

Emerging Technologies for Educational Change (EDPE 640) (McGill University, Fall 2015) ~ final version

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Office Hours: Tuesdays 4:30 to 5:30 or virtually on Google Hangout

Course Wiki: <http://edpe640.wikispaces.com>

Course website & Mightybell Community: <http://bit.ly/edpe640f15>

Welcome & Course Texts:

I am looking forward to working with you over the next few months. Together we will create and build a learning community using current web 2.0 technologies (on your phone, tablet, computer, and laptop). The class will be built around the tools you should be using in your personal and professional lives!

The class will take place in the Education Bldg. (Room 627) from 6:05 to 8:55 starting on Tuesday, Sept. 8th. Be sure to bring your phone, laptop, or tablet if you have one :)

I am providing many resources and possible readings for the course on the McGill MyCourses LMS . This semester we are using the following texts as primary readings:

- ***Stratosphere*** by Michael Fullan (MUST be purchased, approx. \$25, available at the bookstore)
- ***Teaching and technology: New tools for new times*** by Fishman and Dede. Thanks to Dr. Dede at Harvard who's been kind enough to allow us to use and read his about to be published book: Fishman, B., & Dede, C. (in preparation). *Teaching and technology: New tools for new times*. In D. Gitomer & C. Bell (Eds.), *Handbook of Research on Teaching*, 5th Edition (American Educational Research Association). New York, NY: Springer. Book will be available on MyCourses page.
- ***Emerging Technologies for the Classroom: A Learning Science Perspective*** edited by Chrystalla Mouza & Nancy Lavigne. Book will be
- The New Horizon K-12 and Higher Education 2015 reports.
- Must purchase one paperback from the list for our book club discussions.

Course Overview:

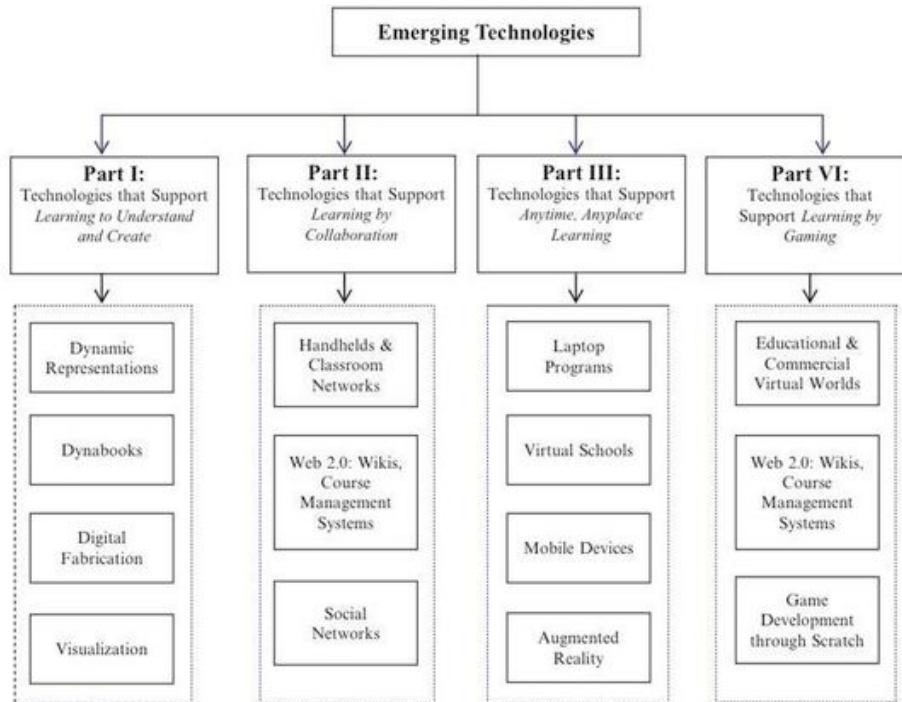
Emerging technologies have the power to sustain, transform, and disrupt education. Students will work with and explore emerging technologies that may have a large impact on teaching, learning, research and creative expression. EDPE 640 is a practical hands-on course grounded in constructivist learning theory.

Students will build a personal learning network (PLN) using Twitter and create a blog to post reflections and thoughts on themselves as learners, students, and teachers. These tools will also be used to reflect on:

- systems thinking (cybernetics)

- the 'big' ideas: in education and life:)
- thinking about the 'thinking' (metacognition)

The course wiki is found at <http://edpe640.wikispaces.com>. You will help build the wiki by contributing to the various topics on the student project page.



Course Assignments

Blog/Reflection (20%)

You need to write between 10 to 12 posts on Mightybell reacting to my prompts, to the readings, any of the class discussions and/or activities. Feel free to add any posts on technology that you think may be of interest to the class.

These posts are due before the start of the following class. You will also complete the **mid-term online participation report** after class 5 and the **final online participation report** after class 13. Please send the completed forms to my McGill email.

Class Participation (30%)

Class participation will be evaluated by rubrics:

- **Twitter rubric** (15 %)
- **Group discussion** (10%) -- peers (50%) and Sam (50%).
- **Book Club** (5%) -- peers (average)

Emerging Technolog Presentation (20%)

The presentation will to be given by groups of 3 students. It should last between 45 to 60 minutes. Please pick a topic by week 4, the presentations will start in week 6. Each presentation must have 3 parts:

- quick overview of new technology
- positive and negative impact
- hands-on activity /demo (**MAIN** part of presentation)

A wiki page written by the group on <http://edpe640.wikispaces.com> with the notes and presentation materials must be posted within the week following the presentation.

Here's the **presentation evaluation rubric** you will be completing for each presentation

Final Project (30%)

The class ends on November 25 ~ you will have up to Dec. 10th ~ to submit the final version. Pick one of the following for your final project:

1. Networked Professional Learning

This project falls in the digital portfolio /digital footprint / digital citizenship category.

One of the main goals of the course is to have students participate in networked learning environments and critically, and continually, reflect upon those experiences. In practice, this means that students utilize a number of social tools (e.g. blogs, wikis, micro-blogging platforms), read widely from a number of traditional (e.g. academic journals) and non-traditional sources (e.g. educational blogs, Twitter) and connect with other educators who are already 'connected.' Through these interactions, students will develop a 'personal learning network'. Assessment for the achievement of this course will consist of two key aspects: a course blog and a network map.

Please use the blog to describe and reflect upon your course experiences. The blog will also act as an important communication tool between you, your classmates, your instructor and the wider educational community. At the very minimum, your blog should show evidence of:

- weekly, scholarly reflections/responses of course activites, readings, multimedia artefacts, and presentations;
- frequent reading and analysis of key educational articles, media, and/or blog posts from other educational bloggers;
- interaction with other community members through ping backs; commenting, and descriptions of interactions;
- sharing and review of discovered resources and/or tools; and, thoughtful, critical reflection of the use of technology (through ongoing experimentation) in your personal or professional context.

It is also important to note that blogs highlight unique affordances that distinguish them from paper and other non-digital media. Students should adopt the appropriate use of hyperlinks, pingbacks, video/audio embeds, commenting, and other such unique features.

OR

2. Summary of Learning

Students will produce an artefact (e.g. narrative, slide deck, audio, video, concept map, other visual, etc.) that summarizes the learning experience in EDPE 640. The artefact should reference significant course experiences (e.g., reflections, assessments, readings, presenters, networking, experimentation, etc.) that contributed to the greater understanding of educational technology and media. Students will present these artefacts, or make them available to others, for the last day of the course.

OR

3. Major Digital Project

Students will develop a digital project related to technology in teaching and learning. This project is wide-open to possibilities. Some ideas: portion of an online course or unit, digital video (e.g., presentation, advertisement), educational resource website, course blog or wiki, etc. Additionally, there will be a reflective component to each project, which will be tied in to the reading reflection posts.

OR

4. Research Synthesis Paper

A research synthesis paper using the **following guide** on emerging technologies. Here's 3 sample papers using the template layout (**Shaw, Connors**, and **Kissane**) from Harvard. We will replace these exemplars once I have McGill examples from the class over the next year or so.

OR

5. Teach yourself coding

Teach yourself how to code. Come up with a programming document and document your journey/process via a blog with examples of successes/failures along the way.

OR

7. Your Own Topic

You want to do something else ~ talk to me as early in the semester as possible.

EDPE 640: Syllabus Fall 2015

Always check <http://bit.ly/edpe640f15> for the live links and latest updates.

Class back channel for quest.&discussions is: <https://todaysmeet.com/edpe640>

Everything to do with the course will be listed and updated on this page. Please check often as this will be updated frequently with live links.

Sept. 8 (class 1): Introduction to the course and mobile technologies

- Getting to know one another ~ Poll Everywhere and/or Socrative
- Setting up of Twitter (#edpe640) ,Evernote and Google Drive accounts Edublogs or Weebly or Blogger or Mightybell ---> You decide !
- Course overview ~ goals, objectives, what do you want to learn?
- Buy course text --> Stratosphere by Michael Fullan (in stock at the bookstore only \$24 ~ needed for class 2 ~ bookstore closes at 5 pm)
- Pick a book to read from our book club page with 4 or 5 of you classmates. You can order the book on Amazon or Kobo. The book may be a paper copy or an ebook. With your mini reading group you will read and discuss the book several times in class.

Sept. 15 (class 2): iPads as a disruptive force in education and society

- Class back channel for quest.&discussions is: <https://todaysmeet.com/edpe640>
- Readings:
 - “New Tools for New Times” by Fishman & Dede p. 1-17 teaching and learning with technology
 - “Stratophere” by Fullan p 1-16 The Journey
- Activities:
 - Group Discussion: Questions
 - Lab Activities: Introduction to tablet technology and Activity 1 (Transforming Learning with iPads --> iPad basics, Book Creator, and QR codes OR we may do Google Apps for Education depending on your needs
- Reflections: Post on Mightybell (to be explained in class)

Sept. 22 (class 3): Tablet technologies continued....

- Class back channel for quest.&discussions is: <https://todaysmeet.com/edpe640>
- Readings:
 - Fishman & Dede p. 17-37 research on technology
 - Fullan p. 17-32 Technology: Power and Peril
 - The Future of Tablets in Education: Potential vs. Reality of Consuming Media by Justin Reich and Beth Holland
- Activities:
 - Group Discussion
 - Lab Activities: QR codes, Voice, Socrative
- Reflections

Sept. 29 (class 4):

- Readings:
 - Book Club
 - Read the forward (v-vii) and Chapter 1 (pp. 1-12) to the Emerging Technologies for the Classroom text. This chap gives an overview of the book and there may be a chapter that will help you with your presentation and/or final project. This readings is posted on the (on My Courses page).
 - The iPad in education: uses, benefits, and challenges by Thierry Karsenti and Aurelien Fierez
 - Smartboard study (new)
- Activities:
 - Book Club
 - New Horizon Report 2014 & 2015 plus Twitter Lab Activities: Evernote, Nearpod, Tellagami, Explain Everything
- Reflections

Oct. 6 (class 5)

- Readings:
 - Fishman & Dede p. 38-61 blended learning & teaching online
 - Mitchel Resnick (2007). All I Really Need to Know (About Creative Thinking) I Learned (By Studying How Children Learn) in Kindergarten. ACM Creativity & Cognition conference.
 - John Seely Brown and Richard Adler (2008):Minds on Fire. Educause Review. New link for article: <http://net.educause.edu/ir/library/pdf/ERM0811.pdf>
- Activities:
 - Group Discussion
 - Presentation overview work and prepare
- Reflections

Oct. 13 (class 6)

- Readings:
 - Fishman & Dede p. 61-93 coding, logo, maker movement, MUVE
 - "Students First, Not Stuff" by Will Richardson (ASCD, March 2013)
 - "Pedagogy and Change: Essence as Easy" by Fullan pp. 17-32
 - "Digital Disappointments and Dreams" by Fullan pp. 33-54
- Activities:
 - Group Discussion
 - Presentations:
 - #1
 - #2
- Reflections

Oct. 20 (class 7)

- Readings:
 - Fishman & Dede p 93-125 augmented reality, gaming & simulations

- Chapter 1: Flattening Classrooms Through Global Collaboration
- Activities:
 - Group Discussion
 - Presentations:
 - #3
 - #4
- Reflections

Oct. 27 (class 8)

- Readings:
 - Book Club #2
 - Tamim, R. M., R. M. Bernard, et al. (2011). "What Forty Years of Research Says About the Impact of Technology on Learning: A Second-Order Meta-Analysis and Validation Study. "Review of Educational Research 81(1): 4-28.
- Activities:
 - Book Club #2 Discussion
 - Presentations:
 - #5
 - #6
- Reflections

Oct. 28 (class 9)

- Readings:
 - Fishman & Dede p. 125-141 digital teaching platforms (DTP)
 - Gee, James Paul. Digital Media and Learning as an Emerging Area and “Worked Examples” as One Way Forward // (Scribd Download from the MIT Press.)
 - "Is Google Making Us Stupid?" by Nicolas Carr
 - Redefining the Writing Process with iPads by Beth Holland
- Activities:
 - Group Discussion
 - Presentations:
 - #7
 - #8
- Reflections

Nov. 3 (class 10)

- Readings:
 - Fishman & Dede p. 142-162 preparing students for work and life in the 21st century
 - Two Reasons Educators Can No Longer Ignore Social Media
 - Consumerization of Information Technology/BYOD (Educause)
- Activities:
 - Group discussion
 - Presentations:
 - #9
 - #10

- Reflections

Nov. 10 (class 11)

- Readings:
 - Fishman & Dede p. 163-178 evolving research agenda on teaching with technology
 - Fullan p. 33-54 Digital Dreams and Disappointment
- Activities:
 - Group Discussion
 - Presentations:
 - #11
 - #12
- Reflections

Nov. 17 (class 12)

- Readings:
 - Book club #3
 - Realigning Higher Education for the 21st Century Learner through Multi-Access Learning by Valerie Irvine, Jillian Code, & Luke Richards
 - Storytelling is not lecturing, lecturing is not storytelling by Jackie Gerstein
- Activities:
 - Book Club Discussion
 - Lab Activities: Haiku Deck/Evernote & Coding or Genius Hour
- Reflections

Nov. 24 (class 13) ~ Wrap up ~ show and tell ~ Virtual / Flipped class

- Readings:
 - Fishman & Dede p. 179-185 A way Forward
 - Fullan p. 55 - 78 Design Principals & Change Knowledge; Making Technology Pay
 - skip extensive bibliographies; Fishman & Dede p. 86-236 & Fullan p. 87-91

To be done the week FOLLOWING the last class -->Pick **ONE** of the following conference presentations based on your interests and write your response and thoughts on Verso (sign in as student and use IT9B13 for class code). You may do this through the app or on the browser:

Kindergarten to Secondary 5:

- Using social media in the classroom by Alec Couros BLC 2014 keynote (75 min.)
- Panel keynote (Shannon, Darren, Sara, Shilpa) at BLC 2014~ 4 speakers (approx. 75min.)
- The App Generation by Howard Gardner & Katie Davis (75 min.)
- Leadership: The Principal: Three Keys to Maximizing Impact BLC 2014 keynote 70 min.)

Higher Education:

- The 21st Century University by Valerie Irvine TLt 2013 keynote (approx. 80 min.)

Supplementary Reports (optional):

The MOOC Model for Digital Practice
12 Best iPad Games for you NOT your students

UNESCO policy on Mobile Learning
NCTE policy on 21st Century Learning

All 'final' versions of assignments/work due by December 10th ~ at the latest

Here's the 'big picture' overview of the course Fall 2015 version:

