 2004. Digital cameras, color laser printer and software purchases can be made as soon as funding is available for year one. Decisions of software purchases will be made based upon need and data collected from CEPS faculty and student technology surveys with guidance from the CEPS Technology Committee.

For year one a CEPS Video Conferencing Workgroup will be established to work on planning, implementing, and policy issues for placing video conferencing equipment in the field. This workgroup will be open to all CEPS departments that wish to participate in this project and will report findings and recommendations to the CEPS Technology Committee. Secondary Education & Foundations and the Early Childhood, Elementary, and Middle Level Education departments along with other departments will lay the groundwork for year two and year three activities including developing appropriate assessment instruments and selecting courses to integrate video conferencing experiences for students.

Year 2
The main activity taking place in year two is the CEPS Video Conferencing Project. Equipment will be placed in the field based upon the planning work and recommendations of the CEPS Video Conferencing Workgroup from year one. The Video Conferencing Workgroup will continue throughout all three years of this project to provide consulting expertise to the CEPS Technology Committee. At least one school site will be chosen for installation of video conferencing equipment and CEPS will begin implementing activities designed to increase diversity experiences and other video conferencing uses for our programs. We will also explore the feasibility of providing equipment for a short period of time and then relocating the equipment for the next project at another location. If this is feasible we can maximize our investment in this technology by working with multiple locations each year. CEPS is also requesting funding for document camera(s) for year two. It is planned to add document camera(s) to our technology proficiency for students. We will also continue the purchase/upgrades of software in year two for CEPS faculty, staff, and students.

Year 3
CEPS will continue the Video Conferencing Project in year three along with the software purchases/upgrades. In addition we are requesting funding to purchase new wireless laptops for the wireless mobile lab for checkout use in classrooms in Buzzard Hall. The existing laptops will be over four years old and will be in need of replacement.

Relationship to EIU Mission and Mission of Department or College:
Describe how this project will help meet the mission of Eastern Illinois University, as well as your department and/or college.
Institutional Mission Statement

EASTERN ILLINOIS UNIVERSITY offers superior yet accessible undergraduate and graduate education. Students learn the methods and outcomes of free inquiry in the arts, sciences, humanities and professions guided by a faculty known for its commitment to teaching, research/creative activity, and service. The University community strives to create an educational and cultural environment in which students refine their abilities to reason and to communicate clearly so as to become responsible citizens in a diverse world.

College of Education & Professional Studies
Unit Mission and Vision Statement

The College of Education and Professional Studies at Eastern Illinois University has a tradition of providing an educational environment that is conducive to interaction, inquiry, and service. The goal of the College is to prepare professionals who will advance the intellectual, physical, psychological and social well-being of our pluralistic democracy and global society. Offering preparation in varied fields and on multiple levels of study, the College serves a diverse student body at the undergraduate and graduate levels. The College has a reputation for excellence in its programs, strives to hold students to even higher expectations for learning, and is accountable for quality of academic programs and the assessment of learning.

The College will sustain and create varied partnerships including faculty, students, community agencies, business, industry and P-12 schools. Administration, faculty and staff are committed to design and implement programs that reflect the changing community. All students participate in field-based experiences that bridge the gap between theory and practice. Students are prepared to be leaders in their professions. Graduates have the skills to integrate technology effectively and responsibly in their personal and professional lives. Graduates demonstrate respect for the dignity of individuals because they have seen it modeled and integrated in the College experience.

The first goal, Improved Technology Access and Related Services for CEPS Faculty, Staff, and Students will provide needed resources to improve access to equipment and software for CEPS faculty, staff, and students. The CEPS Mission Statement above clearly illustrates that the College of Education & Professional Studies expects our graduates to be technologically savvy and professionally responsible. Adding two additional Technology Enhanced Classrooms, color laser printing for students use with the Uniprint system in the Instructional Technology Center (ITC), revamping the current student technology proficiencies with digital camera/document camera equipment, and purchasing and/or upgrading software yearly for faculty, staff, and students will all impact the availability of technology to CEPS faculty, staff, and students.

The second goal, CEPS Video Conferencing Project has the potential to extend access to culturally diverse settings that are currently difficult to meet because of the geographic location of EIU in the state of Illinois and local demographic issues. Providing access to culturally diverse settings for our students is an important part of the EIU mission and the mission of the College of Education & Professional Studies. Teacher education programs in particular need to
provide access to diverse experiences for future teachers and we believe video conferencing is a technology that has the potential to supplement existing efforts and expand options available to faculty and students. Lack of access to cultural diversity experiences in the Charleston area is currently limited due to local demographics. The CEPS Video Conferencing Project will explore access to diverse settings as well as use in field/observation/practicum experiences, distance learning uses, and assisting with advising activities for students off campus.

**Relationship to Technological Needs:**

Every year for the last five years the CEPS Technology Committee has conducted a faculty Technology Use survey. This year in the Fall 2003 the tech committee conducted a Student Technology Use survey. Results from the faculty and student surveys are used to guide the CEPS Technology Committee in planning for and implementing technology to meet the needs of the College of Education & Professional Studies. The CEPS Technology Plan along with the results of the faculty and student technology surveys were used as a guide to construct this PIE grant application.

The first goal, **Improved Technology Access and Related Services for CEPS Faculty, Staff, and Students** will provide needed resources to improve access to technology equipment and software in classrooms and faculty offices. The two Technology Enhanced Classrooms continues the goal of having every CEPS classroom become a Technology Enhanced Classroom. This meets the needs of faculty and students by providing two additional rooms that are equipped with technology to enhance the effectiveness of instruction. TEC’s also give our students practice using technology when making group presentations. Data collected from the Faculty Technology Survey indicate faculty are using TEC equipment regularly and it has been a worthy investment.

The CEPS Technology Committee is currently in the process of revamping the technology proficiencies and would like to include digital cameras for Fall 2004 and is also requesting a document camera for year two of this proposal for technology proficiencies. The proficiencies serve a large number of students each semester (over 800 students for Fall 2003) and serve to meet accreditation needs of our college. The color laser printer is needed to provide color printing access for students using computers in the ITC Labs (BUZ 1430/1440). Adding a color laser printer will greatly improve color printing access for students in the Instructional Technology Center. Currently the ITC has one HP Color Deskjet printer that is connected locally to one computer. By purchasing a networked color laser printer that can be connected to the Uniprint system students will have the ability to print in color from any of the networked computers by using their Panther Card, similar to printing to the existing black & white printers in the ITC.

The second goal, **Staying current with new technologies and emerging trends - (CEPS Video Conferencing Project)** was chosen as the main project of this proposal because of past successes of the IVHS project and for the potential to address areas of need by various CEPS departments. Video conferencing is something that our faculty and students currently know little about. According to the faculty and student technology surveys less than 5% of faculty and students have had experience using video conferencing equipment. As stated above CEPS will investigate five areas of video conferencing applications. Probably the greatest need and
potential for video conferencing use is in the area of bringing diverse settings to the EIU classroom experience of our students. Our EDF 2555 course on cultural diversity can benefit from video conferencing technology by making available a culturally diverse classroom for faculty and students to study. Elementary education faculty have identified several courses where video conferencing technologies hold promise. Practicum, observations, and distance education experiences for students are areas worthy of investigation. CEPS also has many cohort groups around the state that could benefit from periodic access to video conferencing equipment. We believe as video conferencing technologies continue to mature the opportunity to communicate with various stakeholders will be amplified. Educational Administration, Special Education, Student Teaching and others see possible uses for their current programs. In discussions with Continuing Education we hope to work together to take advantage of remote sites that Continuing Education is equipping with video conferencing access such as Danville, Kaskaskia, and other community colleges. We also hope to provide better service to transfer and new students by utilizing video conferencing equipment for remote advising sessions.

Collaboration and Cooperation:
All CEPS Department Chairs and CEPS Technology Committee Members participated in the development of this grant application. CEPS Technology Committee members represented their respective departments and all CEPS Technology Committee members were asked to share information and hold discussions with fellow faculty and their department chair and represent their department by providing input to shape the final CEPS PIE application.

Participants in the CEPS PIE Grant Application (Spring 2004)

<table>
<thead>
<tr>
<th>Name</th>
<th>Representation</th>
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<tr>
<td>Charlie Rohn</td>
<td>CEPS Dean</td>
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<tr>
<td>Doug Bower</td>
<td>CEPS Associate Dean</td>
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<tr>
<td>Pat Fewell</td>
<td>CEPS Technology Committee Co-Chair and Department of Secondary Education and Foundations Representative</td>
</tr>
<tr>
<td>Tom Grissom</td>
<td>CEPS Technology Committee Co-Chair, Assistant to the Dean of Academic Computing</td>
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<tr>
<td>Rick Roberts</td>
<td>Department Chair, Counseling and Student Development Department</td>
</tr>
<tr>
<td>Merribeth Bruning</td>
<td>Department Chair, Early Childhood, Elementary, &amp; Middle-Level Education</td>
</tr>
<tr>
<td>Nick Osborne</td>
<td>Department Chair, Department of Educational Administration</td>
</tr>
<tr>
<td>Rob Bates</td>
<td>Department Chair, Department of Health Studies</td>
</tr>
<tr>
<td>Phoebe Church</td>
<td>Department Chair, Physical Education Department</td>
</tr>
<tr>
<td>Bill Higelmire</td>
<td>Department Chair, Department of Recreational Administration</td>
</tr>
<tr>
<td>Mahmood Butt</td>
<td>Department Chair, Department of Secondary Education and Foundations</td>
</tr>
<tr>
<td>Kathleen Shank</td>
<td>Department Chair, Department of Special Education and Department Chair, Department of Student Teaching</td>
</tr>
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</table>
In addition to the individuals listed above several departmental level discussions were held in the individual departments and CEPS Technology Committee members provided departmental input representing their individual departments. Discussions were also held with Dean Hine and Cathy Brachear of Continuing Education to see if there was a possibility of working together on the video conferencing project as part of this PIE application. It was decided that the PIE timeline was too short but we agreed to continue working together and meet in the future to see if common activities could be pursued.

The submission for this grant application formally began January 22, 2004 with an email to CEPS Technology Committee members, CEPS department chairs, Dean Rohn, and Associate Dean Doug Bower that included an attachment of the PIE grant rationale and application requirements. The CEPS Technology Committee is represented by members of each department within CEPS. CEPS technology committee members were encouraged to bring departmental ideas for the PIE grant application to the CEPS Technology Committee meeting held on January 29, 2004.

At the January 29th tech committee meeting the existing CEPS Technology Plan was reviewed for identified gaps and goals. A brainstorming session was conducted to hear all ideas the committee members had regarding possible uses for the PIE grant monies. At the conclusion of the meeting a list of possibilities was compiled from the brainstorming session and forwarded to each member of the CEPS Technology Committee and also emailed to the department chairs, the dean and associate dean for their review. Results were discussed with chairs at the CEPS Department Chair meeting on February 11, 2004. One of the challenges of the PIE grant is to find projects that could be beneficial to all CEPS departments. Department chairs expressed an interest in video conferencing technology and to continue the implementation of the CEPS Technology Plan goals identified by the committee. Three more CEPS Technology Committee meetings were held to work out the details of this grant application. Meetings were held March 11th, March 23rd, and March 30th. Copies of a research article from Purdue University (Appendix B) were distributed for committee members to review. The committee continued
working on the draft application by defining goals and objectives, technology integration, and the evaluation sections. A second department chair update was given March 24, 2004.

This application has been a collaborative venture from the beginning. By utilizing our existing CEPS Technology Committee and the CEPS Technology Plan we selected projects to meet existing identified needs. Tech Committee meetings provide open communication of technology-related business for all departments within CEPS. The projects selected have the potential to benefit all CEPS departments. Departments will be updated as to the status of PIE projects through regular CEPS Technology Committee meetings over the next three years.

CEPS will also offer one public session each year, open to the campus community, to report on findings and lessons learned from selected projects.

**Integration of Technology:**
CEPS has established a technology plan that drives decisions regarding implementing new technologies. This plan is based upon data collected from faculty, staff, students, and other stakeholders including local K-12 school districts. Projects selected for this grant are both a continuation of existing projects as well as projects that will explore new and innovative uses of technology.

The Technology Enhanced Classrooms are heavily utilized by our faculty and students for class projects and to provide students needed experience in presenting in front of a group with technology support. This is a continuation of the already existing CEPS Technology Plan goal to have all CEPS classrooms be technology-enhanced. CEPS has methodically added TEC’s each year for the past five years.

The student technology proficiencies are required of all students prior to admission to teacher education to assure beginning-level technology proficiency for future coursework. The media proficiency is required by selected secondary and elementary courses. By having dedicated proficiencies CEPS guarantees student awareness of certain technologies and requires demonstrated hands-on proficiency with technology by the student. Purchasing equipment to update proficiencies will keep our students on the leading edge of technology use.

Video conferencing is a project that has been identified by multiple CEPS departments as having possibilities of solving existing cultural diversity issues for EIU pre-service teachers. Due to geography and local demographics student exposure to field, practicum, and observation experiences involving a diverse classroom is limited for current EIU teacher education candidates. In addition, the numbers of pre-service teachers our program produces can overwhelm and burden local school districts as students work to meet practicum and observation hours. Video conferencing offer the possibility of forging new ground to take advantage of technology and implement new video conferencing technologies as one way to supplement the offering of diverse experiences to our students and possibly reduce the need for physical observation hours.

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The video conferencing working group will be formed to identify appropriate courses to integrate video conferencing technologies for this project and identify faculty interested in using video conferencing applications. Preliminary discussions are already underway and a number of departments and faculty have expressed an interest in one or more of the five video conferencing areas listed above.

**Evaluation:**

**Goal #1: Increased Technology Opportunities and Related Services for CEPS Faculty, Staff, and Students.**

For the CEPS Technology Enhanced Classroom additions the evaluation will include the schedule for all courses held in Buzzard Hall Rooms 1441 and 2430 for the academic year. For the digital cameras, document camera, and color laser printer usage logs will be maintained and total number of students taking technology proficiencies will be provided in a summary format. For yearly software purchases/upgrades a listing of installed machines along with CEPS workshop/presentation activities will be maintained and reported in a summary format each year. Finally, for the mobile laptop cart project in year three a checkout log will be maintained as well as a description of uses by faculty and students.

**Goal #2: Staying current with new technologies and emerging trends. (CEPS Video Conferencing Project)**

The CEPS Technology committee will form a Video Conferencing Workgroup in Year one to begin working on the issues involved with implementing and repeating successful video conferencing ventures. This working group along with the CEPS Technology Committee, department chairs, and the Dean’s office will work on issues related to implementing video conferencing uses identified by this group. Year two and three will build upon the planning activities of year one and will involve the purchase of additional video conferencing equipment/accessories for placement in the field. This working group will identify school district(s) and/or other sites for placement of video conferencing equipment to be used in a collaborative manner by CEPS faculty/students, Illinois school district(s), and other partners. Plans will be made to partner with a school district that offers a more diverse learning environment than is available in the local area. Usage logs will be maintained for the equipment and broken down by application area. Periodic progress reports will be made to the CEPS Technology Committee to keep departments informed of progress. A presentation will be held each year to report progress on the CEPS Video Conferencing Project and discuss lessons learned along with successes of the project.

In addition, the CEPS Faculty Technology Use survey and the CEPS Student Technology Survey will continue to be administered by the CEPS Technology Committee to gather data on faculty and student technology use for CEPS Technology Committee planning purposes.

**Other:**

If additional monies are available because either a college has not requested full PIE funding, or if additional monies become available, CEPS would like to respectfully request consideration for funding additional projects related to Local Area Network connections and/or Wireless Access Points in Buzzard Hall (Appendix C). CEPS is consistently looking for funding sources to implement projects and goals identified by the CEPS Technology Committee. If additional funding is available we would like consideration to pursue the LAN connections and/or Wireless Access Point additions as part of supplemental PIE funding. Please contact us if additional supplemental funding is available. Thank You.

March 30, 2004
Budget Submission Forms for TEAM PIE Grants

NOTE: Please prepare a separate sheet for each project or initiative in each fiscal year.

**Budget Proposal:** ☑ FY05 ☐ FY06 ☑ FY07

**Name of Project or Initiative:**

CEPS - Increased Technology Opportunities and Related Services

**Estimated Costs for Non-Personal Services:**

(1) Item: Technology Enhanced Classroom (BUZ 1441) $12,500.00

Explanation: TEC equipment and installation (Media Services Quote)

(2) Item: Digital Camera Equipment / Accessories $2,500.00

Explanation: Cameras for faculty/student use with technology proficiencies

(3) Item: Color Laser Printer $2,500.00

Explanation: To be used with Uniprint system in Instructional Technology Ctr.

(4) Item: Software Purchases/Upgrades $2,500.00

Explanation: Software titles for CEPS faculty, staff, and student use

(5) Item: $

Explanation: 

**Total Funding Requested for Non-Personal Services for this Project or Initiative** (add items 1 through 5) $20,000.00

**Total Matching Funds for this Project or Initiative** $20,000.00

Brief explanation of matching funds and relationship to this project or initiative:

CEPS match will include a combination of monies, equipment, and staff time. For FY05 CEPS will equip BUZ 2430 as a TEC using existing projector ($4000) and $8000 in CEPS monies for purchasing the remaining TEC equipment and installation costs. CEPS will utilize new IVHS Video Conferencing equipment ($6000) to meet first year goals of the CEPS Video Conferencing Project. CEPS will match the software purchases/upgrades with $2500 in CEPS monies. CEPS will match with staff, student help, and GA time for administering media and technology proficiencies and for technology workshops/presentations (100 hours=$2000).

**NOTE:** Once funding has been approved for a TEAM PIE Grant, any budget changes will require review and approval by the TEAM Grants Council. For all approved items, documentation will also need to be submitted as part of the annual progress report.
Budget Submission Forms for TEAM PIE Grants

NOTE: Please prepare a separate sheet for each project or initiative in each fiscal year.

Budget Proposal: ☐ FY05 ✔ FY06 ☐ FY07

Name of Project or Initiative:
CEPS - Increased Technology Opportunities / Video Conferencing Project

Estimated Costs for Non-Personal Services:

(1) Item: Video Conferencing Equipment / Accessories / Services $ 15,000.00
Explanation: IP based video conferencing equipment and peripherials/accesso

(2) Item: Software Purchases/Upgrades $ 2,500.00
Explanation: Software titles for CEPS faculty, staff, and student use

(3) Item: Document Camera(s) / Accessories $ 2,500.00
Explanation: Document Camera(s) for technology proficiencies

(4) Item: $ 
Explanation: 

(5) Item: $ 
Explanation: 

Total Funding Requested for Non-Personal Services for this Project or Initiative (add items 1 through 5) $ 20,000.00

Total Matching Funds for this Project or Initiative $ 20,000.00

Brief explanation of matching funds and relationship to this project or initiative:
CEPS match will include a combination of monies, equipment, and staff, student help, and GA time for selected projects. Some equipment/match commitments may come from external funding sources including other grants and gifts. For FY06 CEPS will match with staff/student help/GA time for administering media and technology proficiencies, video conferencing setup/maintenance/support, and for technology workshops/presentations (approx. 250 hours=$5000). CEPS will match with $12,500 in money/equipment for use in the video conferencing project and will match the software purchases/upgrades project with $2500 in CEPS monies.

NOTE: Once funding has been approved for a TEAM PIE Grant, any budget changes will require review and approval by the TEAM Grants Council. For all approved items, documentation will also need to be submitted as part of the annual progress report.
### Budget Submission Forms for TEAM PIE Grants

NOTE: Please prepare a separate sheet for each project or initiative in each fiscal year.

**Budget Proposal:** □ FY05  □ FY06  ✔ FY07

**Name of Project or Initiative:**

CEPS - Increased Technology Opportunities / Video Conferencing Project

**Estimated Costs for Non-Personal Services:**

1. **Item:** Video Conferencing Equipment / Accessories / Services  
   **Cost:** $7,500.00  
   **Explanation:** IP based Video Conferencing equipment and peripherals/accessories

2. **Item:** Software Purchases/Upgrades  
   **Cost:** $2,500.00  
   **Explanation:** Software titles for CEPS faculty, staff, and student use

3. **Item:** Wireless Laptop Updates for Mobile Lab  
   **Cost:** $10,000.00  
   **Explanation:** New Wireless Laptops for mobile lab classroom use in Buzzard Hall

4. **Item:**  
   **Cost:** $0.00  
   **Explanation:**

5. **Item:**  
   **Cost:** $0.00  
   **Explanation:**

**Total Funding Requested for Non-Personal Services** for this Project or Initiative (add items 1 through 5)  
**Cost:** $20,000.00

**Total Matching Funds for this Project or Initiative**  
**Cost:** $20,000.00

Brief explanation of matching funds and relationship to this project or initiative:

CEPS match will include a combination of monies, equipment, and staff, student help, and GA time for selected projects. Some match commitments may come from equipment and external funding sources including other grants and gifts. CEPS will match with $5000 for the FY07 video conferencing project, $7500 for wireless laptop project, and $2500 for software purchases/upgrades project. Staff/student help/GA time will be used for administering media and technology proficiencies, video conferencing setup/maintenance/support, and for technology workshops/presentations projects (approx. 250 hours=$5000).

**NOTE:** Once funding has been approved for a TEAM PIE Grant, any budget changes will require review and approval by the TEAM Grants Council. For all approved items, documentation will also need to be submitted as part of the annual progress report.
CEPS PIE Grant References:
CEPS Technology Plan, available online at:
http://www.eiu.edu/ceps/tech/cepstechplan02_03final.pdf

Bringing Classroom Diversity to the Campus: Technology as a Tool for Linking Pre-Service Teachers to Diverse Classrooms at a Distance by James D. Lehman and JoAnn Phillion - Purdue University, available online at: http://p3t3.soe.purdue.edu/AACTE_2004_Lehman.pdf

Streaming Video Examples of Purdue Video Conferencing Project: (Real Player of Windows Media Player Required), available online at:
http://www.pt3now.org/207.php

Example Video Conferencing Equipment/Accessories:
http://www.polycom.com/products_services/1,1443,pw-185-4363,00.html
http://www.polycom.com/products_services/1,1443,pw-185-3083,00.html
http://www.polycom.com/products_services/1,1443,pw-185-4364,00.html
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Bringing Classroom Diversity to the Campus: Technology as a Tool for Linking Pre-Service Teachers to Diverse Classrooms at a Distance

James D. Lehman and JoAnn Phillion
Purdue University
Beering Hall of Liberal Arts and Education
100 N. University St.
West Lafayette, IN 47907-2098
Email: lehman@purdue.edu

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Abstract: Field experiences are a key means to prepare future teachers for the diversity and complexity of today's classrooms, but some colleges of education lack ready access to diverse school settings. In a 3-year initiative, part of a Preparing Tomorrow's Teachers to use Technology (PT3) implementation project, Internet-based video conferencing technology was used to support pre-service teachers' observations of and interactions with diverse P-12 classrooms at a distance. Using this new technology, future teachers were able to learn about and come to better understand diverse classroom settings unavailable to them locally, thereby enhancing their preparation to become teachers. Results showed that pre-service teachers' knowledge of diversity and the use of technology grew as a result of this experience. Pros and cons of this approach were identified, and lessons learned were translated into guidelines for others who might wish to pursue the same approach. This technology offers promise as one way to expand the options for linking students in teacher preparation programs with teachers and students in diverse P-12 settings.

Introduction

Teacher preparation programs are faced with a variety of challenges. Over the past two decades, a number of national reports have emphasized the need to improve teacher preparation (Carnegie Forum, 1986; Holmes Group, 1986; Moursand & Bielfeldt, 1999; National Commission on Teaching and America's Future, 1996). Today, programs to prepare future teachers must meet national and state standards with regard to both content and pedagogy in an era when there is increased emphasis on performance. Teacher preparation programs must also help pre-service teachers learn to use technology and develop their understanding of diversity and multiculturalism (NCATE, 2001). Meeting these challenges is increasingly difficult and may require new approaches.

Field experiences have been identified as a key means to better prepare teachers for the diversity and complexity of today's classrooms (Goodlad, 1990). While field experiences are generally recognized as critically important, many colleges of education, particularly those in rural areas, have difficulty placing students in field settings that provide for needed experiences, for example, with diverse student populations. Distance education technologies offer capabilities that can be used to provide a form of these critically important experiences for pre-service teachers when appropriate field sites are not in close proximity. Purdue University has initiated an innovative project in the use of technology-enabled field experiences, part of a Preparing Tomorrow's Teachers to use Technology (PT3) implementation grant, to address key components of its teacher preparation program including understanding of classrooms and diversity as well as technology integration.
Distance education technologies, particularly those that support video conferencing, have the potential to be of significant value. Using video conferencing technologies, prospective teachers can not only observe but also interact with P-12 students and teachers from a distance. The concept of using live video for classroom observations is not new. Reports of the use of closed circuit television for observation of classrooms in teacher education programs date back as far as the 1960s (Abel, 1960). In the 1980s, Iowa State University's Teachers on Television program was a relatively large-scale effort which showed that the observation skills of pre-service elementary teachers could be improved by observational practice using microwave-based video connections to public school classrooms (Hoy & Merkley, 1989). While successful, these older video technologies were expensive as well as difficult to set up and maintain. As a result, they were never widely implemented. Today's Internet-based video conferencing technologies offer a much more flexible and cost-effective option for observation of and interaction with school-aged learners at school sites that are remote from the university campus. Good quality group-to-group or individual-to-individual video conferencing can be accomplished over the Internet with off-the-shelf equipment, and any two sites with reasonably fast Internet connections can engage in this type of video conferencing. As a result, researchers and teacher educators are beginning to explore this technology.

Recent literature on the applications of video conferencing in education has focused on uses such as virtual field trips (LeBlanc, 2002; Pachnowski, 2002) and supervision of practicum students at a distance (Pemberton, Tyler-Wood, Pérez Cereijo, Rademacher, & Mortensen, 2001). While a few authors have reported on the use of video conferencing as a tool for remote field experiences (Edens, 2001; Howland & Wedman, 2003; O'Connor, 2003, Phillion, Johnson, & Lehman, 2003-04), this application of the technology has been relatively little explored. This paper reports on a 3-year implementation project, part of P3T3: Purdue Program for Preparing Tomorrow's Teachers to use Technology, which investigated the use of video conferencing as a tool for enhancing teacher education by providing opportunities for pre-service teachers and classes to link with P-12 students, teachers, and classrooms in diverse settings.

Background

Purdue's P3T3 project is part of the U. S. Department of Education's Preparing Tomorrow's Teachers to use Technology initiative, a nationwide effort designed to ensure that future teachers are adequately prepared to use technology for teaching and learning. Purdue's project is a collaboration involving several partners. The School of Education, which plays the primary but not exclusive role in teacher preparation on the campus, is the lead organization. At Purdue, the Schools of Science and Liberal Arts, which provide coursework for teacher education students and support secondary teacher education majors in various disciplines, are partners as is the campus-wide Information Technology at Purdue (ITaP) group. Both Apple and Intel are for-profit corporate partners which have provided both equipment and training support. Partners from the non-profit sector include: the North Central Regional Technology in Education Consortium (NCRTEC), the Center for Interactive Learning and Collaboration (CILC), and the Indiana Department of Education. Finally, four Indiana school districts are partners: School City of East Chicago, Crawfordsville Community Schools, Lafayette School Corporation, and Lawrence Township Schools of Indianapolis. Two of these districts, East Chicago and Lawrence Township of Indianapolis, have much more ethnically and socio-economically diverse student bodies than most of the schools in immediate proximity to the Purdue campus. Many of the distant field experiences described in this paper have taken place in partnership with these districts.

The goals of Purdue's P3T3 project are to (1) prepare pre-service teachers to demonstrate fundamental technology competencies, using technology as a tool for teaching/learning, personal productivity, communication, and reflection on their teaching, and (2) prepare teacher education faculty to teach pre-service teachers in technology-rich environments, modeling approaches that future teachers should use themselves. The project is meeting its goals via three complementary components: (a) faculty development and implementation of technology experiences in teacher preparation courses, (b) development of an electronic portfolio system for all pre-service teachers, and (c) the creation of rich and diverse field experiences enabled and enhanced through the use of technology. This paper focuses on the latter, although it also illustrates an example of the integration of technology in a teacher preparation course.
Two types of video conferencing have been used to support our efforts to create diverse field experiences for students using technology. At the outset of the project, we expected to exclusively use an intrastate fiber optic video network called Vision Athena (http://www.visionathena.org), managed by the Center for Interactive Learning and Collaboration, a partner in the P3T3 project. While we have used that network on a limited basis to link to some of our partner schools, IP-based video conferencing equipment from Polycom (http://www.polycom.com) emerged during the project as a better way to meet most of our needs. This technology supports good quality video and audio over the Internet, is relatively affordable, and is very flexible because a standard H.323 Internet video conferencing connection can be established between any two locations with access to a reasonably fast (128 Kbps or better) connection. Special distance education rooms or video studios are not needed; connections can be established from classroom to classroom.

We currently use two types of Polycom video conferencing equipment. Room-to-room video conferencing is supported by Viewstation SP (point-to-point) or Viewstation FX (multipoint) units. These compact units have an integrated camera with panning and zooming capability that can be attached to any available video monitor and plugged into an Ethernet jack for Internet connectivity. Educational prices start at about $2,500 for the Viewstation SP. The Viewstation FX unit, which can connect up to 4 sites, is about $7500. For person-to-person or small-group-to-small-group connectivity, we use the Polycom ViaVideo computer-based desktop video conferencing unit, which operates in conjunction with a Windows PC. While the smaller ViaVideo camera is of lesser quality and lacks the panning and zooming capability of the larger Viewstation units, this inexpensive (about $400) unit adds the exciting capability for application sharing during video conferencing. While the costs of these video conferencing units are not trivial, they are much below video conferencing costs of just a decade ago, and the costs must be weighed against the savings in travel time and expense that can be realized from the use of video conferencing.

Several models of interaction between teacher education candidates and P-12 classrooms have been explored. Several faculty members in the School of Education have used video conferencing to provide relatively short-term experiences (usually one to three video interactions) for their classes of prospective teachers. For example, one faculty member in Consumer and Family Science Education had her class spend a class period observing a pre-school, housed in a high school in an urban center in the state, to learn more about its operation. A faculty member in Agriculture Education had his teacher education students spend a class period making structured observations of a high school classroom to learn about teaching techniques and classroom management. A faculty member in Educational Technology, with the assistance of an advanced graduate student, developed several projects with partner elementary schools in which his university students developed and then used instructional materials with the elementary students. The university students led a series of video conferencing sessions to teach lessons with their materials and involve the elementary students (see O'Connor, 2003; Phillion, Johnson, & Lehman, 2003-04).

The longest running pilot project involving the use of video conferencing to connect pre-service teachers with diverse P-12 settings has now spanned over three years. In this pilot project, which is the focus of this paper, an introductory teacher education class at the university linked with an elementary school classroom in a diverse, urban region of the state. This project involved a more sustained use of the video conferencing with pre-service teachers connecting to an elementary classroom once per week throughout most of a semester. A video program describing this pilot project was produced by WHRO-TV and Soundprint Media for the PT3 Now! video series and can be viewed online at: http://www.pt3now.org/207.php.

This pilot project was implemented in order to link learning about technology with learning about classrooms, diversity, and multiculturalism. While pre-service teachers often feel there is no need to understand diverse populations of students because they plan to teach in predominantly white and rural areas after graduation (Yeo, 1999), demographics of schools are changing throughout the country. Prospective teachers must be exposed to the diverse classrooms they are likely to encounter in the future. In this project, pre-service teachers enrolled in the first course in Purdue's teacher education program linked with a teacher and students in a grade two or three bilingual class in a diverse inner city school in East Chicago, one of the poorest and most culturally diverse districts in the state of Indiana.
Once per week throughout most the semester, the teacher education class connected with the elementary classroom for 1-2 hours. Initially, the pre-service teachers used the video conferencing to focus on classroom observations under the guidance of the instructor. This activity helped the pre-service teachers, who were just beginning their teacher education programs, to gain a perspective on classrooms from a different vantage point. Because the instructor observed alongside the students, there were opportunities for rich discussions that emerged out of the shared observational context. As the semester progressed, sessions became increasingly interactive. Eventually, the future teachers actually conducted lessons for the elementary students, designed to supplement the elementary teacher's curriculum, via the video conferencing. Thus, the prospective teachers got the experience of working with diverse students using a cutting-edge technology that promises to be more widespread by the time they become certified teachers and move into their own classrooms.

During each semester that the pilot project was implemented, the pre-service teachers started the semester by becoming acquainted with the technology. They learned to connect to the remote site, operate the remote controls for the cameras both at the Purdue site and the school site, and develop mechanisms to facilitate communication. The pre-service teachers practiced with the equipment by splitting into two groups and conducting a practice video conferencing session between two local classrooms. A checklist of procedures was developed to help the pre-service teachers learn how to connect to the school site. Prior to beginning the actual video conferencing field experiences, the university class made a site visit to the participating school. During this trip, the pre-service teachers spent the day touring the school; meeting staff, teachers and students; and interacting with the elementary students involved in the project. This visit allowed the pre-service teachers to gain first-hand knowledge of the school and the students, which we believe helped to overcome some of the impersonal nature of remote connection.

Following the site visit, the virtual field experiences began and continued weekly through the remainder of the semester. Initially, pre-service teachers spent time observing the classroom and getting oriented to classroom activities. During one semester, the first session was spent on introductions. Students in the elementary class and pre-service teachers brought in baby pictures and made riddles about “Who am I?” Pre-service teachers prepared Powerpoint presentations of their riddles to share. Some riddles were done in English and some in Spanish for the bilingual classroom.

A typical interactive session began with the classroom teacher teaching one of her usual lessons. The pre-service teachers then took turns, individually or in small groups, directly teaching mini-lessons to the students. These activities were designed to reinforce what the teacher was teaching in the class or enrich the curriculum. Over the life of this pilot project, pre-service teachers have had the opportunity to engage in a variety of activities, including teaching lessons on equal and unequal fractions using everyday objects, colorful graphs, and diagrams and charts; reading stories and providing follow up questions; researching information about Benjamin Franklin and presenting it to students in the form of a skit; and, discussing the 9/11 World Trade Center disaster.

In the recent semester, the cooperating elementary teacher was preparing to teach in Japan and decided to use Japan as a year-long theme. Purdue pre-service teachers were invited to participate by preparing activities related to Japan. The students, Purdue pre-service teachers, and the classroom teacher brainstormed questions about Japan. The teacher then organized these questions into topic areas including: geography, school life, food, daily activities, wildlife and art/drama/literature. Purdue pre-service teachers then worked in groups of three to prepare lessons about these topics. For example, the school life group wrote a book. The food group did a lesson on preparing sushi via the video conferencing, while the teacher did a similar activity in her class. Thus, a variety of enrichment lessons were created, adding to the teacher's curriculum while giving the pre-service teachers a chance to learn about and work with diverse elementary students. The Japan project took place over the entire semester and was deemed by the teacher, who had done videoconferencing several times, and the faculty member who had also done it several times, to be the most successful format for interaction over the course of the pilot project.
Evaluation

In order to understand the learning of the pre-service teachers about diversity issues and the use of technology, both qualitative and quantitative methodologies were employed as part of the evaluation of the pilot project. Quantitative data were collected by means of short online surveys completed by the pre-service teachers in the pilot study class. Data for this paper were drawn from the fall 2002 and spring 2003 surveys administered at the end of the semester. The online surveys contained both Likert-type and open-ended questions that probed pre-service teachers' attitudes toward the technology and class experience.

Qualitative data were drawn from the open-ended responses to survey items and from pre-service teachers' journals. The contents of the journals were analyzed for themes related to diversity and technology use. Student journals and questionnaires were reviewed by the instructor (the second author of the paper) and by the P3T3 project coordinator (the lead author of the paper). Outcomes related to diversity and technology are discussed below. In addition to these sources of information, regular observations were made of the video conferencing sessions, and these observations contributed to the overall assessment of the impact of the project.

Outcomes

Although the pre-service teachers had very little familiarity with video conferencing at the outset of the class, we found that they quickly adjusted to it. At the end of the class, mean responses to all of the Likert-type survey items fell on the positive side of the scale; most clustered near a response of "agree" (see Table 1). The pre-service teachers tended to agree that they were comfortable with the technology, found it easy to use, learned how to use it from the class, and found it to be of value to the class. They also tended to agree that the experience made them more comfortable in their ability to use technology for teaching and learning and in their ability to understand and work with diverse learners. One pre-service teacher commented, "I've learned that technology can do a lot of good things in education." Our observations of the P-12 class suggested that the P-12 students also became comfortable with the technology fairly quickly. Students quickly got over the novelty of being on camera, and, with prompting from the teacher, they learned to raise their hands, speak up, and otherwise follow protocols that facilitated communication with their distant "Purdue friends."

Table 1.
Summary of Pre-Service Teachers' Responses to Likert-type Survey Items

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<tr>
<th>Likert-type Survey Item</th>
<th>Fall 2002 Mean (n=21)</th>
<th>Spring 2003 Mean (n=21)</th>
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<td>By the end of the class, I felt comfortable with video conferencing equipment that we used.</td>
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<td>The video conferencing in this class was easy to use.</td>
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<td>I learned how to use video conferencing in education from this class.</td>
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<td>I believe that the use of video conferencing was a valuable addition to this class.</td>
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<td>3.33</td>
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<td>Because of the experience in this class, I feel more comfortable in my ability to use technology for teaching and learning.</td>
<td>3.90</td>
<td>3.62</td>
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<tr>
<td>Because of the experience in this class, I feel more comfortable in my ability to understand and teach diverse learners.</td>
<td>3.90</td>
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Note: means on scale of 5 = strongly agree, 4 = agree, 3 = undecided, 2 = disagree, 1 = strongly disagree

The pre-service teachers began to see the technology as a tool that could be used for teaching and their own and others' learning, personal productivity, and communication. While these beginning teacher education majors came into the course as unskilled observers, through the guidance of a faculty member who observed
alongside them via the video conferencing, they became better observers themselves. One pre-service teacher commented, "We got a chance to see a classroom without actually being there." The traditional model for early field experience, at least as implemented in this university course, involves sending all of the pre-service teachers into classrooms for one to two hours of observation per week. The pre-services teachers all visit different classrooms, and they come together the following week to discuss their observations. While certainly useful, this approach lacks a shared context. Different pre-service teachers observe different classrooms and activities, and the instructor has no idea what most of them have seen. The shared observational experience of the distance field experience, on the other hand, led to opportunities for richer class discussions. Because the instructor and all of the pre-service teachers observed the same teacher, students, and classroom events, they were able to discuss their observations from a common ground.

Pre-service teachers' journals and questionnaires indicated that their understanding of diversity issues and how to teach "other people’s children" (Delpit, 1995) also grew during the project. One pre-service teacher commented, "I also think that being able to see a more diverse classroom than the ones close by was a big advantage for us because it gave us something to relate our multicultural studies to." Diversity was in every interaction, although subtly, and in sometimes unexpected ways. Pre-service teachers thought the classroom teacher would teach differently because she had diverse students. In interactions with the teacher and students and in interviews with the teacher, they have found that the teacher did not "water down the curriculum, had high expectations, taught in an integrated style, and built on the students' prior experiences". They also began to question their assumptions and beliefs about teaching and learning of diverse groups of students. This is an important aspect of preparing pre-service teachers to understand diverse populations (Gay, 2000; Ladson-Billings, 1994, 2001). One pre-service teacher commented, "I've learned not to be afraid of teaching students in the more run down communities and that they're not as scary as I had first imagined."

Although there were a number of indicators of success, there were also problems and issues. The technology, while generally working well, did have occasional problems. One pre-service teacher commented, "Technology is not perfect. We weren't able to connect one time and had trouble connecting another time. It can be hard to see..." Technical problems were more frequent during the spring of 2003, and this probably contributed to the somewhat low mean response to the item, "I believe that the use of video conferencing was a valuable addition to this class" (see Table 1). A number of the pre-service teachers were also put off by the lack of face-to-face contact with the teacher and her students. One pre-service teacher commented, "I feel that we have not gotten an experience that we would have in the other class that actually went into the classrooms. I feel that we have been cheated..." However, a number of pre-service teachers shared the sentiment expressed by one who said, "At first I was opposed to the idea, but now I kind of like the experiences I had." A similar reaction was expressed by another who wrote, "At first, I was very skeptical. However, it turned out to be a very good experience."

Discussion

When working with any new medium of communication, there are inevitable difficulties. The first hurdle to overcome in this pilot project was simply getting the technology working at both sites. For IP-based video conferencing, a significant initial barrier is school Internet firewalls. Because of information security concerns, most schools are protected by an Internet firewall. While keeping people out of the internal network, a firewall can be configured to allow selected outside connections. When trying to set up this access, we ran into a number of difficulties. Purdue technical support staff worked with the technical support staff at the school to "punch a hole" in the school's Internet firewall for the video conferencing. Once done, everything worked fairly well until network changes caused problems that had to be corrected. If you are contemplating trying this approach, be sure to allow for plenty of lead time to get the technology working, and do one or more test sessions prior to the first video conferencing session.

Participants, both Purdue pre-service teachers and P-12 students, had to spend time getting acclimated to the system of communication. This process was not difficult, but it was critically important. The university students needed to practice using the system to help them get a feel for the communication abilities, and the P-12 teacher and students needed to develop procedures (e.g., raising hands, speaking loudly, addressing the
camera) to facilitate routine communication. For a successful experience, develop conventions to facilitate communication, such as having name signs and using signals to denote when students at the remote site are supposed to do something.

In this pilot project, pre-service teachers learned to see technology as a tool that enabled them to communicate across distance, and with students they may have had little experience of in the past. One pre-service teacher commented, "I feel that it was a good opportunity for us to receive a chance to see a school that is very diverse. We received an experience that others have not." Just learning to use the technology itself was a benefit for many of the pre-service teachers. One commented, "I have learned about the equipment used in such a process so I would feel comfortable participating in something like this in the future!" If you decide to try to use video conferencing in this way, kill two birds with one stone by helping the students understand how the technology can be used in the classroom.

The technology is good, but it has limitations. Sometimes we were unable to establish a connection due to technical problems of one kind or another. In addition, IP-based video conferencing connections are susceptible to problems as a result of limited bandwidth or network congestion. Sometimes the Internet-based video conferencing connection is "choppy." When Internet packets are "dropped" as a result of network traffic, this can result in the video freezing and the audio breaking up. Even when working perfectly, the picture on the screen, while not bad, could be clearer. Effective observation often means noting facial expressions and body gestures not easily discerned by viewing a video monitor. Pre-service teachers reported that they had difficulty judging whether the P-12 students at a distance understood when a lesson was being presented. Audio was also problematic at times. While the teacher’s voice comes through clearly most of the time, the children’s voices are less clear. Furthermore, background room noise can create interference. We have found that having the teacher work with the students to speak more loudly and clearly helps.

The main issue for the pre-service teachers was that they were not in a “real” classroom with “real” students. Some students, at least initially, felt a loss at this mode of interaction. Clearly, this kind of distant or virtual field experience should not be viewed as a substitute for traditional field experiences in real classrooms. Pre-service teachers need real field experiences. However, by the end of the course, most found value in the distant field experience. One pre-service teacher captured this sentiment by commenting, "It was a really good experience. I was somewhat upset at the beginning that I wasn't going to be able to go to the classroom, but I feel I learned just as much, if not more, than I would if I had to be in a class." If you try this approach in your teacher education program, be sure that your pre-service teachers do experience genuine field experiences, and stress to them that this is a supplemental approach that has certain advantages and disadvantages.

Our pilot project suggests that technology-enabled field experiences provide a viable alternative for some types of student observations and for interactions with P-12 teachers and students. While certainly not a replacement for traditional field experiences, video conferencing over the Internet offers a promising new tool for teacher preparation programs. It provides one avenue for offering field experiences and for linking with diverse P-12 sites in a way that provides for flexibility and emphasizes integration of technology. It is one new tool for expanding the options for linking students in teacher preparation programs with P-12 teachers and students to enhance their preparation with respect to both technology integration and the ability to understand and work with diverse students.

References


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Appendix C:
CEPS Projects for PIE Funding Consideration
if additional PIE monies are available:

When Buzzard Hall was originally wired in 1997 Category 5 cabling was used and each LAN drop contained only one network cable and one phone line. Many of our offices and classrooms have only one usable network cable that does not meet current EIA/TIA specifications. This has prevented us from adding network printing equipment, adding wireless access points, adding additional computers, video conferencing, and other equipment that requires a LAN connection in many of our department areas and classrooms in Buzzard Hall.

We have requested this project to be considered as part of the TENG – Horizontal Infrastructure Project but as of this date (March 30, 2004) Buzzard Hall is considered outside the scope for the TENG Project. If monies are available at this time as part of PIE monies we would like to meet with the TEAM committee to discuss funding consideration. If this wiring request is added as part of the current TENG project then we ask the money be spent on wireless access points for Buzzard Hall, McAfee, and Lantz buildings.

Below is a listing by CEPS area in Buzzard Hall for requested additional LAN drops at this time: (two Category 6 network cables per drop):

Secondary Education and Foundations Department
BUZ 2148 Chairs office - east wall next to table
BUZ 2149, Conference Room - west wall, center
BUZ 2147, Front Office - west wall, south corner
BUZ 2141, Mailroom - south wall center
BUZ 2135, GA Office - west wall
BUZ 2131, Records Room - north wall, center
BUZ 2120 LAN drop near ceiling with electric
BUZ 2120 Copier Work area south wall

CEPS Deans Office
BUZ 1417 Bower east wall
BUZ 1415 Rich south wall
BUZ 1420 cubby area north wall
BUZ 1420 hallway LAN drop near ceiling with electric
BUZ 1412 copier room east wall

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Appendix C : (continued)

Instructional Technology Center
BUZ 1440 south wall, east side
BUZ 1440 south wall, east side
BUZ 1440 LAN drop near ceiling
BUZ 1440 south wall, west side
BUZ 1440 west wall
BUZ 1440 east wall
BUZ 1440 east wall
BUZ 1440 east wall, for new uniprint copier
BUZ 1440 staff area - west wall
BUZ 1436 east wall
BUZ 1430 west wall
BUZ 1430 east wall for uniprint copier

Counseling and Student Development Department
BUZ 2103 Copier Room - south wall
BUZ 2116 south wall
BUZ 2120 south wall

Student Teaching Department
BUZ 2418 east wall
BUZ 2418 south wall
BUZ 2418 staff area LAN drop near ceiling with electric
BUZ 2412 south wall
BUZ 2423 south wall
BUZ 2423 north wall
BUZ 2422 south wall

Grants Office
BUZ 2307 - north wall
BUZ 2305 - west wall, by copier

Reading Center
BUZ 1321 Resource Room west wall
BUZ 1324 west wall
BUZ 1322 Noelle/Kiran west wall
BUZ 1333 Clinic Room south wall
BUZ 1335 Clinic Room south wall
BUZ 1320 staff area north wall
BUZ 1320 staff area LAN drop near ceiling with electric
Appendix C : (continued)

Special Education Department
BUZ 1224 Library west wall
BUZ 1206 Special Projects north wall
BUZ 1210 Work Room east wall
BUZ 1212 LAN drop near ceiling with electric
BUZ 1150 TMC - west wall
BUZ 1135 Tech Ctr - west wall
BUZ 1135 Tech Ctr - east wall

Educational Administration Department
BUZ 2321 GA Room south wall
BUZ 2320 cubby area north wall
BUZ 2332 Conference Room north wall
BUZ 2332 Conference Room south wall
BUZ 2326 Fax Room north wall
BUZ 2324 Copier Room north wall

Early Childhood, Elementary, and Middle-Level Education Department
BUZ 2220 west wall BUZ 2220 LAN drop near ceiling with electric
BUZ 2222 Conference Room west wall
BUZ 2216B GA Area east wall
BUZ 2216 Copier Room east wall
BUZ 2221 Chairs Office east wall
BUZ 2151 new faculty office west wall

Buzzard Hall Classrooms
BUZ 1103 Classroom LAN drop near ceiling with electric
BUZ 1103 Classroom west wall
BUZ 1121 Classroom LAN drop near ceiling with electric
BUZ 1140 Classroom LAN drop near ceiling with electric
BUZ 1180 Classroom LAN drop near ceiling with electric
BUZ 1302 Classroom west wall BUZ 1302 Classroom south wall
BUZ 1302 Classroom LAN drop near ceiling with electric
BUZ 1441 Classroom LAN drop near ceiling with electric
BUZ 1445 Classroom LAN drop near ceiling with electric
BUZ 1445 Classroom - (would like to relocate existing drops and electric in this room, safety issue)
BUZ 1445 (would like to relocate existing drops and electric in this room)
BUZ 1501 - Auditorium LAN drop near ceiling with electric
BUZ 1501 - Auditorium LAN drop near ceiling with electric
BUZ Atruim 1st floor LAN drop near ceiling with electric
BUZ Atruim 2nd floor LAN drop near ceiling with electric
BUZ 1501 Auditorium south end
BUZ 1501 Auditorium south end

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Appendix C : (continued)

Buzzard Hall Classrooms (continued)
BUZ 2160 Classroom LAN drop near ceiling with electric
BUZ 2160 Classroom west wall
BUZ 2160 Classroom east wall
BUZ 2440 Classroom LAN drop near ceiling with electric
BUZ 2441 Classroom LAN drop near ceiling with electric
BUZ 2442 Classroom LAN drop near ceiling with electric
BUZ 2444 Classroom west wall
BUZ 2445 Classroom/Lab east wall
BUZ 2445 Classroom/Lab south wall
BUZ 2445 Classroom/Lab north wall
BUZ 2445 Classroom/Lab LAN drop near ceiling with electric
BUZ 2445 (would like to relocate existing drops and electric in this room)
BUZ 2439 Classroom LAN drop near ceiling with electric
BUZ 2430 Classroom LAN drop near ceiling with electric

If PIE monies become available the CEPS Technology Committee would like to discuss options available for the additional requests with the TEAM Grants Committee. Thank you for your consideration.