THE UNIVERSITY OF BRITISH COLUMBIA

Faculty of Education

Masters of Educational Technology Program

ETEC 565A—Learning Technologies: Selection, Design and Application

(Online course)

Purpose of the Course

ETEC565A is an online seminar that provides several theoretical frameworks to assist educators in evaluating, selecting and using various learning technologies. Students will gain hands-on experience using a range of learning technologies and platforms including web-publication, course management systems, communication tools, community and collaboration tools, multimedia, and social software tools. Using a project-based approach, students will complete a number of small assignments using different learning technologies as well as a larger project in which they bring several of these technologies together to design materials and activities to support student learning.

Objectives

In this course students will:

1. Discuss the characteristics of their classrooms, their instructional strategies, and the technologies that support teaching and learning.
2. Explore a set of theoretical frameworks for analyzing learning technologies and apply those frameworks to help them select technologies appropriate to their context.
3. Develop skills in the use of learning technologies:
    a. Web-publication: html editing skills, CSS, website design
    b. Learning management system (Moodle)
    c. Communication Tools (synchronous and asynchronous environments, audio/video conferencing)
    d. Social Media Tools (wikis, weblogs, cloud computing, digital storytelling)
4. Examine and analyze a wide range of formal and informal learning environments, including e-learning, computer-supported collaborative learning, instructional software, and social media.
5. Acquire skills in the design of educational media, the creation of robust online assessment strategies, and the integration of design thinking with scholarship in education.

Methodology

ETEC 565A has been designed according to several principles. First, we believe that knowledge is best acquired through constructivist pedagogy—learning that is situated, relevant and engaging. Second, we believe that in the realm of educational technology it is education—and its aims—that takes precedence; educational technology, therefore, supports teaching and learning. Third, students are better qualified to determine how this course can best meet *their* needs. Thus, we have developed a course that is substantive, comprehensive and flexible. Finally, we know from experience that two of the greatest barriers to mastering educational technologies are lack of “hands-on” experience and a fear of “messing things up.” We will provide students with opportunities galore in the former; instructors in the course, as well as more skilled peers in the course are also available to gently prod students through any trepidation or uncertainty!

Course Content

This course uses a modular approach; within each module are 2-3 units. The modules are:

Module 1 -Theoretical Frameworks
Module 2 - Presentation Tools: Spaces, Places and Platforms for Learning
Module 3 - Interaction and Assessment Tools
Module 4 - Web 2.0 – Social Software Tools
Module 5 - Multimedia

Instructional Resources

Several instructional resources are used in this course. First is the course site, hosted on WebCT Vista, UBC's learning management system. Second is the UBC Blogs WordPress tool, within which each student creates an ePortfolio of their various assignments—as well as a series of reflections on practice. Third is the course's eLearning Toolkit which contains a range of self-directed competency-based activities for students to pursue. Finally, there are numerous readings, both required and supplemental.

Required Readings

All required readings are available online, either via existing UBC Library subscriptions or via copyright clearance to distribute digitally. The following are required readings as they correspond to each module:

Module 1: Selecting and Using Learning Technologies: Theoretical Frameworks

- Chickering, A.W. & Gamson, Z.F. (1987). Seven Principles for Good Practice in Undergraduate Education. American Association for Higher Education Bulletin, 39 (7), 3-7. Accessed online 11 Mar 2009 http://www.aahea.org/bulletins/articles/sevenprinciples1987.htm
- Chickering, A.W. & Ehrmann, S.C. (1996). Implementing the Seven Principles: Technology as Lever. American Association for Higher Education Bulletin, 49(2), 3-6. Accessed online 11 Mar 2009 http://www.aahea.org/bulletins/articles/sevenprinciples.htm.
- Bates A. W. & Poole, G. (2003). A Framework for Selecting and Using Technology. In A.W. Bates & G. Poole, Effective Teaching with Technology in Higher Education (pp. 75-108). San Francisco: Jossey-Bass. 4.
- National Educational Technology Standards for Teachers http://www.iste.org/Content/NavigationMenu/NETS/ForTeachers/2008Standards/NETS_for_Teachers_2008.htm

Module 2: Presentation Tools: Spaces, Places and Platforms for Learning

- Perkins, M. & Pfaffman, J. (2006). Using a Course Management System to Improve Classroom Communication. Science Teacher, 73(7), 33-37.
- Panettieri, J. (2007). Addition by subtraction. University Business, August, 58-62. Accessed online 11 March 2009. http://www.universitybusiness.com/viewarticle.aspx?articleid=845

Module 3: Interaction and Assessment Tools

- Anderson, T. (2008). *Towards a Theory of Online Learning.* In: T. Anderson & F. Elloumi (Eds.), *Theory and Practice of Online Learning*. Edmonton AB: Athabasca University. Accessed online 3 March 2009 http://www.aupress.ca/books/120146/ebook/02_Anderson_2008_Anderson-Online_Learning.pdf
- Anderson, T. (2008). *Teaching in an Online Learning Context*. I In: T. Anderson & F. Elloumi (Eds.), *Theory and Practice of Online Learning*. Edmonton AB: Athabasca University. Accessed online 3 March 2009 http://www.aupress.ca/books/120146/ebook/14_Anderson_2008_Anderson-DeliveryQualitySupport.pdf.

- Gibbs, G. & Simpson, C. (2005). Conditions under which assessment supports students' learning. *Learning and Teaching in Higher Education, 1*(1), 3-31. Accessed online 11 March 2009. http://www.open.ac.uk/fast/pdfs/Gibbs%20and%20Simpson%202004-05.pdf

Module 4: Social Media

- Alexander, B. (2006) Web 2.0: A new wave of innovation for teaching and learning? *EDUCAUSE Review, 41*(2), 34-44. Accessed online 2 March 2009. http://www.educause.edu/ir/library/pdf/ERM0621.pdf.
- Wesch, M. (2007) A Vision of Students Today (& What Teachers Must Do). Accessed online 25 March 2009. http://www.britannica.com/blogs/2008/10/a-vision-of-students-today-what-teachers-must-do/.
- Downes, S. (2004). Educational Blogging. *Educause Review, 39*(5, September/October), 14-26. Accessed online 25 March 2009.
- Fisch, K. (2007) Blogging: In Their Own Words. *The Fischbowl*. Accessed online 26 March 2009. http://thefischbowl.blogspot.com/2007/06/blogging-in-their-own-words.html.
- Lamb, B. (2007). Dr. Mashup; or, Why Educators Should Learn to Stop Worrying and Love the Remix. *EDUCAUSE Review*, *42*(4, July/August), 12–25. Accessed online March 9 2009 http://www.educause.edu/ER/EDUCAUSEReviewMagazineVolume42/DrMashuporWhyEducatorsShouldLe/161747

Module 5: Multimedia

- Boyes, J., Dowie, S. & Rumzan, I. (2005). Using the SECTIONS Framework to Evaluate Flash Media. *Innovate Journal of Online Education, 2*(1). Accessed online 12 March 2009 http://innovateonline.info/index.php?view=article&id=55&action=article.
- Siemens, G. (2003). Evaluating Media Characteristics: Using multimedia to achieve learning outcomes. *Elearnspace*. Accessed online 11 October 2005. http://www.elearnspace.org/Articles/mediacharacteristics.htm.
- Janson, A. & Janson, R. (2009). Integrating Digital Learning Objects in the Classroom: A Need for Educational Leadership. *Innovate, 5*(3). Accessed online 15 February 2009 http://innovateonline.info/index.php?view=article&id=581&action=article.

Assessment

This is a three-credit course that carries a maximum award of 100 marks. Six assignments submitted by students are worth a total of 90 marks. As well, course participation is weighted as 10 marks.

Overall Assessment

The following general assessment criteria describe how students' work in ETEC 565A will be assessed summatively, i.e. for marks. There are also specific criteria for each assessed task.

A Level (80% to 100%)

A+ is from 90% to 100%. This range is reserved for exceptional work that greatly exceeds course expectations. In addition, achievement must satisfy all the conditions below under "A".

A is from 85% to 89%. This range suggests a very high level of performance on all criteria used for evaluation. Contributions deserving an A are distinguished in virtually every aspect. They show that the individual (or group) significantly shows initiative, creativity, insight, and probing analysis where appropriate.

A- is from 80% to 84%. Marks in this range are awarded for generally high quality performance, no problems of any significance, and fulfillment of all course requirements. However, the achievement does not demonstrate the level of quality that is clearly distinguished relative to that of peers in class and in related courses.

B Level (68% to 79%) and C Level (60%-67%)

This category of achievement is typified by adequate but unexceptional performance when the criteria of assessment are considered. It is distinguished from A level work by problems such as:

- one or more significant errors in understanding
- superficial representation or analysis of key concepts
- persistent surface errors (spelling, grammar, punctuation)
- lack of coherent organization or explication of ideas

The level of B work is judged in accordance with the severity of the difficulties demonstrated.

Level	Percent	Criteria
B+	76% to 79%	Work with any one of these deficiencies.
B	72% to 75%	Work with any two of these deficiencies.
B-	68% to 71%	Work with any three of these deficiencies.
C+	64% to 67%	Work demonstrating all four of these deficiencies - yet reflects a substantive effort on the part of the student.

Assignments (ePortfolio)

The successful completion of ETEC 565A requires students to demonstrate educational design prowess, educational technology competence, and critical thinking skills informed by the materials studied in the course.

Students' performance in the course will be based on the completion of a modular ePortfolio project with multiple components. Each component constitutes an important aspect of learning technology selection, design and application. This ePortfolio (or components of it) could form part of a professional teaching ePortfolio. This modular approach will also make it easier to provide both formative and summative feedback on students' work. Students will also receive summative qualitative feedback for each assignment; those that have a mark associated with them will also be quantitatively assessed.

EPortfolio components

There are six (6) components of students' ePortfolio, five (5) of which are graded. Where there is a grade associated with a component, the total value of that component is in parentheses. The components of students' portfolio will include:

Assignment/Page	Maps to Course Objectives
1. A "flight path" where students outline what they hope to learn during the course, including the specific technologies they will begin to master (no marks)	1, 3d, 5
2. An LMS course site proposal (15 marks)	1, 2, 3b, 3d, 5
3. A Moodle Learning Management System (LMS) online course site (25)	1, 2, 3a, 3b, 3c, 3d, 5
4. A complete exam or quiz for students' LMS course site, reflecting a variety of question types and assessment strategies (15)	1, 2, 3a, 3b, 3d, 5
5. A digital story produced in a social media tool of students' choice (20).	1, 3a, 3d, 5
6. A final ePortfolio synthesis reflection (15)	1, 2, 3b, 3d, 4, 5

Details on the requirement for each component will be covered in each assignment's corresponding learning module. Students' portfolio accounts for 90 marks; there are 10 marks for course

participation.

Assessment rubrics for graded ePortfolio components
The numbers below correspond to the assignment to be assessed. Further details will be provided in the corresponding module; the first of these is due during Module 2.

A Learning Management System (LMS) proposal, assessed for:

- Comprehensiveness: does the proposal answer the sort of questions a reviewer would expect to find answered.
- Integration of learning from relevant ETEC 565A activities
- Overall quality of work, as per the overall standards listed on the assessment page in the course introductory module
- Indication of having tested the platform, including what aspects or functions were tested
- Integration of relevant literature
- Posted in the *Proposal* page of students' ePortfolio

A Learning Management System (LMS) online course site with the following components:

- Overall quality of work, as per the overall standards listed above
- Splash page with a graphic user interface (GUI)
- Two (or more) complete learning modules (module shells or placeholder pages not acceptable)
- One (or more) module programmed for selective release
- Two general discussion forum topics
- One group discussion forum for (at least) 2 groups (must set up groups; they need not be populated)
- A reflection upon students' experience completing this assignment posted in the *Course Site* page of students' ePortfolio

A complete exam or quiz for students' LMS course site, reflecting a variety of question types and assessment strategies, with 10 (or more) questions. Students will be assessed based on creating:

- 3 (or more) multiple choice questions
- 3 (or more) matching questions
- 2 (or more) short answer questions
- 2 (or more) short essay questions
- One question with an embedded image or graphic
- Partially or wholly auto-assessed/graded
- Time limited
- Pre-programmed post-exam feedback for students
- A reflection upon students' experience completing this assignment posted in the *Assessment* page of students' ePortfolio

A complex digital story using one of a range social media. Students' stories must:

- Meet the overall quality of work standards listed above
- Be educational
- Be viewable either as an embedded file or a link on the *Story* page of students' ePortfolio
- In addition to the story itself, describe the following on the *Story* page:
- Why was this the right tool for students to use to tell their story?
- How did students purposefully select the tool?
- How does this story work within a course that students teach (or would like to teach) using sound pedagogical arguments?

A final ePortfolio synthesis reflection, including:

- 1-2 paragraph précis of students' flight path
- Reflection on students' eLearning toolkit experience overall
- Reflection on students' overall ETEC565A experience
- Describe next steps for students, in terms of students' practice in educational technology, which could *include* what technologies students hope to explore moving forward, or how students plan on engaging as a lifelong learner in terms of educational technology?
- Overall quality of work is also important, as per the overall standards listed above
- Posted on the *Synthesis* page of students' ePortfolio.

Participation

Because ETEC 565A relies heavily on our creating a learning community, students' class participation mark is based on students' overall substantive participation in course-wide and small group discussions (10). In addition, there is a pass/fail aspect to both participation components. Failure to participate in *any* of the activities described in the course leads to a zero participation mark for the entire course.

MET ePortfolio

We strongly encourage students to keep copies of their projects, tasks, products and discussions that they work on throughout the MET programme. It is important for students to have their own record of their work in the program, and students may also choose to include these items in a personal ePortfolio (supplemental to the ePortfolio developed specifically for ETEC 565A).These materials will also be useful reference tools down the road after students graduate, and are most frequently used if students are intending to register in ETEC 590 (Graduating Project).
If students want more information on ePortfolios and on ETEC 590 within the MET, please visit http://met.ubc.ca/program/eportfolio.htm.

Instructor

My background includes program development, instructional design, and teaching at post-secondary institutions in Canada and internationally. My graduate training is in adult education, learning technologies, and health promotion. My primary role here at UBC is Senior Manager, Strategic Curriculum Services in the Centre for Teaching Learning and Technology.

Please note: I do not provide an external email address to students: instead you must use the internal WebCT Vista email tool. Emails or messages sent by any other means will not receive a response.

Since most students are not based in the Greater Vancouver region, I do not keep face-to-face (F2F) office hours; instead I make myself available via multimedia communication tools as follows *based on an agreed-upon time to meet*:

Skype: john.p.egan.ubc
MSN: john.egan@ubc.ca
AOL IM/iChat: johneganubc

We will also be exploring some additional communication tools as the course unfolds. As we roll out each tool we can also meet there—stay tuned! I'm also on Twitter (johnpegan) and keep a blog (http://blogs.ubc.ca/egan).

Course Schedule

Each unit represents one week, commencing on Monday and ending on Sunday.

Module	Dates	Unit	Learning Activities
Selecting and Using Technology	04 - 08 January	Course Introduction module Digital-age teaching professionals	Say Hello (Wimba Voiceboard & discussion forum) Ice breaker & Discussion: Digital-age teaching professionals
	09 - 15 January	Theoretical Frameworks	Setting up your WordPress ePortfolio Discussion: Applying the Frameworks ePortfolio assignment #1: Flight path
Presentation Tools	16 - 22 January	Learning Management Systems	Discussion: Moodle as solution Discussion: Business Writing development timeframe Begin platform evaluation rubric group activity Start building LMS site (ePortfolio assignment #3; work ongoing throughout semester)
	23 - 29 January	Other web-based approaches	Discussion: Pro-D Online delivery platform rubric (group)
	30 January - 05 February	DVD Authoring	Discussion: Diabetes DVD ePortfolio assignment #2: LMS site proposal
Interaction and Assessment Tools	06 - 12 February	Interactions for Learning	Discussion: Interactions to support learning
	13 - 19 February	Communications Tools	Discussion: What could Trinh do? Discussion: Synchronous and asynchronous communication
	20 - 26 February	Assessment Tools	Discussion: Assessment challenges and opportunities ePortfolio assignment #4: Assessment Tools
Social Media	27 February - 04 March	Social Media & Collaborative Writing	Wiki Activity: Social Media and Learning Discussion: Wiki reflections
	05 - 11 March	Personal Publishing & Social Networks	Discussion: Public or private spaces for learning Discussion: The Wisdom of the Crowd
	12 - 18	Rip, Remix, Feed: Creative	Discussion: 50 ways to Tell a Story

	March	Mashups Intellectual Property/Copyright Privacy	Activity ePortfolio assignment #5: Digital story
Multimedia	19 - 25 March	Features and Benefits	Discussion: Dafna
	26 March - 30 March (5 day week)	Internal and External Resources	Discussion: Looking back, moving forward ePortfolio assignment #3: Complete LMS site ePortfolio assignment #6: Synthesis reflection