Syllabus

Instructors

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Welcome to the 2010 summer session of the Masters Program in Educational Technology. This summer we will cover three courses (CEP 800, 815, & 822) as an integrated seminar beginning Wednesday, June 21 and continuing through Friday, July 30. The first two weeks (June 21 – July 2) will be face to face, while the rest of the course will be conducted online with a final meeting/presentation on July 30.

For the first two weeks we will meet in Rooms 133 D, Erickson Hall from 9:00 – 4:00. The online component of the course will be conducted via the course Web site and Facebook.

Course website

The course website can be found at http://punya.educ.msu.edu/summer10/

Quite a bit of the online discussion will happen via Facebook. We will discuss this is class…

Course Goals

This course has two goals: an easy goal and a difficult one. The easy one is to learn about technology. Some of you may already know a lot about it and some may know less. But learning that stuff is easy and we will do some of that this summer. The difficult goal is figuring out what we are going to do with that knowledge to help students learn and to develop professionally. Here things get messy and confusing. Clear answers are hard to come by, in fact sometimes it may not even be clear what the problems are. We will try and make some headway into these issues.

This integrated seminar includes three courses: CEP800, CEP815 & CEP822. The titles and catalog descriptions of these three courses are as follows:

CEP 800: Learning in school and other settings.
Learning as active, socially-mediated construction of knowledge in school, home, community, and work settings. What is learned, how it is taught and learned, and what learners bring to the setting.
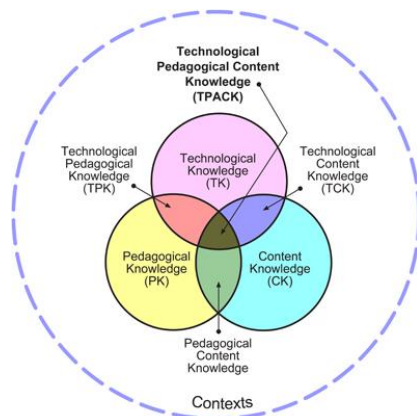
CEP 815: Technology & Leadership
Professional development strategies. Project management, planning and evaluation. Relationship building. Ethical and social implications of technology integration.

CEP 822: Approaches to Ed Research.

Alternative methods of educational research. Identifying researchable problems in education and developing a research proposal. Applications of descriptive and inferential statistics for analyzing and critiquing published studies.

The first course focuses on understanding students from Pre-kindergarten through high school and beyond. The course, though, is offered in an Educational Technology program. Consequently, it will be slightly different from the course offered in a more traditional Educational Psychology Masters program. This three-course, integrated seminar brings together a study of technology, teaching, learning, and leadership. Throughout our time together we will explore various uses of technology and what is currently known—or believed—about human learning and development. After all, in order to use technology in meaningful ways, we must understand who it is that will use the technology and their abilities at a specific age and/or grade.

A study of learning, however, cannot be conducted without including subject matter. It is impossible to determine if learning has occurred if we do not understand what is to be learned. Consequently, our seminar adds content to our study. The relationship between these three areas (Technology, Pedagogy & Content) is represented in the following diagram.

Technological Pedagogical Content Knowledge (TPACK)

Technological Pedagogical Knowledge (TPK)

Technological Knowledge (TK)

Technological Content Knowledge (TCK)

Pedagogical Knowledge (PK)

Content Knowledge (CK)

Pedagogical Content Knowledge

Contexts

Research in each of these areas has produced significant findings that have allowed us to improve teaching, construct new understanding in various academic disciplines, and develop new technologies that have dramatically changed the way we live, work, and play. When we begin to think about technology as an instructional tool we must bring these three areas together creating new agendas for study that mix what is known and what we want to find out. At the intersections of the circles are relatively new areas of study, but this is where the real action is. We shall be spending quite some time at these intersections (both during the summer and through your master's program).

The second course focuses on educational leadership. This involves two components. First, we'll talk about ways to manage your own learning and development in a world of rapid technological change. You can no longer depend on classroom based professional development seminars to keep us up-to-date on new technology, so we will talk about using a variety of resources (e.g. the internet, our colleagues) to build a personal learning network. Second, as teachers earning a master's degree in educational technology, you

have a role to play as technology leaders in your school. Therefore, we help you begin developing the skills you need to fulfill this role.

The third course focuses on educational research. Research is important if we are to understand what is being learned and whether our attempts to teach (with or without technology) are successful. The focus of this course is not as much on conducting educational research but rather developing the skills to interpret research and to critically examine it. We would also like to explore the issue of how each of us, as practitioners, can be researchers as well. Practitioners who reflect on their own practice to continually improve it.

Readings

There is no assigned textbook for the course, though we will have readings. All of these readings will be provided as online documents, either links to webpages or as PDF documents. We may add some additional readings (or delete some) as the course progresses. You will need Adobe Acrobat reader (a free download from www.adobe.com) for most of the readings. Apart from the assigned readings we expect each of you to conduct research and collect readings for your own learning. We would like you to share any interesting links, documents you find with the rest of us, and we will be exploring some social technologies (so called Web 2.0 technologies) that allow us to share information and knowledge.

Learning Technology

Just as utilizing a language creatively requires learning the alphabet and the basic rules of grammar, learning to use technology for the purposes of learning requires learning the basics of technology. We hope that that by the end of this month each of you will have made significant progress in learning technology. In brief we expect each of you:

> » to be able to access your MSU e-mail account and utilize the storage space available to you there.
> » be able to construct a basic web page with links, images etc. We see this web site as being the beginning of your professional portfolio that will grow as you progress through the Master's program (and beyond).
> » be able to construct non-linear PowerPoint / Google Doc presentations (and upload an appropriate version of it to your web or storage space).
> » should be able to take digital pictures, scan images and take digital video. Be able to do some simple image manipulation and video editing. This will require having a working understanding of file formats and file compression strategies.
> » should be able to download and install software on your machine
> » should be comfortable setting up accounts and using blogs, wikis and social networking sites
> » should be able to demonstrate advanced Web search skills
> » should be comfortable using tags to organize and access Web-based information
> » be comfortable using RSS feeds to aggregate the information available to you from various web sources
> » to be able to use various technologies for online collaboration

» should be able to construct a meaningful concept/mind map
» should have a basic understanding of issues of design and layout as applies to web pages and presentations
» should have a working understanding of file compression (particularly images and video).
» should have a working understanding of issues around copyright and fair use, security, ethics etc.

This is a lot to learn in a month-and-a-half and clearly not all of it can be covered by us. So we expect each of you to be in charge of your own learning. That said, we will have workshops on many of these topics but more importantly we will design activities that will expect you to develop and practice these skills.

Tentative daily schedule

Time	Activity
9:00 – 9:30	Welcome, general housekeeping, introduction to the day, today in technology & education
9:30 – 11:00	Morning activity, discussion of readings, etc.
11:15 – 12:00	Work time
12:00 – 1:00	Working lunch
1:00 – 3:00	Technology workshops
3:00 – 4:00	Individual or group work time; followed by summing up for the day

Course Expectations

Expect to Attend: You are expected to attend each class session. This is critical as one cannot simply "get the notes" in a class where the interaction among peers and material is key.

Expect to come to class prepared. Being prepared means having read and thought about assigned readings, conducted outside research, or having worked on a computer project. We expect you to read the required readings and your out-of-class research "hard;" that is, read them with questions, ideas, and conjectures in mind. Four good general questions are:

* What is the author saying?
* Where does what the author is saying fit into his or her argument?
* What would it be like to believe what the author is saying?
* What parts of the paper or chapter were puzzling, confusing, surprising?

Expect to participate. Although classroom activities will vary, at times we will have small group and whole-class discussions of class activities, reading assignments, and other topics that may arise. The success or failure of each discussion depends in large part on your participation. We expect each of you will be able to contribute something to our discussions and will do so regularly. You are smart, capable people and the topics, readings, and assignments are designed to engage your interest and experiences.

Our discussions will normally follow the same sequence. The sequence includes:

- Gathering our thoughts. Before we begin our conversations, we will spend a few minutes alone thinking about and writing down the ideas presented in the text or activity that we believe deserve further discussion. Topics that deserve further discussion might be ideas that you agree with and want the class to explore in greater detail, ideas you disagree with and you would like to argue against, ideas you do not completely understand and would like more time to think about, or anything else that caught your attention.
- Small group discussions. In small groups you can share ideas you believe are important to discuss. In your groups, you should exchange lists of important ideas and make sure each idea is thoroughly discussed. At the end of your discussion, your questions should be answered and each group member's perspective on the topics known.
- Large group discussions. At the end of the small group discussions, each group will be asked to present their ideas to the whole class. These presentations should include ideas your group discussed, a characterization of the perspectives presented in your group, any consensus reached in your group, and should elicit ideas from the other class members. The success of your presentation will rest, in part, on how successful you are in engaging the class in the conversation.
- During these discussions, *we encourage you to be exploring the ideas discussed on the Web*. You may have had classes that discourage computer use during lecture conversation; we do not advocate this stance. In fact, you will be rewarded for contributing information from the Web to these discussions. Point out mistakes that we make (yes, it happens!), elaborate on the information presented, or make unique contributions.

Note: Your attendance record, preparation, and participation in class will contribute to your grade for the course. The three course grades are related: Although you can attend class, be prepared, and not participate, you cannot participate if you are not there and you can not participate if you are not prepared. Do not expect a high participation grade if you have missed any class sessions or regularly come to class unprepared.

Participation in class discussions (both face to face and online) will be evaluated both quantitatively and qualitatively. Different class members participate in different ways. Whereas some students may speak often, others may speak sporadically. It is possible, however, to speak often and say little or to speak seldom but say much. It is important that we recognize how often we participate AND our contributions to the class' thinking about important topics—one without the other is an incomplete assessment of participation.

Expect to learn from your peers. Classes work best when students view one another as knowledgeable and expect to learn as much from classmates as from the teacher. Also expect to challenge our ideas and those of your classmates (gently) and have yours challenged by us. We make no headway if we nod our heads politely but push neither ourselves, the readings, or others to deeper understandings.

Expect to be confused, irritated, and misunderstood, as well as appreciated, applauded, and surprised. The readings, discussions, and assignments should provoke a range of feelings and responses. Try to understand what makes you feel comfortable or uncomfortable, what you take for granted and what surprises you, what others understand or misunderstand about your ideas.

And finally, most importantly, Expect to Play…We firmly believe that learning happens best when it is fun. A lot of the fun will happen in our everyday interactions. We have also tried to institutionalize the fun that we can have. Clearly, there are no hard and fast rules but we see this as an opportunity for us to play with ideas (which often requires a deep understanding of the ideas in the first place).

Assignments

This summer's integrated seminar includes five major assignments. Two of them are a group projects while three are individual projects. The assignments are:

- *What do they know? Video research project on understanding* (group project, to be completed by the end of the face to face session, July 2).
- *A technology based grant proposal for transformative learning* (individual project, to be completed during the online component of the course and presented on July 30).
- *Exploring key topics in technology & education* (group project, to be completed during the online component, due date July 18).
- *Developing a personal web portfolio,* a beginning (individual project, to be presented at the end of the summer session, July 30).
- *Final reflection paper (Personal MBA)* on the summer program (individual project, to be submitted at the end of the summer session, July 30).

In addition to these graded assignments, there may be other mini-assignments that you will be asked to complete during the first two weeks, which will contribute to your participation in class, but will not be graded.

Each of the graded assignments is described in separate pages available on the course Web site.

For the ungraded mini assignments, we will periodically ask you to complete small assignments to help prepare you for class discussions or activities. The activities might include finding and bringing in artifacts from your classroom instruction, writing short journal entries, conducting informal inquiry, among others. Although these projects will not be graded individually, they are required and your completion of them will contribute to your course participation grade.

Grading

Activity	% of grade
What do they know? Video research project on understanding	20%
Dream IT Project	30%
Exploring key ideas in technology & education	15%
Developing a personal web portfolio	15%
Final reflection paper	10%
Class participation (face to face & online), including un-graded assignments	10%
Quality *	5%

Ask us what that means

Final thoughts

We want these next few weeks to be exciting, challenging and fun. We are very open to ideas and modifications of our strategies. So though over the next month we will follow the framework given above we will also diverge from it. This will be based primarily on what you desire from this course and our situation sensitive reading of what seems appropriate. For this reason your questions or comments are very useful to us. Please feel free to talk with us during the breaks, after class (if time permits) and most importantly through email.

Note*: This set of courses has evolved over the past several years, incorporating the work and thinking of all the people who have taught them. The assignments, activities, and written materials (including the content of this syllabus) were developed by various groups and individuals and subsequently revised and reconfigured to result in the current versions. The primary responsibility for this version rests with Punya Mishra, Sara Beauchamp-Hicks, & Jesse Knott. Others who deserve credit (and none of the blame) are, in alphabetical order: Brandon Blinkenberg, Greg Casperson, Shane Cavanaugh, Mike DeSchryver, Chris Clark, Mark Girod, Kathryn Hershey, Amanda Hoffman, Matt Koehler, Cindy Okolo, Ralph Putnam, Jim Reienke, Jack Smith, Penny Thompson, Aman Yadav, Raven Wallace, Leigh Wolf and David Wong.*