Using Field Experiences to Assess Technology Proficiency in Preservice Teachers

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Technology Applications in the Classroom Course

• Required of students in all four programs at Roger Williams University
  – Undergraduate Elementary Education
  – Undergraduate Secondary Education
  – Master of Arts in Teaching (MAT)
  – MA in Literacy
• Course designed to meet all 6 ISTE NETS-T

Assessment

• All assessments in this course are performance assessments
• Students perform authentic teacher tasks, such as lesson planning, critical reviews of websites, and development of a teacher web page
• Required field project component (20%)
Field Project Guidelines

• Students must design and implement a field project of their choice that gives them practical experience using educational technology
• The time commitment is a minimum of 15 hours

Suggestions

• Team up with a teacher who is not a regular user of technology in the classroom. Determine ways that technology would enhance the existing curriculum or operations. Use your time to train the teacher to use new technologies and together create some applications that can be used in the classroom.

Suggestions

• Team up with a teacher who uses technology in the classroom on a regular basis. Plan and implement lessons or activities that have not previously had a technology component.
Suggestions (MA Literacy)

- Use this time to try out new ways to use technology in your own classroom. Try to think of a project that will make a lasting difference in your classroom.

Suggestions – Virtual Experience

- Students can apply to participate in the ESL Email Mentoring project. In this project, students will be paired with a high school ESL student and serve as a writing mentor for the course of the semester. Students will have an opportunity to meet their mentee at the end of the semester. (Ongoing K-12 partnership).

Suggestions – Ongoing Partnerships

- Students can participate in school based “Tech Nights” at Cranston-Calvert School in Newport Rhode Island. This urban school serves as a model technology school for Newport. Evening tech nights allow teachers to explore new ways to use technology. Students can learn to use Palm Pilots to assess reading.
Suggestions – Ongoing Partnerships

- Students can participate in a partnership program in the Bristol-Warren School district where classroom teachers are paired with education students to create web-based scavenger hunts and WebQuests.

Examples

Procurement of an FM System

- Student worked with a former teacher to research and procure an FM system for use in the classroom with a hearing impaired student. (This school did not have assistive technology resources.)
- Research was done in schools using FM systems near the university
- System was implemented in the high school the student attended.
“High - Teching” a School Newspaper
• Student worked with a high school teacher to develop operating procedures and directions for using technology to improve the efficiency of the school newspaper. (Pagination and file structure)
• The student had worked on the newspaper when she was in high school.

Working with an Art Teacher
• Student helped an art teacher prepare for the annual auction fundraiser by creating materials using a digital camera and PaintShop Pro
• All work had previously been done by hand and was extremely time consuming

Field Trip Scavenger Hunt
• Student worked with her Biology teacher from high school to plan a scavenger hunt on a field trip to a nature center.
• Previous scavenger hunts were low tech and involved index cards and samples (bugs, etc.)
• Students used disposable digital cameras and create PowerPoint's of their findings.
Classroom Projects

- American Women’s Quit Project
- Commemoration Issue of a school newspaper for a retiring teacher
- Mail Merge field trip permission forms
- Setting up Smart Boards that were collecting dust!

Training Classroom Teachers

- PowerPoint
- Word Processing
- Mail Merge
- Web Skills
- Email, address books
- Excel, charts
- Creating web pages
- Creating rubrics

Deliverables

- Reflection paper
  - What they did
  - How they did it
  - The benefits to them as a future teacher
  - The benefits to the teacher and students with whom they worked
- Samples
- Time log
- Comments from teachers and students
- Digital pictures
Student Comments about the classroom teachers

• “She was so amazed at the fact that this information and knowledge was out there but she had no idea it even existed.”
• “She wanted to talk to the administration and get a class going for all of the teachers in the school.”
• “She asked me how to print a document. At first I didn’t understand what she was asking. It turns out she did not know that all you had to do was choose File/Print!”

Student Comments about the Students

• “The students working on the paper were so excited to be using all the ‘high tech’ equipment”
• (ESL project) “I was able to guide a student and watch her progress as she learned our language.”
• “The learning process is an amazing thing and it was a great experience to see how my suggestions helped her improve.”

Personal Benefits

• (ESL Project) “Exchanging emails with Mizuki each week was more than simply part of a project. It was an amazing opportunity to see another’s culture right through her eyes.”
• “I was able to bring the entire school together using technology.”
  (Commemorative newspaper)
• “This has been one of the best experiences I have had at RWU!”
Effecting Change!

• “We have decided that we will keep the Bradley Buzz in production from month to month.”
• “After using the portable lab for the project, I now have the confidence and skills to continue using it in my classroom!”
• Students have found that classroom teachers who previously used no technology are excited about their new skills.
• The number of ongoing partnership projects is growing.

Getting the most out of field projects

• Encourage flexibility and creativity
• Show and discuss examples of previous successful projects
• Encourage students to explore new experiences
• Develop and cultivate ongoing K-12 relationships and projects
• Be open to “virtual” experiences

For more information

• ESL Project Pages
  http://faculty.rwu.edu/mthombs/research.html
• NECC Presentations and handouts
  http://faculty.rwu.edu/mthombs/NECC2005
• (Local version)
  ..\NECC2005\index.html