

CALIFORNIA STATE UNIVERSITY MONTEREY BAY

MAE 638

Fall 2011

CRN

Science, Room 123

Time: TUES 4:00PM–6:50PM

Prof. Nicholas Meier

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OFFICE HOURS: WEDNESDAY 4:30-7:30PM

Updated 11/3/11

MAE 638: Technology as a Tool for Excellence and Equity

Course Description

Catalog Description: Participants explore current technologies and coming trends. 'Technology' in this course is more than computers and digital media. Participants also explore the issues created by these technologies. They look at tools that will help them use the potential of technology to support teaching and learning, and to develop thoughtful and powerful implementations of technologies in whatever educational setting they work. Meets the Level 2 credentialing requirements of the California Commission on Teacher Credentialing.

Required Materials/Equipment:

- Ongoing access to a computer (either Mac or PC operating system is fine, but it needs to have capability to create multi-media and it needs to have Internet connectivity).
- An Internet service provider (ISP) connection, preferably a high speed connection (e.g. DSL or cable).
- Microsoft Office (PowerPoint, Word and Excel especially).
- Flash drive

Course Description

This is a course about technology. If you expected this to be a course where you learn how to use technology, you're partially right. We will certainly use technology and learn about some of the latest gadgets, software and the coming trends. However this course is intended to be much more than learning how to use technology. This course will also explore the influences of technology on education, schools and youth. Particular focus will be spent on issue of technology and educational equity in it's various forms.

By the end of the course, you'll have the knowledge and skill to develop thoughtful and powerful implementations of technologies in whatever educational setting you work in. My goal is to help you explore the questions that will aid you in developing beneficial implementations of technology.

Expected Outcomes and Objectives

This course is designed to meet the State of California Level 2 technology proficiency objectives for teachers. The objectives for this course, are, therefore, the same as the Level 2 objectives. The table below identifies how this class meets these objectives:

State of California Level 2 Technology Proficiency Objectives
L2.1 Each candidate uses a computer application to manipulate and analyze data (e.g. create, use and report from a database; and create charts and reports from a spreadsheet).
L2.2 Each candidate communicates through a variety of electronic media (e.g. presentations incorporating images and sound, web pages, and portfolios).
L2.3 Each candidate interacts and collaborates with others using computer-based collaborative tools (e.g. threaded discussion groups, newsgroups, electronic list management applications, online chat, and audio/video conferencing).
L2.4 Each candidate demonstrates competence in evaluating the authenticity, reliability: bias of the data gathered, determines outcomes and evaluates the success or effectiveness of the process used.
L2.5 Each candidate optimizes lessons based upon the technological resources available in the classroom, school library media centers, computer labs, district and county facilities, and other locations.
L2.6 Each candidate designs, adapts, and uses lessons, which address the students'½ needs to develop information literacy and problem solving skills as tools for lifelong learning.
L2.7 Each candidate creates and makes use of learning environments inside the classroom, as well as in library media centers or computer labs that promote effective use of technology aligned with the curriculum.
L2.8 Each candidate uses technology in lessons to increase each student's ability to plan, locate, evaluate, select and use information to solve problems and draw conclusions.
L2.9 Each candidate uses technology as a tool for assessing student learning and for providing feedback to student and their parents
L2.10 Each candidate frequently monitors and reflects upon the results of using technology in instruction and adapts lessons accordingly
L2.11 Each candidate collaborates with other teachers, mentors, librarians, resource specialists and other experts to support technology-enhanced curriculum. For example, they may collaborate on interdisciplinary lessons or cross grade level projects
L2.12 Each candidate contributes to site-based planning or local decision-making regarding the use of technology and acquisition of technological resources.

REQUIRED READING (TEXTS):

Provided Through iLearn and eReserves

For further resources related to this course and other educational topics:

Web Resources: <http://www.nicholasmeier.com/Websites2.html>

Books: <http://www.nicholasmeier.com/favoritebooks5.html>

COURSE POLICIES

ATTENDANCE AND PARTICIPATION.

You are expected to attend class and to be well prepared to participate This means that you have read and reflected on the assigned readings and are clearly involved in group discussions and activities. Absences, early departure from class, excessive tardiness, or not respecting the length of break time will negatively influence your grade. Whenever possible please inform the instructor in advance if you know you will be absent or late. I do NOT give make up assignments for missed classes.

SUBMISSION POLICY:

All assignments must be typed (unless otherwise specified). 12 point serif font (e.g. *Times*) is preferred. Assignments must be delivered through the online course system based on assignment instructions. Please use your name in the title, and the name of the assignment as the title of the document (e.g. Smith_Project.doc).

ACADEMIC INTEGRITY, PLAGIARISM and CITING WORK

Any form of academic dishonesty, such as cheating, fabrication or falsifying information, or plagiarism WILL result in serious repercussions. To avoid plagiarism, be sure to include a works cited section in any academic paper. It is important to acknowledge where you are drawing your insights, inspiration, or ideas.

If the material is copied directly from the readings then both quotation marks and text citations with page numbers need to be used. For example, "...the quoted material you have chosen..." (Ayers, 1991, p. 52). If you are paraphrasing or putting the material (ideas) into your own words then the citation needs to follow the material—name of author and year of publication. (Ayers, 1991). Full bibliographic information comes in the work sited section. Failure to do so constitutes plagiarism, PLAGIRISM and plagiarizing WILL result in either failing the course, or at a minimum mean an unacceptable paper. More severe consequences are likely. For more details, see the University Academic Integrity Policy at <http://policy.csumb.edu/site/x20830.xml>.

LATE ASSIGNMENTS

If you need an extension on a assignment you MUST notify the instructor in ADVANCE of the due date. Late assignments will NOT be accepted without prior (that is, by the due date) agreement from the instructor. Failure to result in a zero grade for that assignment, and if it is a major assignment for the course, a failing grade for the course. Authorized late assignments WILL receive a 10% reduction in grade for each two days late, up to a 50% grade reduction.

INCOMPLETES:

The purpose of an incomplete is to allow students who face an emergency or illness toward the end of the semester to complete their work after the semester is over. If this happens to you, please contact me as soon as you can. Unless there is a compelling reason, you will not be given an incomplete for reasons that do not relate to an emergency or illness. Rather, you will earn the grade based on the points you have accumulated by the end of the semester. Also, by University policy, the *student* must initiate the incomplete by submitting the Incomplete form to the professor before the end of the course. If you are granted an incomplete, we will work out a schedule for turning in missing work, and you will be expected to stick to that schedule. Any incompletes that are granted must be finished within a year, or the agreed upon date, whichever is sooner, or the "inc." reverts to an F.

ELECTRONIC ACCESS TO COURSE MATERIALS AND COMMUNICATION :

Important class documents and communication will be posted electronically. Once you register for the course, you will be automatically enrolled in iLearn (<http://ilearn.csumb.edu>). iLearn is an electronic tool that can be adapted for a variety of instructional purposes, including on-line discussions, the archiving of important course related documents.

EMAIL

I will send all email to your CSUMB email address. Getting your CSUMB mail is a REQUIREMENT of this course, the department, and the University. If you do not regularly check your CSUMB mailbox then you will need to set the preferences to forward your mail to your primary email address. Not checking your email is *not* an acceptable reason for not being aware of information that was provided in that form.

USE OF WRITTEN WORK

I will be asking for the right to use work written for this class for teaching and research. Agreeing to this use is completely voluntary and will have no effect either way or the other on your course evaluation or grade.

STUDENT COMPLAINTS

If you have a problem with the instructor or other department faculty, you are encouraged to first attempt to solve the issue directly with that person. If that is not possible, or the issue is not resolved satisfactorily, please use the Student Complaint Procedures. The Student Complaint Procedures for the Department of Teacher Education at CSU, Monterey Bay are intended to provide a clear and responsive process for addressing complaints that may arise among students participating in Departmental Programs. Furthermore, this process is designed to encourage and respect the abilities of students and faculty/staff to resolve issues in a constructive manner. A copy of the complaint procedures can be obtained from the Program Handbook or from the department support personnel.

Assignments

Software Review

Find and review one software program that is intended for use in the educational setting where you work. If at all possible, it is recommended that you review a program that you are using for your using technology project. I will be looking for your review to answer the following questions:

- Name and publisher of the program. Year of latest version. Cost if any, and possibly how to obtain.
- Describe the program and what it is designed to do.
- How well does this software meet the need it is designed for?
- How easy is it to learn to use?
- If this is software designed for student use, in your review identify where this program lies in the continuum of a program that is used as a tool by the student to achieve their own ends, or as a tool of the teacher to teach a particular skill.
- Does the use of this software increase the students knowledge of subject matter, build basic skills, develop their use of technology as a tool (beyond basics required for using any use of the computer) or some combination?
- Would you recommend this software to others, and if so, to whom?

Self Assessment Essay

In this essay you will reflect on what you learned in this course. In particular, if you are a teacher, you will describe how you have met the twelve "Level 2 Technology Proficiency Objectives" for the State of California through the coursework. You will need to cite the assignment(s) in which you showed evidence of mastery of that objective and what technology you used to do so.

Using Technology Project:

The assignment consists of three parts: Proposal, Paper, and PowerPoint Presentation.

Proposal

Consider how you will implement technology into your setting (if you currently aren't in an educational setting, you can plan for one where you want to be eventually). Think in terms of three areas: Hardware (equipment), Software, and Training. Create a plan for how you will develop equitable implementations of technology into your setting. Your plan needs to include the following:

Scope of Project: Describe briefly what the project is, and what need it is designed to fulfill. What "problem" is this project meant to solve? Why does this matter to you? Why does it matter to the larger community (e.g. other professionals in your field)? Why and how might your project help with this issue?

Setting: Where does this take place (e.g. your school/classroom, your position, and the students being served)

Hardware considerations: What current hardware exists, and what hardware will you need to carry out your project

Software considerations: What current software do you have, and what software will you need to carry out your project?

Training Step : Write a plan for how the users will learn to use the software and hardware required.

Implementation: Here is where you describe the project itself. This could be an instructional unit, the infusion of technology into your regular instruction, the use of a particular type of hardware or software to improve your teaching, the instruction of hardware or software into your work environment and how the appropriate people will be trained to use it. Give an outline of the timeline as well, how will the project proceed?

Assessment: How will you decide if this project met your goals? (you do *not* need a formal assessment tool).

You are to post your project proposal by the due date for the proposal. It will be graded on the degree to which you adequately address the above questions.

Paper

You will also write a paper (1500–2000 words) about the process of engaging in this project. First you will describe the need you were attempting to meet, and the goals you had for the project. Then tell the story of the implementation of the project. How did it proceed? What difficulties did you encounter? What successes did you and the students have? Then tell what you learned from engaging in the project. Did you achieve your goals? What would you do differently? What advice would you have for others?

Remember this is NOT primarily a software review, but a mini action-research paper reporting on what happened in the implementation of this software.

The paper will mimic the basic elements of a primary research article.

- I. **Problem:** As in the proposal, describe the problem or need this project is designed to fulfill. Go beyond what you see in your classroom, as to evidence that this may be general need. Provide some professional literature citations that speak to this need, and to other research that has looked at what you are trying to do.
- II. **Methods:** Describe the methods you used to carry out the project, the plan you had. This should include the setting, the participants, the procedures you used to carry out the project and the timeline, what data you collected, and how you collected it.
- III. **Findings:** Describe the implementation of your project—tell the story of what happened in a sort of narrative.
- IV. **Discussion/Conclusions:** What did you learn from doing this project, what can others learn?

In creating the paper you will be required to demonstrate the use the following features in MSWord (learning these features will be especially helpful to those of you who will be writing theses).

- Table of contents
- Use at least 2 levels of headings
- An embedded table
- Section breaks
- Headers and/or footers, including page numbering
- Hyperlinks (internal and external)
- Footnotes (or endnotes)

Presentation

For the presentation of this assignment create a PowerPoint presentation.

You will present this in the form of a PowerPoint presentation of no more than 10 minutes (it is absolutely crucial that you rehearse your presentation beforehand, both for practice and for timing).

The presentation should be about 10-15 slides.

Elements

- Introduce the project (e.g. Problem Statement)
 - What are you trying to accomplish and how
 - Describe the setting (Methods)
 - Describe the software (methods)

- Describe the implementation (methods)
 - **Tell the story of the implementation!!**
 - Summarize your conclusions—what worked didn't work, would you use it again? What would you do differently, what did you learn from carrying out this project
- *This should NOT be primarily a software review, but rather a presentation on your experience in trying to implement it.

Evaluation Criteria for the presentation

I want to know that that you can apply the ideas that we've been discussing to an educational setting. I'm less concerned with your expertise with the PowerPoint than I am with your ability to use it and your knowledge of the issues that we're covering in the class. I do want you to be able to create rudimentary slides in PowerPoint. The important issue for this course, however, is what you do with the technology. So do not spend a lot of time trying to learn a dazzling effect. You'll have the rest of your career to explore and create dazzling uses of technology. Spend your time and efforts in getting the topics addressed.

DISABILITIES

Students with disabilities who may need accommodations should contact me by the third week of class. You are invited to visit during office hours, make an appointment by calling 582-3536, or email me at nicholas_meier@csumb.edu. You should ALSO, contact: Student_Disability_Resources@csumb.edu; Phone: 831/582-3672 voice, or 582-4024 fax/TTY; <http://www.csumb.edu/student/sdr/>

GRADING

(An equivalent of a C- or lower on either of the major assignments will mean a C- or lower for the course regardless of your total points earned)

See the assignment descriptions for particulars of the assignment and how they will be evaluated.

Your final grade will be based on:

% of Final Grade	Assignment		Due Date
30	Participation (e.g. in class discussion and in class assignments)		
15	Software review		September 27
5	Self-assessment		Dec 6
5	Technology Proposal		September 13
35	Technology Project	Problem Statement draft	November 8
		Methods, Findings, & Discussion draft	November 29
		Final Paper	December 13
10	Technology Presentation		Variable

Grade Distribution

Grading Scale		
A+ 100-99	A 98-93	A- 92-90
B+ 89-87	B 86-84	B- 83-80
C+ 79-77	C 76-74	C- 73-70
D+ 69-67	D 66-64	D- 63-60

Bibliography of Course Readings

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MAE 638 Schedule			Fall 2011 Meier
As the semester unfolds, I may find it necessary to make modifications to the instructional activities and readings. When and if this becomes necessary, you will be notified immediately.			
Date	Topics	Readings Due	Due Dates
8/23	Intro to class	<ul style="list-style-type: none"> ISTE Profiles 	
8/30	Technology and Learning / Learn Word Features	<ul style="list-style-type: none"> Reeves: Authentic Activities Roth: Computers Can individualize Learning Barnett: Successful K-12 Technology Planning 	
9/6	Technology and Learning / Apply Word Features	<ul style="list-style-type: none"> Ferguson: Technology in a constructivist class... Zemke: Timeless Rules Cruthirds: Programmed Instruction 	
9/13	Effectiveness / Web sites from Top Ten	<ul style="list-style-type: none"> Barron: Large-Scale Research Study on Tech ... USDE: Effect of Reading and Math software Edutioia's Top Ten Tips 	Proposal
9/20	Special Education / Excel-stat features	<ul style="list-style-type: none"> Parette: What Should We Expect of AT Wepner: Using AT for Literacy... Information for Parents: Assistive Technology 	
9/27	Assistive Technology / Excel stats	<ul style="list-style-type: none"> Harris: Laptop Use Students with Disabilities Jennings: Ambassadors of the Computer Age Wehmeyer: Technology Use by Students with Intellectual Disabilities 	Software Review
10/4	Effects on children / Excel Charts	<ul style="list-style-type: none"> Atwell: Computers and Young Children Healy: Cybertots TechTonic: What's Wrong with a High-Tech Childhood? 	
10/11	Effects on children / Photoshop	<ul style="list-style-type: none"> Rosen: Teaching the iGeneraation Sprenger: Focusing on the Digital Brain 	
10/18	Multiculturalism / Video with Quicktime	<ul style="list-style-type: none"> Gorski: Insisting on Digital Equity Diott: Podcast of thousands 	
10/25	Multiculturalism / Video with iMovie	<ul style="list-style-type: none"> Gorski: Multicultural Education and Progressive Kemker: Laptop computers in the Elementary... Chen: Using CT to Bridge School and Community 	
11/1	Censorship and responsible use / create Survey Monkey	<ul style="list-style-type: none"> Manzo: Filtering Fixes Holladay: Cyberbullying Tokunaga: Following your home from school 	Problem Statement draft due
11/8	Take Survey Monkey surveys and create grpahs	<ul style="list-style-type: none"> West: Best Practices in Integrating Technology Cutshall: Clicking Across Cultures 	
11/15	WebQuest / Project review	<ul style="list-style-type: none"> Svoboda: Cellphonometry Bowerman: Technology for All 	
11/22	Thanksgiving	<ul style="list-style-type: none"> No Class 	
11/29	Project Presentations		paper draft
12/6	Project Presentations		Self-assess
12/13	Project Presentations		Project paper

