Fordham University Graduate School of Education Media And Technology: Applications for Instruction PSGE 6565 Fall 2009

Michael Edwards mike@onearmedman.com

Course Description

In this course, students will examine the uses of technology in a variety of learning environments. Beyond the mystique and power of technology, what are the psychological and design principles that underlie good multimedia instruction? What are the appropriate uses of new technology? What are the best ways to evaluate their efficacy? Students will be asked, through a combination of design and research activities, to explore the issues, findings, and applications surrounding the use of media and technology in education.

Course Outline

After a period of initial investigation, the course will be broken into a series of brief design and research cycles in which small groups of students will attempt to answer the following questions:

- How are new technologies being used in the classroom? What are the controversies? What does the research actually say?
- How are networked technologies being used to support learning across distances? What are popular technologies, and what are effective ones? Again, what does the research say?
- How do teachers select and use technologies in the classroom? Where do they get their information? How are they trained, and where and in which contexts has this training been applied effectively?

By the end of the course, student will be expected to formulate their own questions about the uses of technology and will create a presentation that both discusses and applies multimedia principles effectively through the combined use of design and research.

WEEK 1	09/15/09	Introduction, Syllabus Handed Out, On Media and Technology	Assignment: Idea board contributions on media & technology, read Metiri Group
WEEK 2	09/22/09	Fundamentals of Multimedia and Learning	Assignment: read Tufte essay, Mayer chapter 8,9,10
WEEK 3	09/29/09	Split-Attention and Modality	Assignment: start reading Tufte book
WEEK 4	10/06/09	Visual Design in Practice	Assignment: Mayer chapters 11,12,13
WEEK 5	10/13/09	Technology In the Classroom	Assignment: First iteration of TIC research
WEEK 6	10/20/09	TIC Preliminary Findings Tufte Reading Discussion	Assignment: Second iteration of TIC research, Norman reading
WEEK 7	10/27/09	TIC Presentations Technology Out of the Classroom	Assignment: First iteration of TOC research
WEEK 8	11/03/09	TOC Preliminary Findings Norman Reading Discussion 1	Assignment: Second iteration of TOC research
WEEK 9	11/10/09	TOC Presentations Teachers and Technology	Assignment: First iteration of T&T research
WEEK 10	11/17/09	T&T Preliminary Findings Norman Reading Discussion 2	Assignment: Second iteration of T&T research
WEEK 11	11/24/09	T&T Presentations Finals Discussion	Assignment: First Iteration of Final Question research
WEEK 12	12/01/09	Finals Preliminary Findings	Assignment: Second Iteration of Final Question research
WEEK 13	12/08/09	Finals Workshop	Assignment: Third Iteration of Final Questions Research, Self and Group Evaluations
WEEK 14	12/15/09	Final Presentations, Part 1	Assignment: Self and Group Evaluations
WEEK 15	12/22/09	Final Presentations, Part 2 All evaluations due	

Final Grade Calculation

First Group Research 20% Second Group Research 20% Third Group Research 20% Final Research 30% Class Participation 10%

Required Reading

Mayer, R. (2005). *The Cambridge Handbook of Multimedia Learning*. Cambridge University Press.

Norman, D. (1990). *The Design of Everyday Things*. Doubleday Business.

Tufte, E. R. *The Cognitive Style of PowerPoint: Pitching Out Corrupts Within, Second Edition*. Graphics Press, 2 edition.

Tufte, E. R. *The Visual Display of Quantitative Information*. Graphics Press.

Grading Standards

F

Failing grades are given for required work that is not submitted and for incomplete final projects.

C/C+

These are below average projects. They will demonstrate some success in engaging with the assignment. The projects will show that the student can identify and work with key concepts and techniques and apply them to their work. Additionally, the projects will demonstrate effort in the areas of analysis and critical thinking by posing an interesting problem or question. Typical of a "C/C+" project, however, is that the original problem or question, once asked, does not move the project forward.

B/B+

These are very good projects. The "B/B+" project does everything a "C/C+" project does, but offers a sustained and meaningful structure to a critical endeavor that is more complex than a project at the "C/C+" level. What also distinguishes a "B/B+" project is the designer's ability to offer a unique insight and to ask questions of inputs, data, and outputs. The designer's point of view is clear and an argument is sustained fairly consistently throughout the work. "B/B+" projects are logically organized, and also respond to the assignment in thoughtful and distinctive ways.

These are exceptionally good projects that go above and beyond the expectations and requirements set forth in the assignment. They demonstrate substantial effort and achievement in the areas of critical thinking and scholarship. They also demonstrate considerable interpretive connections between concrete ideas, a high level of analysis, and flexibility of technique.