

CEP 812: APPLYING EDUCATION TECHNOLOGY TO PROBLEMS OF PRACTICE

Michigan State University

PURPOSE OF THE COURSE

The underlying purpose of the Educational Technology Certificate Program is to improve teaching and enhance learning through technology. In CEP 812, the emphasis is placed on using technology as a tool to address problems of practice or opportunities for improvement in real school settings. This course can be seen as taking what is learned in CEP 810 and 811 and learning how to make a difference in your own work environment with it.

COURSE TOPICS

- Informally assessing problems of practice and opportunities for improvement in educational settings
- Designing and implementing a project for applying technology as a tool to address the issue(s) identified
- Assessing and reporting on the impact made by the project

COURSE OBJECTIVES

Upon completion of this course, it is expected that students will understand:

- Various frameworks for assessing and enhancing the effectiveness of schools and classes
- Various strategies for applying educational technology to problems or opportunities in a school setting in support of school goals
- A framework for applying technology to address authentic educational needs and opportunities and assessing its effectiveness.
- Issues related to leadership and the effective use of technology in schools

Upon completion of this course, it is expected that students will know how to:

- Apply technology to address authentic educational needs and opportunities and assess its effectiveness.
- Employ Internet-based tools and resources in support of collaboration with educational leaders and peers
- Perform Internet-based research in support of the application of technology in the educational setting

IMPORTANT INFORMATION

MSU Minimum GPA Policy

MSU, the College, the CEPSE Department, and the MAET program all have a policy that requires MA students to maintain a minimum cumulative GPA. "If, upon completion of 18 or more graduate credits, the student has not attained a grade-point average of 3.00 or higher, he or she becomes ineligible to continue work toward the master's degree in the College." - *from Academic Standards, University Graduate Policy - Education, p. 1.*

MSU Minimum Course Grade Policy

There is also a policy regarding credit and grades for MA courses. According to MSU policy, students cannot receive credit for any course with a grade below 2.0. You will have to take an extra course if you earn below a 2.0 grade on any course. "In particular graduate programs the number of 2.0 grades acceptable for credit may be expressly restricted and/or levels higher than the 2.0 minimum may be established for the fulfillment of degree requirements." (In the MAET program, no 2.0 grades can be applied toward your degree) - *from MSU General information, policies, procedures, and regulations, p. 22.*

Academic Honesty Policy

"The principles of truth and honesty are recognized as fundamental to a community of teachers and scholars. The University expects that both faculty and students will honor these principles and in so doing protect the validity of University grades. This means that all academic work will be done by the student to whom it is assigned, without unauthorized aid of any kind. (See General Student Regulation 1.00, Scholarship and Grades, for specific regulations.) Instructors, for their part, will exercise care in the planning and supervision of academic work, so that honest effort will be positively encouraged." - *from MSU General information, policies, procedures, and regulations, p. 24.*

LATE WORK POLICY

In an online course it is easy to get behind on your assignments. In some cases certain assignments build upon others so it is imperative that you complete all the assignments on time. You have plenty of notice with your assignments, so last minute glitches and minor illnesses are not acceptable excuses. You should anticipate computer troubles. Things like erasing your files, losing your files or media storage, and/or computer problems should be considered possible events when trying to complete your work so give yourself plenty of time to submit an assignment. All graded assignments will be accepted late for these penalties:

- 2 days late subtract 10%
- 3-4 days late subtract 20%
- 5-7 days late subtract 50%
- more than 7 days late subtract 100%

GRADING SCALE

- All work is submitted to the portfolio website and grading will be based upon successful completion of the course portfolio. Grades for each assignment will be posted on the course portfolio website.
- Grade percentage totals for work submitted are available at the bottom of the student portfolio page.
- A 4.0 will be given for a total of 94% or higher (if all assignments have been completed), 3.5 for 87%-93%, and 3.0 for 80-86%.

- Expectations: All work should be spell-checked, grammar-checked, and proofread BEFORE submission. Again, a reminder that all assignments must be submitted and a total percentage of 94% or higher attained to receive a grade of 4.0.
- Students may resubmit any assignment ONCE, to improve a grade.

REQUIREMENTS AND GRADING FOR CEP 812

Internet Research for TechQuest Project (15 points)

Use the Internet as a resource in the planning of your project. Information you may try to find includes:

- Others who have attempted projects similar to what you have proposed
- Resources that may help guide your project
- Resources that may help in the implementation of your project

Your report for this assignment should cover two aspects:

1. The results of your search
2. What you learned from performing this search. For example, which search engines did you use? What strategies did you use? What helped or hindered your search? How would you search again next time?

Your report must be posted to your blog.

TechQuest (50 points)

A TechQuest is a project in which you implement a use of technology to address a problem of practice and/or an educational goal. Your TechQuest project design, implementation, and assessment should follow the [TechQuest template](#). This template should guide the content of your report while the report itself may be made as a Web page, or a Word document. You are encouraged to include pictures of the implementation of your project. You will write a **draft** for the main sections of the TechQuest and post them in your blog. (See the description of the Virtual Workgroup Participation assignment.) You can use your blog postings in your final document. HOWEVER, please make sure that the text you use from your blog in your final TechQuest document is revised and incorporates feedback. If you receive the full points for your blog posting you may not receive the full points for this assignment if you do not revise.

This should be a complete, polished document. It can be in the form of a Word document or a Web page.

Virtual Workgroup Participation (25 points)

You are expected to participate actively with the others in your SIG group. An aspect of this assignment involves regular postings to your **blog** about your project.

Your interaction should include:

- Communicating the progress of your TechQuest
- Posting a description of your project

- Creating a podcast communicating your notes on the implementation of your project
- Evaluating your project
- Serving as sounding boards for each other
- Reviewing each others' projects
- Offering encouraging words and support

It is expected that you will contribute to your blog on a regular basis.

Tech. Leadership: Threaded Discussion (5 points)

For this assignment, you must participate in your group's threaded discussion. The discussion forum will be used to coordinate all SIG assignments. For full credit, you must have thoughtfully contributed to your group's forum.

A Matter of Ethics: Prepare a Lesson Plan on Copying and Fair Use (10 points)

Create a lesson plan to be used with your chosen target audience (maybe your students, maybe other teachers, maybe parents) that helps them better understand when, where, and how copying can be done appropriately and inappropriately. Make this a web-based resource and submit the URL to this discussion.

It is expected that a lesson plan would include these elements (although the order and labeling of these items can vary):

- The target learners
- The educational objectives and any associated standards
- The means of assessing whether the objectives were met
- Brief description of the primary teaching strategy(ies)
- The required time & resources
- The series of learning activities

Special Interest Group Proposal (10 points)

This proposal should define a special interest group (SIG) for your assigned group in class. It should define an area of educational technology (e.g., a particular grade level, subject matter area, use of technology).

Please indicate:

- Your SIG focus. In particular, indicate what focus you will have in each of the 4 common places in education: the teacher, the student, the subject matter, and the context.
- Your members and their special areas of emphasis within your SIG.
- The major categories of resources you hope to gather related to your SIG.
 - These might include professional organizations, tech help forums, lesson plans, online articles and/or examples.

SIG Annotated Links Page (15 points)

For your SIG, this web page should list resources (online and otherwise) you have identified for your SIG along with your own annotations describing the resources and their contribution to your SIG. You can use a social bookmarking tool to collect your sites. You must link to your annotations from your SIG proposal site.

Multiple Page Web Site (40 points)

You will create a multiple page site. Please [refer to the 811 tutorials](#) for a review on how to create a multiple page site. The Web site will also include an electronic portfolio for this course and the Certificate.

Specifically you should create a Web site on the Internet that:

1. Contains multiple linked pages with a main page that is the default entry point
2. Contains graphics, both pictures you have taken and computer-generated images such as screen dumps or clip art
3. Contains links to other sites on the Internet
4. Contains an active e-mail link to yourself

Suggestions: You have already created your main page for your site in 811. You just need to create supporting pages.

You can easily have four pages if you link

1. Your main page
2. Your WebQuest
3. Your Tech Plan
4. A Matter of Ethics Lesson Plan

You can also link to your SIG group project and your TechQuest project.

Personal Technology Plan (30 points)

Your personal technology plan should be a web page and should include:

- A vision statement for technology in education, including both the promises and pitfalls, both now and in the future
- How you currently employ technology in your work in education
- Your own plan for enhancing and increasing your use of technology in your work in education, including a timeline with required own learning and skill development

Include links to relevant examples, reference materials, Internet research, and the like.

Scope: You should have approximately 1 to 2 pages for each of the above 3 points.

Class Participation (10 points)

You will receive full credit for class participation if you actively and constructively contribute to class interaction during:

1. On-line activities
 2. Group activities, including feedback on the work of other class members
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SESSIONS

Session 1

- Course Overview
- Recent research on computer technology contributions in Education
- Applying Technology to Problems of Practice
- Begin assignment related to creating a lesson plan on fair use and copyrights
- Project design model
- Selection of and preliminary work on individual project
- Creation of Special Interest Group
- Building a multiple page web site

Session 2

- Review and Overview
- Technology Leaders
- Technology Plans and Standards
- Individual Consultations on Projects
- Introduction of Personal Technology Plan Assignment
- Podcasting Tutorial

Session 3

- Digital Divide
- Types of Instructional Software
- Evaluating Technology in Education
- Technology Across the Curriculum
- Create a podcast reporting on your implementation

Session 4

- Evaluating Your TechQuest
- Reflecting on Your Experience with your SIG

READING LIST

Bransford, J.D., Brown, A. L., & Cocking, R.R. (1999). How People learn brain, mind, experience and school. Commission on Behavioral and Social Sciences and Education, pp. 206–230. Available at <http://books.nap.edu/html/howpeople1/ch9.html>. (Chapter 9 only)

Technology and Student Achievement: The Indelible Link. International Society for Technology in Education. (2008). (59.08) Retrieved from <http://www.iste.org/Content/NavigationMenu/Advocacy/Policy/59.08-PolicyBrief-F-web.pdf>

Critical Issue: Technology Leadership Enhancing Positive Educational Change by Gilber Valdez or Critical Issue: Promoting Technology Use in Schools by Jan Gahala

Information Fluency Meets Web 2.0 By Joyce Valenza

Education Week's State of Technology Report for your particular state

The State of Michigan Technology Plan

NETS for Students

Salpeter, J. (2006, March). Inside the divide. Technology & Learning, 26 (8), 22-28

Listening Assignment: NPR's News & Notes: Bridging the Digital Divide in the Classroom