George Mason University  
College of Education and Human Development  
Initiatives in Educational Transformation  

Master’s in New Professional Studies – Teaching  

MNPE 703  
Technology and Learning in the New Professions  
Summer/Fall 2009 and Spring 2010  

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** Teaching Team faculty may also be contacted through Blackboard email.

The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn.  
Alvin Toffler

I. Course Description

This course is designed to explore the role technology can play in the teaching and learning process for students and practicing K-12 teachers. A technologically savvy generation of students has entered our classrooms and have grown-up using various technologies to discover their world. Online processes and structures have implications for learning and teaching in our classrooms and the ways in which students learn and construct knowledge. The inclusion of technology in classrooms should be informed by learning theories and practices that shift the ways in which teachers teach and students learn. One such theory is constructivism.

Constructivism is a learning theory premised on the understanding that people are participants in their own learning. There is no single true reality that must be imparted to learners, but rather individuals create their own knowledge based on how they relate new information to what they have previously experienced. Social constructivism additionally recognizes the value of social interactions in the learning process, meaning that people clarify personal conceptions as they interact with the understandings of others. Engaged learning is tied closely to constructivist underpinnings. Students learn best when they are active participants in the learning process, meaning that they make their own decisions, think critically about real learning problems and resources, and operate in contexts that are meaningful to them. Authentic, challenging, and multidisciplinary learning tasks allow student to grasp the subject matter better (Bitter & Legacy, p.29).

Throughout the two years of the IET program, we will use the Blackboard environment to extend our learning community to discuss issues related to teaching and learning raised
on class days, in readings, in team discussions, and as you reflect on your own knowledge
and experience. Often these discussions will provide data, a framework, and/or critical
dialogue that will be integrated into other assigned work.

Along with team meetings, Blackboard discussions create dialogue to stimulate our
thinking between class meetings. The Blackboard environment for our class is password
protected from persons outside the teachers enrolled in this program. We urge teachers to
respect the privacy and trust embedded in our pledge to protect your thoughts and
reflection from the eyes and ears of others. This discussion space needs to be safe for
whatever thoughts you are ready to share with classmates.

We attempt to integrate much of the teaching and learning of technology into the work of
other courses and class days. Our purpose is to make the use of technology seamless
within our program. We invite you to incorporate technology into any assignment or
activity that fits your needs and interests.

Scholars working in the area of technology and teacher professional development agree
that traditional methods of technology training for teachers—mainly workshops and
courses, often miss the mark to produce “deep understanding” that can assist teachers in
becoming informed users of technology for pedagogy and student learning. Teachers’
professional development experiences need to involve technology in authentic problem
solving.

Supporting effective technology integration for teaching subject matter requires
knowledge not just of content, technology and pedagogy, but also of their relationship to
each other. Pedagogical uses of technology require the development of a complex,
situated form of knowledge called Technological Pedagogical Content Knowledge
(TPCK). At the heart of TPCK is the dynamic relationship between content, pedagogy
and technology. Good teaching with technology requires understanding the mutually
reinforcing relationships between all three elements taken together to develop
appropriate, context specific strategies and representations to enhance student learning
(Koehler, Mishra & Yahya, 2005).

**Student Outcomes**

The primary aim is to support teachers’ understandings of technology integration for
teaching and learning for a generation of students who are technologically savvy.
Students will:

- Plan, develop and share with peers a technology-rich lesson to support the teaching
  and learning process through a multi-step process embedded within reflection.
- Actively engage in our Blackboard learning community through blogs, wiki and
discussion forums.
- Integrate technology in seamless ways to support teaching and learning.
- Explore virtual gaming and digital games

**II. Relationship to Program Goals and Professional Organizations**

This course addresses the following College of Education and Human Development and
Graduate School of Education priorities: research-based practice, diversity, and
innovation. It addresses state and national guidelines and standards including the
Effective teachers model and apply the National Educational Technology Standards for Students (NETS•S) as they design, implement, and assess learning experiences to engage students and improve learning; enrich professional practice; and provide positive models for students, colleagues, and the community.

**National Educational Technology Standards for Teachers**

**Facilitate and Inspire Student Learning and Creativity.** Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments. Teachers:

a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity
b. develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress

d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

**Model Digital-Age Work and Learning.** Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society. Teachers:

b. collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation
c. communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital-age media and formats
d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

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**Promote and Model Digital Citizenship and Responsibility.** Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices. Teachers:

b. address the diverse needs of all learners by using learner-centered strategies and providing equitable access to appropriate digital tools and resources

c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning

d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

**Engage in Professional Growth and Leadership.** Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources. Teachers:

a. participate in local and global learning communities to explore creative applications of technology to improve student learning
c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning

d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

The framework presents a holistic view of 21st century teaching and learning that combines a discrete focus on 21st century student outcomes (a blending of specific skills, content knowledge, expertise and literacies) with innovative support systems to help students master the multi-dimensional abilities required of them in the 21st century.

- Focuses on 21st century skills, content knowledge and expertise.
- Builds understanding across and among core subjects as well as 21st century interdisciplinary themes
- Emphasizes deep understanding rather than shallow knowledge
- Engages students with the real world data, tools, and experts they will encounter in college, on the job, and in life--students learn best when actively engaged in solving meaningful problems
- Allows for multiple measures of mastery

III. Course Materials

Required Texts


Required Chapters


Required Additional Materials

- T.H.E. Journal
- Teaching Tolerance
- IndyKids

* Please note: Other readings, media, films, journal articles and miscellaneous content may be assigned as necessary.

IV. Course Requirements

Computer Access. Teachers enrolled in the course are required to have reasonable access to a computer that has unrestricted Internet capabilities.

In addition to readings, reflective logs entries, and assignments (see below), the course involves active participation in class meetings and in weekly school-based team meetings.

Readings. Readings are carefully chosen to stimulate thinking and dialogue. Some are chosen to challenge your thinking about particular issues. Others are chosen to dialogue with those challenges. Our hope and intention is that you will engage in dialogue around these readings and others you may want to bring to our deliberations. These readings will not contain answers; rather they are designed to raise questions. Any “answers” we come to will arise out of our deliberations as we compare ideas in readings with classroom experience and practical wisdom. Evidence of incorporation of critical interaction with readings into on-line (Blackboard) discussions, team meetings, reflective logs, and papers is the essential element of documenting that one has engaged with the readings.

Weekly Team Meetings. Teams are expected to meet together at least once a week throughout the year (in school or in another designated location) to discuss all aspects of the research process and progress. These regular team meetings allow teams to develop a supportive collaborative professional space to engage in critical dialogue over research or teaching issues, readings and assignments. Minutes from these meetings should be turned in to the team’s mentor via blackboard or email as determined by your mentor within 48 hours of your team meeting.

Mentors. Each school team will be assigned a faculty mentor who will work with and support team members and collaborative processes as the research progresses. Your mentor will attend your weekly team meeting approximately two times per semester and will be available on Blackboard, email, phone and by appointment. If you have any concerns, problems, discoveries, or anything else that you want to discuss with your mentor, please don’t hesitate to contact him/her.

Reflective Log. Reflective log entries are a requirement of the IET program and are designed to help you think about your experience as a moral professional. Continue to maintain a reflective log throughout the year. You are to write in your reflective log at least twice a week. When your school is in session, one of the entries each week should be field notes from your classroom or school. For the other entry, usually you will choose your reflection topic. You must write at least one entry on every required reading (except those assigned to be read during class days), reflecting on the readings impact on your thinking/learning and teaching. You should also use your reflective log to reflect on your
research: in addition to reflecting on observations of your students and on your practice, you should use the reflective log to record questions, puzzlements, ideas and insights.

Later, reflect on patterns you are seeing in your data, how what you are finding relates to the work of others, and how your question and/or data collection strategies are changing as your research progresses. Bring your reflective log to every class day and you will be sharing and discussing selected field notes with others. Make it a habit to come to team meetings prepared to share selected reflective logs entries with your teammates, particularly about the readings and research process.

V. Assignments and Evaluation Criteria

A. Technology Project: Due: May 7th, 2009

This assignment fulfills one objective from Technology and Learning in the New Professions (MNPS 703). We know that sometimes technology is used to fulfill a requirement or to check off one competency on a larger list of competencies. Too often, technology is used to provide automated worksheets or to do mechanically something that can be done more cheaply and efficiently by a human or a copy machine. In this assignment we would like for you to think about using technology to accomplish something you could not accomplish without the technology.

We hope you will risk using technology to empower learning that could not happen otherwise. We want you to reflect on what the use of technology added (or didn’t add) to student learning. To help you make the use of technology more meaningful, we ask you to make an explicit connection between your technology project and one of the topics related to getting students to accept the responsibility for learning in Weimer’s Chapter 5. This project provides an opportunity to tie ideas from your classroom practice and content area to the theoretical frames from Weimer and to your use of technology. By engaging in this project each of you will be constructing your own meanings of one of Weimer’s topics for getting students to accept the responsibility for learning.

Use one of the two topics listed below as an organizational umbrella to help focus and shape your technology project. Our intention in this project is to encourage you to use technology within your classroom (beyond what you have already done) as a way to deepen your understandings of your teaching and student learning. Refer to T.H.E. Journal to help you generate ideas for your project.

Listed below are two topics related to Getting Students to Accept the Responsibility for Learning (Weimer, 99-107). You are asked to choose one topic.

- Classroom Climates Conducive to Learning
- Climates that Build Student Autonomy and Responsibility

This project may provide data for your research project or it may be completely independent of your research project. This choice is up to you (learner centered 😊).

This project will involve the following six steps:

Step One: Beginning Steps
Choose a technology application (does not have to be computer-based) and a Weimer topic that are complementary.

**Step Two: Design and Implement Project**
Using technology (beyond what you have already done) and the selected Weimer topic, create a lesson or technology-based product or process to support teaching and learning in your classroom.

**Step Three: Gather Student Feedback and Sharing**
Gather student feedback that is age appropriate on your technology project and plan to share what you learned with your students. Shape the information you seek to allow you to glean students’ understandings about teaching and learning related to your technology project.

**Step Four: Reflective Narrative**
Write a reflective narrative (3-5 pages) on how it went, what you learned about the “lived” experience of technology, and how your understandings of teaching and learning have deepened. Connect these understandings to the Weimer topic you selected.

Taking a risk on using new aspects of technology means you may not be successful in achieving your learning objectives. Be open to your own critical analysis of the process. Learning something new about teaching and learning is different from planning a lesson or product that was successful. Your assignment can be completely successful even if your use of technology was not an unqualified success. Submit your reflection electronically using the Drop Box in Blackboard by May 7th, 11:55 pm.

**You will share your lesson plan artifacts of the project including student feedback/analysis with your mentor during your second team meeting.**

**Step Five: Class Booklet**
We will be creating a class booklet that is designed to share your individual technology projects. Individually each of you will be creating a page for our booklet. On your page include:

- a) Brief Project Description,
- b) Benefits to Students, and
- c) Tips and Tricks that you found helpful through the process that others would like to know if they were to try out your lesson plan/idea in their classrooms.

**Due:** Please submit electronically by using the Drop Box in Blackboard by May 7th, 11:55 pm.

**Step Six: Project Sharing Through Digital Story Telling (Due: May 8 Class Day)**
As a team: A) Create a Digital Story that conveys your projects, benefits to student learning, and/or insights. Before you begin creating this portion of the project be sure to:

- Share your project ideas and experiences with your team,
- Read across individual reflections for common themes,
- Discuss benefits to student learning,
- Look over any other materials you may have created for your individual projects and begin making connections that tie the projects together.

After your team has engaged in these conversations use this analysis and synthesis of your individual work as a basis for your team digital story to create a common strand/theme that holds all of your individual projects together. Your team digital story should be approximately 5 -10 minutes long.

**Task:** Bring your digital story on a CD/DVD for class sharing with all team members names and school listed. Be sure to test it out on a computer (other then the one used to create it) to be sure it works.

B) Write a 1-2 page team narrative to describe your digital story and comment on the digital story process (one document per team). **Due:** This is to be submitted electronically using the Drop Box in Blackboard by May 7th 11:55pm.

**Please refer to** *T.H.E. Journal* **for Possible Ideas:**

- PowerPoint
- Video
- Web Page
- Web Quest
- Software
- Your choice, but run it past your mentor

**B. Virtual Gaming Project**

A virtual game is one that allows you to engage in a *simulated reality* and collaborate/play with other players (See Appendix A for game ideas).

Massively multiplayer online games (MMO’s) commonly depict a world very similar to the real world, with real world rules and real-time actions, and communication. Players create a character to travel between buildings, towns, and even worlds to carry out business, engage in missions or participate in leisure activities. Communication is usually textual, with real-time voice communication using VOIP. VOIP provides an additional feature to online gaming in that it allows you to have “real time” conversations with other players.

Typically players will use the following free VOIP software:

a) **TeamSpeak** is proprietary Voice over IP software that allows users to speak on a chat channel with other users, much like a telephone conference call. A TeamSpeak user will often wear a headset with an integrated microphone. Users use the TeamSpeak client software to connect to a TeamSpeak server of their choice, from there they can join chat channels


**Download link:** [http://teamspeakclient.en.softonic.com/](http://teamspeakclient.en.softonic.com/)

b) **Ventrillo:** Download link: [http://www.ventrilo.com/](http://www.ventrilo.com/)
Virtual Gaming Assignment

1) Conduct a survey (age appropriate) with your students and submit electronically your findings/analysis using the Drop Box in Blackboard by **February 5th 11:55 pm**. We encourage you to share the results with your students and talk about what connections they see between their gaming experiences and school.

2) **Virtual Gaming Time Frame** (December – February 6th)

   a) During this time you are to select and actively engage in playing a MMO of your choice for **four weeks**. Please spend at least the same amount of time you did when working on Blackboard with your discussion group. Consider the amount of time it took you to craft and post your initial thoughts, read your discussion groups’ posts, craft and respond to your discussion group, and then read the responses of your group.

   b) You may want to jot down some notes in your reflective log about your gaming experiences, how you are learning to play the game, challenges, stressors, fun, surprises, etc.

3) **Individual Narrative**

   Once you have completed your gaming time please read across your individual Blackboard postings/reflective log entries and write a 2-5 page narrative about:
   - your experiences,
   - learning in a virtual context
   - what if any connections you can make between your pedagogical practices and virtual gaming.

   **Due:** Submit electronically using the Drop Box in Blackboard by March 22nd by 11:55 pm.

C. **Wordle Posting in Blackboard**

The Wordle Posting will open February 6th and close on May 7th.

Wordle link: [http://www.wordle.net/](http://www.wordle.net/)

Over the course of the semester you are to create a learning experience for your students that incorporate the use of a wordle(s).

Once you have completed that work post up your idea, provide your grade level/content area, and sample wordle in the Wordle Blog.

**Due:** This work is to be completed by May 7th.

D. **Blackboard Discussions and Analysis**
Teachers enrolled in the course will participate in a variety of Blackboard discussion groups. Regular, and timely postings are required and a necessary component in building a community and engaging in critical dialogue. Each group will need to assign a facilitator to help direct and move things along each week for the group. Each person in the discussion group is required to do an initial post in response to the facilitator’s topic/initial post. Each discussion group member’s initial post should be 300-500 words in length, incorporate quotes from class texts to support, share examples from classroom, and life. Each person in the group will then do a second post that will be in response to any and all initial posts – this post should too be significant in depth and length but does not need to be as formal as the initial post from earlier in the week.

**February 6th through March 12th.** Discussions will focus on the topic of virtual gaming, gaming experiences and connections to be made to teaching and learning. Some discussion prompts may be provided.

**March 13th through April 16th.** TBA

### VI. Course Evaluation

The final grade for the course will be determined by the following factors, as determined by your mentor. We care about the following elements of all your submitted work:

1. Required work is complete and punctual (the latter is important in case revisions are needed),
2. Written work is clear and coherent with attention to grammar, mechanics, style, and spelling
3. Written work reflects familiarity with and reflection on assigned readings
4. Have worked to surface and question your assumptions
5. Required work demonstrates efforts on your part to connect what you are learning to your professional practice
6. Active, knowledgeable (you’ve read assigned readings), reflective, and generous participation as members of a learning community.

### Summary of Grades

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<td>Participation and Attendance</td>
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<td></td>
<td>100</td>
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### Grade Distribution

- 95-100, A
- 90-94, A-
- 85-89, B
- 80-84, B-
- 75-79, C
- 74 and below, F

### VII. Policies and Information
Attendance Policy

You have joined this program with a team of teachers with whom you make a commitment of mutual social and intellectual support for the duration of this program. We design our pedagogy to accommodate your busy lives. We check your school division calendars to minimize conflicts with important school division events.

Each of our eight-hour class days is equivalent to three weeks in a regular semester course that meets three hours per week. Faculty and teachers are accountable to the State of Virginia, GMU, and the Graduate School of Education for meeting the expectations of class time and for ensuring that persons awarded the Master of Arts in New Professional Studies – Teaching have met their obligations. By disposition, we are not bureaucratic, neither do we equate hours spent in class as a valid measure of learning. Nevertheless, we do track attendance, so you need to be sure you attend class on class days. You cannot meet your commitments to your teammates and your obligations to the program when you are not in class on class days. To ignore absences is unfair to people who put aside other activities to come. It is a disservice to the work of teams.

We do not want to adjudicate reasons why you may decide to absent yourself from the learning community. If you are going to miss class:

1. We need you to inform us in advance in writing (email will do).
2. You will need to get your team’s agreement to help you recreate the experience you have missed (it is not enough to know what was done; you need to have the experience with your team).
3. The teaching team will require written documentation from the team that the experience has been replicated.
4. Create, complete and turn in a reflection on the alternative learning experience within 14 days of the missed class.

Failing to take this personal initiative and responsibility will result in unsatisfactory completion of the participation requirements embedded in each course.

You are able to miss 8 hours per year without affecting your grade. Beyond the 8 hours all absences need to be discussed with the teaching team in order to continue in the program.

Inclement Weather Policy

Check the GMU website http://www.gmu.edu/ for closing or call the GMU Information Line (703-993-1000) to hear announcements of any closings. Occasionally, IET will hold classes on Saturday when the University is officially closed. Please check our Blackboard site for an opening or closing decision form the IET faculty. Makeup class days are worked into IET’s annual calendar.

Change of Grade Policy
A policy for graduate students entitled “Change of Grades” is printed in the University catalog. The catalog states: “Additional work of any type submitted to improve a grade after the final grade has been assigned and sent to the Office of the Registrar is never accepted.”

There are three possible scenarios that may result in a grade change: (1) if professors allow students to resubmit improved assignments, these must be handed in prior to the final grade; (2) if there is a medical, personal, or family condition, that student may be given an “IN” (incomplete), which allows extra time to complete work (until the middle of next semester); and (3) if a student appeals a grade he or she feels is unfair.

**GSE Syllabus Statements of Expectations**

- Students are expected to exhibit professional behavior and dispositions. See gse.gmu.edu for a listing of these dispositions.
- Students must follow the guidelines of the University Honor Code. See http://www.gmu.edu/catalog/apolicies/#TOC_H12 for the full honor code.
- Students must agree to abide by the university policy for Responsible Use of Computing. See http://mail.gmu.edu and click on Responsible Use of Computing at the bottom of the screen.
- Students with disabilities who seek accommodations in a course must be registered with the GMU Disability Resource Center (DRC) and inform the instructor, in writing, at the beginning of the semester. See www.gmu.edu/student/drc or call 703-993-2474 to access the DRC.
Appendix A

Virtual Gaming Types

I) Massively Multiplayer Online Role Playing Games (MMORPGs)
http://en.wikipedia.org/wiki/MMORPG

In nearly all MMORPGs, the development of the player's character is a primary goal. Many MMORPGs feature a character progression system in which players earn experience points for their actions and use those points to reach character "levels", which makes them better at whatever they do.

Pay for Play Examples Include: Warhammer, Lord of the Rings, World of Warcraft, EverQuest, Star Wars, Pirates of the Burning Sea.

Please visit this link for free MMORPG choices
http://en.wikipedia.org/wiki/List_of_free_MMOGs

Free Role Playing Game: Potter World http://www.pottersworld.net/ new member registration accepted December 18, 19, 20, with a break over the holidays. They also have registration every month.

II) Massively Multiplayer Online Games First Person Shooter (MMOFPS)

This online gaming genre features a persistent world and a large number of simultaneous players in a first-person shooter fashion. These games provide large-scale, sometimes team-based combat. The addition of persistence in the game world means that these games add elements typically found in RPGs, such as experience points. However, MMOFPS games emphasize player skill more than player statistics.
http://en.wikipedia.org/wiki/First-person_shooter

Pay for Play Examples Include: Call of Duty, Battlefield 2, Golden Eye, Halo, Doom

Please visit this link for free MMOFPS/MMORPG choices
http://freeonlinegames.forumsextreme.com/