Spring 2019 (updated: March 19, 2019; 76 pages): R678 Only 3 Credits Emerging Learning Technologies (The Famed ''Monster Syllabus'')

Indiana University, School of Education, Room 2101, Mondays 7:00-9:45 pm Section 8743 FTF, Canvas: https://iu.instructure.com/courses/1772486
Section 10173 Online, Canvas: https://iu.instructure.com/courses/1772485
General Course Link to Canvas: http://canvas.iu.edu/

Instructor: Curt Bonk, Professor, Instructional Systems Technology Dept. Syllabus (PDF; HTML): http://php.indiana.edu/~cjbonk/Syllabus_R678_Spring_of_2019.htm
Office Hours and Optional Virtual Sessions in Zoom: https://IU.zoom.us/j/8123222878

Weekly Discussion Moderators: http://www.trainingshare.com/r685.php
Participant Bios and Interests: http://www.trainingshare.com/r678bios.php
Online Role Play: http://www.trainingshare.com/r678roles.php
Dropbox link for course files:

 $\underline{https://www.dropbox.com/sh/prlxtgixwjb1g4p/AACU4yTbPyf444fEe0hi4noxa?dl=0\ l=0}$

Curtis J. Bonk, Ph.D.

Office: 2238 W. W. Wright Education Bldg.

IST Dept. School of Education, IU

Phone: (mobile # available upon request)

E-mail: CJBonk@indiana.edu Office Hours: as arranged

Instructional Assistants:

FTF Section: Meina Zhu: meinzhu@iu.edu

Online Section: Parama Bhattacharya

pbhatta@iu.edu



Course Description and Rationale:

Instead of passive consumption-based learning, we are living in a participatory age where learners have a voice and potentially some degree of ownership over their own learning. Here at the start of the twenty-first century, emerging technologies and activities—such as blogs, wikis, podcasts, ebooks, YouTube videos, massive open online courses (MOOCs), simulations, virtual worlds, and wireless and mobile computing—are generating waves of new opportunities in higher education, K-12 schools, corporate training, and other learning environments.

And today's millennial learner, immersed in an increasingly digital world is seeking richer and more engaging learning experiences; and now the new "phigital" learner who is equally at home in the digital as well as physical world. Amid this rising tide of expectations, instructors across educational sectors are exploring and sharing innovative ways to use technology to foster interaction, collaboration, and increased excitement for learning. It is time to take advantage of the new participatory learning culture where learners build, tinker with, explore, share, and collaborate with others online. It is also time to utilize free and open educational resources, opencourseware, learning portals, and open source software

across educational sectors and income levels. Some of you will create and publish a cross-cultural Wikibook. Others will create video blogs, and still others will design YouTube-like videos. Some might even flip their classrooms. Still others will enroll in or perhaps even teach a massive open online course (MOOC).

The syllabus for this course is purposefully long. I refer to it as "the monster syllabus." I will be your online concierge or guide through masses of online resources. In an age when eyeball-to-eyeball learning is no longer necessary, effective online instructors do not simply teach, but moderate, coach, and assist in the learning process. Today a teacher, trainer, professor, or instructional designer often assumes the role of concierge with a wealth of freely available tools and resources to guide her learners. Or perhaps, after reading through this syllabus, you might be more inclined to call such a person a "curator" of quality content. Still others might focus on the "counseling" skills needed to help guide learners through their assorted instructional options. In this more open twenty-first century learning world, anyone can learn anything from anyone else at any time.

Course Goals and Objectives

After the course, students should be able to many of the items below (not all):

- 1. Explain and demonstrate the educational benefits of emerging learning technologies such as virtual games, augmented reality, synchronous conferencing, online tutorials, podcasts, wikis, blogs, virtual worlds, simulations, social networking software, digital books, mobile books, etc.
- 2. Track and report on trends related to emerging learning technologies.
- 3. Frame learning technology trends and issues from broader psychological, social, cultural, and educational perspectives.
- 4. Critique articles and review books related to emerging learning technologies.
- 5. Use, recommend, or create online resources and portals in a variety of educational settings.
- 6. Design an innovative research or evaluation project related to online learning;
- 7. Successfully submit research, grant, and other proposals related to learning technologies, open education (e.g., open textbooks), MOOCs, e-learning, etc. to conferences, foundations, summits, or institutes.
- 8. Recognize and potentially contact many of the key players and scholars in the field of online learning, open education, MOOCs, and emerging learning technologies.
- 9. Consult with organizations to develop strategic plans or evaluate the effectiveness of elearning courses, programs, and events as well as MOOCs, open education, Web 2.0 technologies, etc.
- 10. Make recommendations regarding online learning initiatives, programs, and strategies as well as various emerging learning technologies, open educational resources, and innovative and nontraditional forms of educational delivery.
- 11. Obtain a model, guide, or framework for thinking about new technology tools and resources in education. Use this framework for strategic planning reports, retreats, consulting, and other situations where a macro lens on learning technology and educational reform is needed.
- 12. Obtain the skills to train fellow teachers as well as learners in emerging learning technologies and pedagogically effective instructional activities and approaches.

Required Texts (none)

Required Videos (you select)

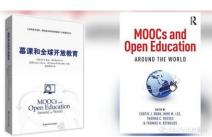
Required Journal Article (you pick from a list)

Nothing required!!! The world of learning should be FREE!

Books that I will refer to (don't buy them):

- 1. Bonk, C. J. (July 2009). *The World is Open: How Web Technology is Revolutionizing Education*. San Francisco, CA: Jossey-Bass, a Wiley imprint. See: http://worldisopen.com/
- 2. Bonk, C. J., Lee. M. M., Reeves, T. C., & Reynolds, T. H. (Eds). (2015). *MOOCs and Open Education Around the World*. NY: Routledge. Book homepage: http://moocsbook.com/









Perhaps get this FREE one instead (it is free in English and Chinese):

3. Free **Book:** Bonk, C. J., & Khoo, E. (2014). *Adding Some TEC-VARIETY: 100+ Activities for Motivating and Retaining Learners Online*. OpenWorldBooks.com and Amazon CreateSpace. Note: Free eBook available at: http://tec-variety.com/; Paperback http://www.amazon.com/dp/1496162722/ and Kindle http://www.amazon.com/dp/B00KJ1FAC8

Curt Bonk's List of journals in educational technology and related fields: http://www.trainingshare.com/resources/distance_ed_journals_and_online_learning_books.htm

Curt Bonk's 27 free 10 minute videos on how to teach online:

"Video Primers in an Online Repository for e-Teaching and Learning" (V-PORTAL)

- 1. Watch & Find Resources in Bonk's YouTube Channel: http://www.voutube.com/user/TravelinEdMan
- 2. **Read about Possible Uses**: http://www.trainingshare.com/keynotes.php#tasel

Technology Tools (we might try out):

- 1. Flipgrid: https://info.flipgrid.com/
- 2. GoAnimate: https://goanimate.com/
- 3. Kahoot!: https://getkahoot.com/
- 4. Jing: https://www.techsmith.com/jing-tool.html
- 5. PhET Interactive Simulations: https://phet.colorado.edu/
- 6. Screencastify: https://www.screencastify.com/
- 7. Sli.do: https://www.sli.do/
- 8. TED-Ed: http://education.ted.com/
- 9. TubeChop: http://www.tubechop.com/
- 10. Vialogues: https://vialogues.com/
- 11. Virtually Inspired: https://virtuallyinspired.org/
- 12. WeVideo: https://www.wevideo.com/

Video Resources and Portals (75+ shared online video portals):

<u>http://www.trainingshare.com/resources/Summary of Ways to Use Shared Online Video.htm</u> (e.g., YouTube EDU, TeacherTube, Link TV, Book TV, Clip Chef, Big Think, TV Lesson, Wonder How To, National Geographic videos, CNN videos, BBC News, Video, and Audio, Academic Earth, etc.

Summary of Course Tasks, Due Dates, and Grading

Tasks	Points	Due dates
A. Tidbit and Video Reflection Paper	40	February 25 (+1 day grace)
B. Discussion Activities (FTF students) or	40	Sign up or as arranged
Discussion Moderator (online students:		
http://www.trainingshare.com/r685.php)		
C. Discussion Participation in Canvas or in Class	40	(due each week)
D. Discussion and Lecture Reflection Paper	50	April 22 (+1 day grace)
E. Report or Strategic Plan Analysis	60	February 25 (+1 day grace)
F. Final: Wikibook, MOOC Project, Video, or	70	April 22 (+1 day grace)
Personal Selected Task		
Total Points	300	

Total points will determine your final grade. I will use the following grading scale:

A+=300 high score B-=240 points A=280 points C+=230 points C=220 points C=220 points C=210 points

B = 250 points F/FN = no work rec'd or signif. inadequate/impaired

Lateness Policy: I usually accept anything turned in within 24 hours of the original due date. After that, students lose 2 points for each day that it is past due without an approved reason.

Directions: Optional Zoom lecture recorded each Tuesday at 7:00-9:45 pm:

- 1. From Google Chrome (preferred) or from Firefox. Internet Explorer should also work.
- 2. Go to Zoom link: https://IU.zoom.us/j/8123222878
- 3. Type your name. Show video (optional--recommended). Mute mic (unless speaking).

Projected Seminar Weekly Topics

- Week 1. (January 7) Introduction to the Open World: Visionaries and Visions
- Week 2. (January 14) Alternate Reality Learning: AR, VR, Gaming, and Simulations
- Week 3. (January 21) Open Textbooks, E-Books, and Digitally Enhanced Books
- Week 4. (January 28) The Expansion of Blended and Fully Online Learning
- Week 5. (February 4) Extreme, Nontraditional, and Adventure Learning
- Week 6. (February 11) Open Educational Resources (OER) and OpenCourseWare (OCW)
- Week 7. (February 18) Open Education and Massive Open Online Courses (MOOCs)
- Week 8 (February 25) More MOOCs and Open Education Around the World
- Week 9. (March 4) Open Education in the Developing World (i.e., Emerging Economies)
- Week 10. (March 18) Informal & Self-Directed Online Learning Environments (includes: language lrng)
- Week 11. (March 25) Connectivism, Social Media, and Participatory Learning
- Week 12. (April 1) Interactive, Global, and Collaborative Learning (including wikis and learning spaces)
- Week 13. (April 8) Mobile, Wireless, and Ubiquitous Learning
- Week 14. (April 15) The Future of Learning Tech: Networks of Personalized Learning
- Week 15. (April 22) The Future of Learning Tech: AI, Robotics, and Personal Digital Assistants

Note: Learners and participants in this class can find their own articles for any week of the course and ignore any assigned articles in the syllabus. Please share what you find. Best of luck in your journeys.

Class Tasks

A. Tidbit and Video Reflection Paper (40 points: Due February 25)

Tidbits and Videos (40 points): Besides reading 3-4 assigned articles each week, during the semester, I want you to read at least 80 total tidbits during the semester from the list of tidbit readings or about 5 or 6 per week (preferably more than 80 tidbit articles; about half of which should be from tidbits from weeks in March and April). Typically, these are very short online news or magazine articles. I also want you to watch at least 5 videos listed below related to our course (or similar ones that you find). On February 25, you will turn in a list of your top 40 tidbits read so far (best ones at the top; including at least 10 from March and April...i.e., you must read ahead a bit) and top 2-3 videos watched. You might also note a few tidbits that you did not enjoy. After those lists, I want you to reflect for 1-2 single spaced pages on what you learned from those tidbits. I am **not** asking you to summarize each article or video; instead reflect on your learning in general. What themes, trends, or concepts were clarified for you? What new insights did you gain? What inspirations did you feel? You might include brief comments at the beginning or end of the paper on why you ranked the tidbits and videos the way you did. I will send an email with examples upon request. Be creative. Take a look at the examples provided. Post your tidbit reflection to Canvas or your Dropbox account or send to me via email.

B. Discussion Moderation and Activities (40 points)

Face-to-Face Students: You will get involved in weekly tasks in class as group leaders and team members. Face-to-face students will also create posters of key articles, select and bring in quotes from these articles, or offer questions for panel discussions for these 40 points. The instructor will assign these most weeks at the start of end of class. 40 points for weekly tasks like bringing questions or posters or article summaries. In effect, these 40 points are for artifact creation, class involvement, leadership, and engagement.

Online Students: You will start and moderate discussion for your 40 points (40 points): At the start of each week, I want one person in the online section of this class to post a short summary to Canvas on at least 4 of the main articles assigned for that week. That person is the starter for discussion. Other students will add to their conversation with their reflections and reactions. As a summarizer or starter, you might:

Moderators or co-moderators might:

- 1. State reactions, questions, and suggestions for the upcoming readings.
- 2. Post author pictures, quotes, figures, tables, etc., from the articles for the coming week.
- 3. Recap or briefly summarize key parts of the assigned articles for the week.
- 4. Monitor the discussion. And spark it when it goes weak.
- 5. Offer feedback to peers on their posts.
- 6. Add resources and links to resources to the discussion.
- 7. Connect to experts in the field.
- 8. Connect or synthesize comments within the week.
- 9. Point to counter points and inaccuracies in the postings of students during the week.
- 10. Be creative or offer creative insights when needed.
- 11. Point out the relationship of upcoming week topic or articles to past lectures or readings.
- 12. Reflect on the discussion from past weeks; repost prior quotes from others.
- 13. Discuss the position of a researcher or pioneer in the field (or perhaps even write to him/her);
- 14. Discuss a recent speech or colloquium you attended related to the week or a visit to a technology center or exhibit.

15. At the end of the week, you might react and reflect on the class discussion that transpired as well as the questions and concerns raised. You might also link to the next week's readings.

You can sign up for this task at: http://www.trainingshare.com/r685.php

Sample Discussion Moderator Recap:

- 1. Prezi from Thuy Han for R678 class Week 4 (February 8, 2015): https://prezi.com/r4vkwqolkrn9/httpswebarchiveorgweb20040303191129httpwwwnetco/?utm_campaign=share&utm_medium=copy
- 2. Jennifer Webeck, April 2, 2015, As an overview of our discussion in bubbl.us: https://bubbl.us/mindmap?h=290e70/52c975/26iay7HLVaIyo

C. Participation in Canvas or in Class (40 points)

Face-to-Face student course participation in class (40 points): Students in the face-to-face section will participate in class discussion on Monday nights for 40 points as follows: 36-40 for high participators; 32-36 for medium participators; 28-32 for low participators; and 0-31 for others. It is optional to post to the online forums.

Online student course participation in Canvas (40 points): We will do discussions each week in either Canvas. This is worth 40 points as follows: 36-40 for high participators; 32-36 for medium participators; 28-32 for low participators; and 0-31 for others. Course participation includes contributing to the online discussion in Canvas, sharing resources, responding to peers, providing feedback on tasks and resource recommendations, and so on. While these will be mainly assessed as to the number of posts, I will also take into consideration qualitative factors such as those listed below.

Participation considerations:

- 1. Diversity (some variety in ideas posted, and some breadth to exploration);
- 2. Perspective taking (values other perspectives, ideas, cultures, etc.);
- 3. Creativity (original, unique, and novel ideas);
- 4. Insightful (makes interesting, astute, and sagacious observations).
- 5. Relevancy (topics selected are connected to course content); and
- 6. Learning Depth/Growth (shows some depth to thinking and elaboration of ideas);

D. Discussion and Lecture Reflection (50 points: Due April 22)

Discussion and Lecture Reflection Paper (50 points): At the end of the semester, you are to reflect on what you learned from weekly discussions in Canvas or in class each week as well as from my recorded lectures and discussions that I will deliver each week via videoconferencing. You should include at least 7 of the weeks in your reflection. What were the ideas, issues, concepts, facts, figures, diagrams, etc., that struck a chord with you? What did you learn during the semester? How did your thinking change in a particular week or over time? What inspired you? What did you find disappointing? What is next?

Using these questions as a guide, please write a 3 page single-spaced reflection paper (not counting any references, appendices, or tables created) on this activity by April 22 (50 points). Though not required, it would help if you included a fourth page with a recap table, chart, figure, or some type of summary of key themes, concepts, terms, etc., mentioned in the reflection paper. This is to be a meta-reflection of your growth in the course, unique learning insights, personal gains, etc., at least in part, from your weekly discussions and responding to your peers. What were the key concepts you grappled with this semester?

How has your thinking evolved? What are the gaps in the research that you might target now? What weeks or particular articles inspired you and why? Post your reflection paper to Canvas or your Dropbox account or send to me via email.

Reflection Paper Grading Criteria (50 Points; 10 points each):

- 1. Relevancy to class: meaningful examples, relationships drawn, interlinkages, connecting weekly ideas.
- 2. Insightful, Interesting, Reflective, Emotional: honest, self-awareness, interesting observations
- 3. Learning Depth/Growth: takes thoughts along to new heights, exploration, breadth & depth, growth.
- 4. Completeness: thorough comments, detailed reflection, fulfills assignment, informative.
- 5. Connections: linking threads in the discussion, lectures, and readings.

E. Report or Strategic Plan Analysis or Naturalistic Study or Critique or Other (60 pts—Due February 25; encouraged to work in teams)

Midterm Option 1. Summary Report or Strategic Plan Evaluation, Critique, and Extension

Find and evaluate a summary report, technical report, or a strategic plan of a company, university, non-profit organization, school, state, province, country, or region related to e-learning, blended learning, mobile learning, or emerging learning technologies of some type and critique it. For instance, you might pick the state or country where you were born or perhaps where you plan to live after graduation. You might find the strategic plan online or request a hardcopy version. I want you to not simply read and critique the report but to also interview someone who created it or is/was affected by that report. You might discuss and critique the online learning technologies highlighted, proposed pedagogical plans, intended training methods, targeted skills or competencies, or evaluation methods detailed. You might visit the organization or write someone an email. What might this organization do differently in planning for e-learning or using some emerging learning technology? Has there been an update? You are encouraged to work in teams on this report. When done, you will present an overview of the report to the class. Testimonials, graphs and trends of indicated growth, comparisons, and other data or handouts are welcome. You are also encouraged to directly contact the organization that developed the report or plan and receive additional product information (e.g., DVDs, brochures, white papers, technical reports, product comparison sheets, videotapes, company annual report, customer testimonies, data sheets, Web site information, etc.). Your evaluation, critique, and extension paper should be 4-6 singlespaced pages (excluding references and appendices; those working in teams are expected to have 7-10 single spaced page papers, not counting references and appendices). Please post it to Canvas, Dropbox, or send to me via email by February 25th.

Sample reports (see also OER reports listed in Week 6):

- 1. United States Department of Education, State Technology Plans: https://www2.ed.gov/programs/edtech/techstateplan.html
- 2. United States National Education Technology Plan: https://tech.ed.gov/netp/
- 3. U.S. Army Learning Concept 2015:
 Department of the Army, United States of America (2011, January 15). The U.S. Army
 Learning Concept for 2015. TRADOC Pam 525-8-2.
 http://www.tradoc.army.mil/tpubs/pams/tp525-8-2.pdf (72 pages). Video (Army Learning
 Concept 2015): http://www.youtube.com/watch?v=KD9NGAV3-3k (4:26 minutes)
- 4. IU Strategic Plan for Online Education (2011, March 9): http://online.iu.edu/assets/docs/schnabel-strategicplan.pdf

5. The Bicentennial Strategic Plan for IU, December 5, 2014: https://strategicplan.iu.edu/doc/plan.pdf

Summary Report/Strategic Plan Grading (10 pts for each of the following dimensions)

- 1. Review of Plan or Document (clarity, related to class, organized, facts, data, relevant, style)
- 2. Relevant Resources and Digging (citations/refs, linkages to class concepts, extensive)
- 3. Soundness of Critique (depth, clear, complete, practical, detailed, important, coherence)
- 4. Creativity and Richness of Ideas (richness of information, elaboration, originality, unique)
- 5. Knowledge of Topic (learning breadth & depth, growth, displays understanding of topic)
- 6. Recommendations, Insights, and Implications (contains relevant recommendations, guides)

Midterm Option 2. Naturalistic Study

You have options to the midterm. For instance, you might perform a case study or pilot observation of workers, students, etc. using tools or instructors interacting with employees, students, other instructors, etc. while they use a web-based learning tool, resources, project, or curriculum application. For instance, you might decide to complete a case study of a child, young person, or adult using a particular learning tool for the first time. Such naturalistic studies should include at least five careful observations and commentary of the person and tutor/teacher. The commentary should reflect your learning and provide insights as to how to make this tool more educationally meaningful. If you are looking at student-teacher-tool interaction patterns, teacher guidance, or simply tool use, you will need to design coding schemes and observation log sheets to help interpret tool functionality in this environment.

When done with your *brief* study, you might interview an instructor, learner, instructional designer, or some other person in that environment about the phenomenon that you observed. Interviewees might come from corporate, K-12, military, government, or higher education settings. These optional interviews can be live (face-to-face), via videoconferencing, phoneor Skype-based, or conducted through email.

Your naturalistic study report should be 4-7 single-spaced pages (excluding references and appendices; those working in teams are expected to have 7-10 page papers, not counting references and appendices). In your report, I want you to reflect on what you learned about elearning from this assignment. How has it opened your eyes? What might you have done differently next time in your study? What recommendations do you have and what implications do you see? How might you put your new ideas to use in training programs or in your own future teaching? Please post it to Canvas or your Dropbox account or send to me via email on or before February 25th.

Sample Format Naturalistic/Research Activities:

- I. Title Page (Name, affiliation, topic title, acknowledgements)
- II. Topic Literature and Method
 - 1. Res topic & materials;
 - 2. Brief stmt of problem and why impt
 - 3. Brief review of the relevant literature
 - 4. Methods:
 - a. Subjects & design (i.e., who/how selected);
 - b. Materials/setting (i.e., hard/software, text)
 - c. Procedure (i.e., how data was obtained)
 - d. Coding Schemes & Dep. meas/instr (i.e., how segment/code data);
 - e. Analyses or comparisons

- III. Results and Discussion 1. Preliminary Results; 2. Discussion of results
- IV. References (APA style: see syllabus for example)
- V. Appendices (e.g., pictures, charts, figures, models, tests, scoring criteria, coding procedures)

Sample Grading of Major Project (60 Total Points or 10 pts each dimension):

- 1. Review of the Problem/Lit/Purpose (interesting, relevant, current, organized, thorough, grounded)
- 2. Hypothesis/Research Questions/Intentions (clear, related to class and theory, current, extend field)
- 3. Method/Procedures (subjects/age groups approp, materials relevant, timeline sufficient, controls)
- 4. Research Activity/Design/Topic/Tool (clear, doable/practical, detailed, important)
- 5. Overall Richness of Ideas (richness of information, elaboration, originality, unique)
- 6. Overall Coherence and Completeness (unity, organization, logical sequence, synthesis, style, accurate)

Midterm Option 3: Review or Critique

A third option is to review and critique a special journal issue, a special conference symposium or summit, or edited book related to any week of this course. What are the strengths and weaknesses of it? Why or why not would you recommend that others read or explore it? How does the content of it relate to R678 content? If you choose this option, please run the special issue, symposium, summit, or book that you selected by the instructor. This critique will be a 4-6 page single spaced report. This is due Monday February 25th.

Note: See below for examples of special issues on Massive Open Online Courses (MOOCs) that you might read and critique. These special issues are from the *Journal of Online Learning and Teaching* (JOLT) and the *International Review of Research on Open and Distributed Learning* (IRRODL).

- a. Special Issue (2017, June): Outcomes of Openness: Empirical Reports on the Implementation of OER, *International Review of Research in Open and Distributed Learning*, 18(4). Available: http://www.irrodl.org/index.php/irrodl/issue/view/85
- b. Special Issue (2017, February): Advances in Research on Social Networking in Open and Distributed Learning, *International Review of Research in Open and Distributed Learning*, 18(1). Available: http://www.irrodl.org/index.php/irrodl/issue/view/84
- c. IRRODL *16*(6), 2015, Special Issue: Towards a European perspective on Massive Open Online Courses: http://www.irrodl.org/index.php/irrodl/issue/view/72
- d. IRRODL *16*(5), 2015, Special Issue: OER and MOOCs: http://www.irrodl.org/index.php/irrodl/issue/view/71
- e. IRRODL *15*(5), 2014, Special Issue: Research into Massive Open Online Courses: http://www.irrodl.org/index.php/irrodl/issue/view/64
- f. JOLT: June 2013, 9(2), http://jolt.merlot.org/Vol9 No2.htm
- g. JOLT: March 2014, 10(1), http://jolt.merlot.org/Vol10_No1.htm

Midterm Option 4: Software or Technology Tool Review

In the fourth option, you are to review at least 3 emerging technologies for learning. What are the key features? How could they each impact on education? What skills do they potentially enhance? What audience do they each serve? Who are the stakeholders? List at least 5 pedagogical ways in which each of these tools or applications can be used in education or training? For each emerging technology, please identify at least 3 features you like best and explain why and how these features can foster or enhance teaching and learning. Please also list at least 3 features you think need improvement and detail why and what can be done to add, modify, change, or delete different features. You should also detail how you would redesign these technology tools or products to improve them for educational use if you were the educational product designer. This review will be a 4-6 page

single spaced report (excluding references and appendices; those working in teams are expected to have 7-10 single spaced page papers). This is due Monday February 25.

For a list of emerging educational technology companies, please see:

- 1. **USA** (mainly): The Ed Tech Market Map: 90+ Startups Building The Future Of Education, CB Insight, June 21, 2017, https://www.cbinsights.com/research/ed-tech-startup-market-map/?utm_content=buffer6565b&utm_medium=social&utm_source=linkedin.com&utm_campaign=buffer
- 2. **China:** August 20, 2016, China's E-Learning Revolution: The 10 Hottest Chinese Online Education Companies of 2016, https://www.whatsonweibo.com/10-hottest-chinese-online-education-companies-2016/
- 3. Summer 2018, Dr. Miriam Schcolnik, Tel Aviv University, Israel, Digital Tools in Academic Writing? *Journal of Academic Writing*, 8(1), 121-130. http://e-learning.coventry.ac.uk/ojs/index.php/joaw/article/view/360

Midterm Option 5: Other (requires instructor approval)

Other options to the midterm might be grant proposals, research interventions (as opposed to observations), technology tool design proposals, curriculum integration plans, or conference research papers. If one of these appeals to you, please write to the instructor for additional information and guidance. This is due Monday February 25th.

F. Web 2.0 Final Project (70 points—Due April 22; project recommended to be conducted with a partner, unless approved by the instructor)

Related resource on open pedagogy: https://openedgroup.org/oer-enabled-pedagogy/
https://www.yearofopen.org/april-open-perspective-what-is-open-pedagogy/

Option 1. Pressbook assignment

Do you want to be an author? Do you want to be famous? In this assignment, you will create an open textbook related to emerging technologies using Pressbook. If the textbook can also be related to your current job or research interest it would be perfect. You can share this textbook with your colleagues, students, classmates, or families. You can also put your Pressbook link in your resume. Maybe your opentext book can be used as next years' assignment examples! For this assignment, you can have at least two chapters. In total, it should be a minimum of 3,000 words. If you work in a team, each of you should contribute at least 2,000 words. A 1-2 single-spaced reflection paper from each student on what you learned from this Pressbook activity needs to be included (not counting references and appendices). Describe what you learned from the task including specific course concepts and ideas mentioned in your chapter as well as ideas related to open educational resources. If you work in a team, attached to your reflection paper will be documentation of what you contributed to the Pressbook. Your paper and chapter will be graded according to the dimensions listed below.

Example (note: you do not have to include so much content like the examples):

- <u>The Open Anthology of Earlier American Literature</u> (https://openamlit.pressbooks.com/) was created by Robin DeRosa and her students.
- <u>Project Management for Instructional Designers</u> (https://pm4id.org/) was created by David Wiley and his students as an adaptation of an existing open textbook written for a different audience.

Pressbook Grading (70 Total Points or 10 pts each dimension):

1. Chapter and reflection paper relevance: Contribution is meaningful to class, we learn from it

- 2. Chapter and reflection paper coherence: flow, well organized, good layout, enjoyable to read
- 3. Chapter and reflection paper completeness: Sufficient coverage of info, extends topic & class
- 4. Overall chapter creativity: Original and distinctive ideas, insightful points, something unique in it such as a figure, model, graph, timeline, comparison chart, acronym, quote or set of quotes, etc.
- 5. Overall reflection paper insightfulness, depth of thought, flow, informational content, etc.
- 6. Shared and discussed in Canvas or in Class
- 7. Effort, digging, extensiveness of the project, etc.

Option 2. Wikibook Online Work (WOW)

In this option, you help with a Wikibook related to emerging technologies. About seven years ago, students from five universities designed a wikibook on "The Web 2.0 and Emerging Learning Technologies" (The WELT); see

http://en.wikibooks.org/wiki/Web 2.0 and Emerging Learning Technologies. If you write a unique chapter for the WELT, it should be a minimum of 2,000 words. A 2-3 page reflection paper (3-4 pages if with a partner) on what you learned from this wikibook activity needs to be included (not counting references and appendices). Describe what you learned from the task including specific course concepts and ideas mentioned in your chapter as well as ideas related to the social construction of knowledge. Attached to your reflection paper will be documentation of what you contributed to the wikibook, including your chapter (with highlights or special notations of your contribution), highlights to the chapters worked on, and perhaps even print outs of the wikibook chapter editing history. Your paper and chapter will be graded according to the dimensions listed below.

Example:

Robert Halford, Spring 2015, Wikibook Chapter on Professional Developmnet:

https://en.wikibooks.org/wiki/Web_2.0_and_Emerging_Learning_Technologies/Professional_Development#Technology_as_a_tool_for_learning_

Greg Snow, Korea, Spring 2016, Wikibook Chapter on Virtual Reality,

https://en.wikibooks.org/wiki/Virtual Reality

Luci Mello, April 26, 2017, Mobile Learning (mash-up),

https://www.softchalkcloud.com/lesson/serve/eqpRyOTbxGsCmr/html

https://en.wikibooks.org/wiki/Mobile Learning

Wikibook Grading (70 Total Points or 10 pts each dimension):

- 1. Chapter and reflection paper relevance: Contribution is meaningful to class, we learn from it
- 2. Chapter and reflection paper coherence: flow, well organized, good layout, enjoyable to read
- 3. Chapter and reflection paper completeness: Sufficient coverage of info, extends topic and class
- 4. Overall chapter creativity: Original and distinctive ideas, insightful points, something unique in it such as a figure, model, graph, timeline, comparison chart, acronym, quote or set of quotes, etc.
- 5. Overall reflection paper insightfulness, depth of thought, flow, informational content, etc.
- 6. Shared and discussed in Canvas and in Class
- 7. Overall quality of assignment

Option 3. Cool YouTube Video Creation

So you want to be cool? You want to be creative? In this option, you are to create a shared online video (e.g., YouTube) related to this class. You cannot be the only person in it. What do different topics in this course mean to you? Alternatively, you can design a YouTube video for someone else. You should post

this video of at least 5 minutes in length. You will turn in a 2-3 page single-spaced summary reflection of your design (3-4 pages if with a partner). Your video and paper will be graded according to the dimensions listed below.

Video Grading (70 Total Points or 10 pts each dimension):

- 1. Insightfulness, creativity, and originality;
- 2. Design and visual effects;
- 3. Coherence and logical sequence;
- 4. Completeness;
- 5. Relevance and accuracy of the content;
- 6. Shared and discussed in Canvas and in class;
- 7. Overall quality of assignment

YouTube Video Final Project Examples (from R685 from 2010, 2011, 2012, 2016, etc.):

- 1. Julie Rust (Participatory Learning): http://www.youtube.com/watch?v=cHx SbRWV0M
- 2. Lynn Deno: Tech, Enhancing Home School: http://www.youtube.com/watch?v=ts45BkAnqTs
- 3. Miguel Lara (Web 2.0 FREEDOM): http://www.youtube.com/watch?v=8cmCFWi9lW8
- 4. Olgun Sadik (R685 overview): http://www.youtube.com/watch?v=unaBQIqVo8Y
- 5. Shuya Xu and Yue Ma (Blog my online lrng): http://www.youtube.com/watch?v=im7GQM9fzhc
- 6. Verily Tan, Recollections from R685, Fall 2011; http://vimeo.com/33090590/
- 7. Anjali Kanitkar: The World Is Open (Video), Fall 2011: http://vimeo.com/33123125
- 8. Qi Li (Oppa Gagnam Style: What's Your Learning Style), December 3, 2012, http://www.youtube.com/watch?v=7Q429lqxZaU&feature=youtu.be
- 9. Valerie Cross (Mobile Thanksgiving), December 5, 2012, Vimeo: http://vimeo.com/55011832
- 10. Troy Cockrum, April 2016, The Making of an Adventurer (video), https://www.youtube.com/watch?v=ew6e7Chd918
- 11. Kim Vincent-Layton, April 25, 2016, Supporting a 21st Century Learning Journey, https://www.youtube.com/watch?v=4Ic39_rYLII
- 12. Rosanne Samir, May 3, 2017, Schultz-Zaki Interview Global Collaboration in Egypt https://vimeo.com/215838867#t=0s
- 13. Kimberly Farnsworth, April 28, 2017, Student-Directed Learning, https://www.youtube.com/watch?v=3fZYT5rGCfY&feature=youtu.be

Option 4. R685/R678 Course Syllabi Historical Evaluation:

Perhaps, like me, you like history. A version R678 was first co-taught at West Virginia University by Dr. W. Michael Reed and myself back in the fall of 1990. Since that time, this course has evolved into many formats. Below are links to more than a dozen syllabi from the course including the present one. Unfortunately, I have yet to locate the original version but did find an outline of the topics addressed. If you select this option, I want you to track the history of this course over time. For instance, you might explore the topics, people, concepts, etc., that were popular in the 1990s, 2000s, and today. You will turn in a 4 to 6 page single spaced paper on what you discovered (7-10 pages with a partner); not counting references and appendices. Additional pages may be attached such as reference lists, visuals depictions mapping out trends over time, correspondences with researchers about their articles from previous versions of the course, and interviews with scholars about their perceptions of changes in the field over time. You might, in fact, gather oral histories or accounts from experts as well as former students about how the field has changed.

Many questions can be asked. Among them, are there any topics that remain popular over the past two decades? How did the focus of this course change over time? Is this course more or less

important today than it was back in the 1990s? Is the total number of pages any indicator of how the field has changed? If so, in what ways? Please compare the tasks from 1995 to those in 2001 or 2002 as well as 2010, 2015, 2017, and 2019. Please look at the books, journals, new sources, online resources, etc. that now comprise this course and note how they have changed over time. Is there anything from the 1990s that remains important today and should be added back to the current syllabus? Are there any tasks, activities, or articles that you found interesting and want to know more about? Is there anything that remains missing despite the fact that the current syllabus is now over 60 pages long? What do see about the field of education or educational technology from browsing through these syllabi and resources?

You should end your paper with 1-2 page single spaced reflection of your own learning in this course. Included in that summary should be an account of what inspired or mattered to you. In addition, you might reflect on the areas wherein you learned or grew the most during the semester.

Sample Prior P600/R685/R678 Syllabi:

- 1. Spring 2019: http://php.indiana.edu/~cjbonk/Syllabus_R678_Spring_of_2019.htm
- 2. Spring 2018: http://php.indiana.edu/~cjbonk/Syllabus_R678_Spring_of_2018.htm
- 3. Spring 2017: http://php.indiana.edu/~cjbonk/Syllabus_R678_Spring_of_2017.htm
- 4. Spring 2016: http://php.indiana.edu/~cjbonk/Syllabus_R678_Spring_of_2016.htm
- 5. Spring 2015: http://php.indiana.edu/~cjbonk/Syllabus_R678_Spring_of_2015.htm
- 6. Spring 2013: http://php.indiana.edu/~cjbonk/Syllabus_R685_Spring_of_2013.htm
- 7. Fall 2012: http://php.indiana.edu/~cjbonk/Syllabus_R685_Fall_of_2012.htm
- 8. Spring 2012: http://php.indiana.edu/~cjbonk/Syllabus_R685_Spring_of_2012.htm
- 9. Fall 2011: http://php.indiana.edu/~cjbonk/Syllabus R685 Fall of 2011.htm
- 10. Fall 2010: http://mypage.iu.edu/~cjbonk/Syllabus R685 Fall of 2010.htm
- 11. Fall 2009: http://php.indiana.edu/~cjbonk/Syllabus R685 Fall of 2009.htm
- 12. Fall 2008: http://curtbonk.com/Syllabus_R685_Fall_of_2008.htm
- 13. Fall 2007: http://php.indiana.edu/~cjbonk/R685-Fall-2007.htm
- 14. Fall 2005: http://mypage.iu.edu/~cjbonk/syllabus p600 and r685 fall of 2005.htm
- 15. Fall 2003: http://php.indiana.edu/~cjbonk/p600syl2.htm
- 16. Fall 2002: http://mypage.iu.edu/~cjbonk/Syllabus--2002.html
- 17. Fall 2001: http://php.indiana.edu/~cjbonk/P600-R685-2001.htm
- 18. Fall 1999: http://php.indiana.edu/~cjbonk/P600-R685-1999.htm
- 19. Fall 1997: http://php.indiana.edu/~cjbonk/P600-R685-1997.htm
- 20. Spring 1995: http://php.indiana.edu/~cjbonk/P600-R685-1995.htm
- 21. Fall 1990: http://travelinedman.blogspot.com/2012/09/the-evolution-of-monster-22-years-of.html

History Evaluation Grading (70 Total Points or 10 pts each dimension):

- 1. Insightfulness, creativity, and originality;
- 2. Learning growth displayed;
- 3. Coherence and logical sequence:
- 4. Completeness and fulfills spirit of the assignment;
- 5. Relevance and accuracy of the content;
- 6. Shared and discussed in Canvas and in class;
- 7. Overall quality of assignment

Option 5. Analysis of Issues and Challenges in the Field of Learning Technologies:

In this option, you will identify and briefly outline 10-20 key issues in the field (e.g., institutional supports for nontraditional learners, corporate recognition of microcredentials and nanodegrees, faculty

awareness of open textbooks and OER, cost effectiveness and consumer utility of virtual and augmented reality, teacher training for online and blended forms of learning; instructional design challenges for MOOC instructors and the instructional support team, etc.). What are the issues that you have noticed when doing the readings for this class, watching the videos, talking to your peers, and attending the lectures? What are some open research questions? To create an historical context for your paper, you might indicate in a timeline when each of these issues arose or potentially make become more salient in the future. You will turn in a 4-6 single spaced paper if working alone and 7-10 page paper if with a partner (plus any references, charts, graphs, appendices, etc.) on the issues and challenges in the field of emerging learning technologies. Meina Zhu and I want to know if you have a grasp of the key issues. We also want to know what your role might be in resolving these challenges or issues after graduation. Among these issues and challenges, choose one or two that you are highly interested in or want to address most and describe your possible plan on addressing them or map out some possible future research. Finally, please do not limit your references to our assigned course readings. You are encouraged to add at least half of your references from articles, books, and other resources that are not listed in our class readings. A minimum of 15 references should be used. Please follow APA guidelines when writing your paper. (Note: It will use a similar grading rubric to those above.)

Option 6. Student Selection Option (e.g., Usable Class Product):

Students choosing Option 4 might design their own final project or combine ideas together into something truly unique (i.e., a mash-up). As part of this effort, they might create or perform a meaningful activity for the class. For example, you might summarize the learning principles embedded in different articles or readings for each week of the course. Or, they might create a unique categorization scheme of the technology tools and resources studied during the semester. The more ambitious of you might create an interactive multimedia glossary or comprehensive Website for the course as an individual or as part of a team. Still others might create an online database of articles from two or more open access journals related to emerging learning technologies including links to the major themes and trends in those journals over a significant period of time (e.g., 3-5 years).

There are still more options. Among them, you might create a mobile application, an educational activity in a virtual world, an interesting global collaboration activity or partnership, or a mobile book. Others might organize a class mini-conference or real conference symposium or demonstrate a set of e-learning tools to your school, company, or organization and then reflect on it. Such tools might have relevance in K-12, military, corporate, or higher education settings or perhaps in more informal settings such as a museum, zoo, or computer club.

You might also engage in a major problem-based learning project related to this class with a school, company, organization, or institution. In this option, you make the contact and find out what needs to be resolved and then get it approved by the instructor. The final product might be a distance learning evaluation project. It might involve the design of e-learning tools and resources. It might entail the creation of a strategic plan, white paper, or vision statement. Whatever the problem or task, it must be authentic. Anyone selecting this option should include a 2-4 page single-spaced reflection paper on what your learned; slightly longer with a partner (not counting references and appendices). Note: any final project report to an organization or institution can substitute for that final reflection paper. The grading scheme will be project specific.

Student Selected Option Examples:

- 1. Abdullah Altuwaijri (Prezi on class): http://prezi.com/8h7grxlyaymv/the-world-is-open/
- 2. Annisa Sari: Article Database for R685 Class: http://r685articledatabase.weebly.com/
- 3. Kevin McGrath: Open Newsroom Learning: http://newslearning.wordpress.com/
- 4. Laurie McGowan (presentation for teaching 1st year students at U. of Notre Dame):

- $\underline{http://www3.nd.edu/\sim lthiel/portfolio/documents/Information_Literacy_Tutorial_Presentation.pdf}$
- 5. Ozgur Ozdemir: Multimedia Glossary in Shutterfly for R685, December 2012 http://r685glossary.shutterfly.com/
- 6. Mo Pelzel. Academic Technology Resource Guide, December 2012 Screencast video: http://www.youtube.com/watch?v=8N1RIwpQcjg&feature=plcp
- 7. Jeffrey Barnette, Today's World: http://prezi.com/-ijzyothst-r/r685-final-project
- 8. Jenny Webeck, March 2015, IU, Pinterest, Emerging Learning Technologies Bonk's Emerging Learning Technologies, https://www.pinterest.com/jennifertwebeck/emerging-learning-technologies/
- 9. Jill Kaufman, April 26, 2015, The World is Open, https://www.youtube.com/watch?v=ZRGV0Mg5Vmw&feature=youtu.be
- 10. John Falchi, March 12, 2016, Timeglider, An Abbreviated History of Distance Education http://timeglider.com/t/50843d8903a48008?min_zoom=1&max_zoom=100
- 11. Meina Zhu, April 27, 2016, Pinterest, Design Article Database in Pinterest, https://www.pinterest.com/zhumeina0000/r-678-emerging-learning-technology/
- 12. Sarah McDonough, May 2, 2017, OER Video Evaluation Rubric: https://www.rcampus.com/rubricshowc.cfm?code=DX8375W&sp=yes
- 13. Spring of 2018: Group project PBL in Puerto Rico https://sites.google.com/iu.edu/pbl-in-puerto-rico/home
- 14. Spring of 2018: Group project Integrating Emerging Tech in ESL/EFL Classrooms https://qupengtong123.wixsite.com/r678

Volunteerism Note: If you want to volunteer your services as part of your final project, you might check out Designers for Learning: http://designersforlearning.org/

Option 7. OpenCourseWare (OCW) or MOOC Review Option

Recently, there is a huge explosion of open educational contents. Among these new learning resources are open educational resources (OER), OpenCourseWare (OCW), and massive open online courses (MOOCs). OCW and OER typically are freely available contents without direct contact with instructors. MOOCs are instructor-driven courses which are usually free and open to the world community, thereby involving large enrollments. An optional assignment idea for this class is to explore or enroll in one or two massive open online courses (MOOCs) related to learning, cognition, and instruction. Even if you do not select this task, you might explore a few of these MOOCs and observe how they are conducted. And then reflect, reflect!

You could replace the midterm or final by enrolling in one or more MOOCs and writing a 2-4 page single spaced reflection paper (4-6 pages with a partner) on what you learned as it relates to various topics from this course (not counting references and appendices). Note: you might include a recap table or chart at the end summarizing key concepts or ideas mentioned in your paper. You would NOT have to complete the course; just sit in and lurk if you want. Your MOOC review paper should include your insights about the learning environment and learning theories relied upon as well as a few specific examples of instructional tasks and ideas from the course. It will be graded for: (1) connections to course content; (2) coherence and organization; and (3) overall insights and conceptual understandings.

If you complete the course or get a certificate (Coursera calls these "Signature" courses), you can replace your final assignment. Even if you do you not complete a MOOC, you could replace your final assignment if you write a longer reflection paper or extend the assignment in some way (e.g., interview the MOOC instructor(s) about their instructional approaches and beliefs about learning; interviewing other participants/students taking this course about their learning experiences; etc.). As part of these efforts, you might also explore some of the open educational portals and contents listed in your syllabus

or that you find online.

Some questions you might ask before writing your paper:

- What is the overall feel of this learning environment? Is there any particular learning approach or philosophy that you feel or experience?
- What aspects of learning and instruction are addressed in this MOOC or by this open educational resource? Stated another way, what theory of learning and instruction does the instructor or the course design tend to rely upon?
- What learning theory or perspective might be used to improve the course? How might you improve this course if asked?
- Are there any specific learning concepts and principles embedded in any module or in multiple modules of the course?
- How does the MOOC utilize existing OER content? How might it better take advantage of such resources?
- Which tasks or activities seem most effective and why? What are the most creative?
- What is the least effective aspect of this course and why?
- What aspects of learning and instruction or theoretical perspective do you understand better now? And why?

Portals to MOOC courses:

- 1. MOOC Provider Companies and Organizations:
- 2. Canvas: https://www.canvas.net/
- 3. Coursera list of courses: https://www.coursera.org/courses?orderby=upcoming
- 4. CourseSites: https://www.coursesites.com/webapps/Bb-sites-course-creation-BBLEARN/pages/mooccatalog.html
- 5. edX courses: https://www.edx.org/course-list
- 6. FutureLearn: https://www.futurelearn.com/courses/upcoming
- 7. iversity: https://iversity.org/
- 8. MasterClass, https://www.masterclass.com/ (fee based)
- 9. NovoEd: https://novoed.com/
- 10. Open Education (powered by Blackboard): https://openeducation.blackboard.com/site/
- 11. Open Learning Initiative Stanford: http://oli.stanford.edu/
- 12. Open2Study: https://www.open2study.com/
- 13. Udemy: https://www.udemy.com/
- 14. Udacity: https://www.udacity.com/courses#!/all

MOOC Lists:

- 1. Class Central: https://www.class-central.com/subject/education
- 2. The MOOC List: http://www.mooc-list.com/
- 3. Open Culture: http://www.openculture.com/free_certificate_courses
- 4. TechnoDuet: http://www.technoduet.com/a-comprehensive-list-of-mooc-massive-open-online-courses-providers/

MOOC Review Grading Criteria if a Final Project (70 Points; 10 points each):

- 1. **Insightful/Originality:** innovative ideas, insightful relationships drawn about MOOCs and open education, helps the reader form new understandings about MOOCs.
- 2. **Interesting:** engaging writing, unique perspective on MOOCs and open education.
- 3. **Completeness:** thorough, detailed, dig deep, effort, fulfills spirit of the assignment.
- 4. **Relevance:** concepts and ideas from MOOC experience appropriate and related to class, perhaps includes a recap list or summary table of what learned.

- 5. **Content:** learning displayed, made several key connections to class from MOOC experience, highly informative reflection (helps the reader form new understandings).
- 6. **Exploratory and Reflective:** pushing out, metacognitive, reflecting on oneself as a learner or on how fellow learners benefit from MOOCs, shows that one was reflecting on the experience both as a learner as well as in light of the content of this class.
- 7. **Coherent, Logical Flow, and Well Organized:** easily read, transitions, conclusions, logical flow to the critique or review of MOOCs or MOOC experience, well organized review, sequence of ideas makes sense.
- 8. **I will also look for:** breadth/depth of thought, knowledge growth displays, understands theories, concepts, and principles in relation to the MOOC experience. And I will want to see some critical thinking displayed including sound analysis and evaluation of instructional approach taken in MOOC, logical, backs up claims.

Grading Note #1: I will use a rubric for the above. Write me an email if you would like to see that rubric.

Grading Note #2: Extra consideration (and the potential for bonus points) given for those who cite references on MOOCs or open education, create a summary or recap table of terms or concepts mentioned in their reflection paper, participate in more than one MOOC, and those who actually complete the course. Summary or recap tables are especially welcome.

Class Sharing of Final Projects: If possible, I would like you to post your final projects to Canvas (my instructional assistant, Meina Zhu, can help). In addition, during our final class session on April 22, some people "might" briefly share their final projects. Online students do not have to worry about the presentation part. I will contact you ahead of time if needed. But I do take volunteers.

Weekly Reading Requirements

We will read 3-4 main articles and 5-6 tidbits per week and watch some of the embedded videos—it is your choice what to read.

Projected Seminar Weekly Topics:

Week 1. (January 7) Introduction to the Open World: Visionaries and Visions

- January 2017, Higher Education Supplement to the National Education Technology Plan, U.S. Department of Education, Office of Educational Technology, https://tech.ed.gov/files/2017/01/Higher-Ed-NETP.pdf
- 2. Vannevar Bush (1945, July). As We May Think. *The Atlantic Monthly; Volume 176, No. 1; pages 101-108*. http://www.theatlantic.com/unbound/flashbks/computer/bushf.htm
- 3. Infed on Ivan Illich: Deschooling, conviviality and the possibilities for informal education and lifelong learning. http://www.infed.org/thinkers/et-illic.htm (Ivan Illich. *Deschooling Society* (New York: Marion Boyars. 1970).
- 4. Sections from: Bonk, C. J. (July 2009). *The World is Open: How Web Technology is Revolutionizing Education*. San Francisco, CA: Jossey-Bass, a Wiley imprint. (Book homepage: http://worldisopen.com)

- a. Bonk, C. J. (2011). Prequel: Sharing...the Journey. *The World is Open: How Web Technology is Revolutionizing Education* (pp. xi-xxx). San Francisco, CA: Jossey-Bass, a Wiley imprint. Available: http://worldisopen.com/misc/prequel.pdf (written for softcover/paperback edition)
- b. Bonk, C. J. (2011). Postscript: An Open Letter to the Learners of this Planet. *The World is Open: How Web Technology is Revolutionizing Education* (pp. 415-422). San Francisco, CA: Jossey-Bass, a Wiley imprint. Available: http://worldisopen.com/misc/postscript.pdf
- c. Bonk, C. J. (2011). Foreword to the Chinese Edition. *The World is Open: How Web Technology is Revolutionizing Education*. Shanghai, China: South China Normal University. Available: http://worldisopen.com/China_Foreword.pdf

(Note: The above three sections of the book are combined and available at: http://publicationshare.com/pdfs/World%20is%20Open_2011_Prequel_and_Postscript_for_paperback_and_Foreword_for_China.pdf and https://publicationshare.com/1)

- 5. Charles A. Wedemeyer, University of Wisconsin
 - a. Wikipedia: http://en.wikipedia.org/wiki/Charles_Wedemeyer
 - b. Introduction to Distance Education: Theorists and Theories—Charles Wedemeyer: http://distance-educator.com/introduction-to-distance-education-theorists-and-theories-charles-wedemeyer/
 - c. A Brief History of Distance Education: http://www.seniornet.org/edu/art/history.html
 - d. In Memorandum: http://www.tandfonline.com/doi/abs/10.1080/08923649909527031#preview
 - e. Learning at the Back Door: Reflections on Nontraditional Learning in the Lifespan (1981), by Charles A. Wedemeyer, Reissued: September 2010. Available: https://etda.libraries.psu.edu/files/final_submissions/6491
 - i. http://www.amazon.com/Charles-A.-Wedemeyer/e/B001KDB9TM (used books)
- 6. Douglas Engelbart: https://en.wikipedia.org/wiki/Douglas Engelbart
 "The Mother of All Demos" is a name given retrospectively to Douglas Engelbart's December 9, 1968, demonstration of experimental computer technologies that are now commonplace. The live demonstration featured the introduction of the computer mouse, video conferencing, teleconferencing, hypertext, word processing, hypermedia, object addressing and dynamic file linking, bootstrapping, and a collaborative real-time editor."
 - a. The Mother of All Demos, presented by Douglas Engelbart (1968) Original Video on YouTube (140:52): https://www.youtube.com/watch?v=yJDv-zdhzMY
 - b. Douglas Engelbart Interviewed by John Markoff of the New York Times, (113:50), https://www.youtube.com/watch?v=VeSgaJt27PM

Videos:

- a. July 10, 2018, Speed dating with Learning Technologies at IU, https://www.youtube.com/watch?v=b4O03IAEaiI&feature=youtu.be
- b. **Videos:** July 12, 2017, re:Learning on Video (various expert interviews), Goldie Blumenstyk, The Chronicle of Higher Education, http://www.chronicle.com/specialreport/re-Learning-on-Video/127
- c. **Video** (11:34), April 13, 2016: The Fourth Industrial Revolution: https://www.youtube.com/watch?v=khjY5LWF3tg
- d. **Video** (2:28), CNN Money (Tech), August 6, 2016: http://money.cnn.com/2016/08/06/technology/world-wide-web-25-years-old/index.html?iid=hp-stack-dom

Week 1 Tidbits:

- a. October 21, 2018, Building a Go-to Resource on Innovation in Online Learning Meg Lloyd, Campus Technology, https://campustechnology.com/articles/2018/10/24/building-a-go-to-resource-on-innovation-in-online-learning.aspx (Virtually Inspired: https://virtuallyinspired.org/)
- b. September 30, 2018, The Learner Revolution and What it Means for Higher Education, Academic Partnerships, https://www.insidehighered.com/sponsored/learner-revolution-and-what-it-means-higher-education
- c. September 26, 2018, The rise and fall of the company behind 'Reader Rabbit' and all your favorite educational games, Abigail Cain, The Outline, https://theoutline.com/post/6293/reader-rabbit-history-the-learning-company-zoombinis-carmen-sandiego?zd=1&zi=qmbuobk7
 Rocky's Boots gameplay (PC Game, 1982): Video (12:14): https://www.youtube.com/watch?v=a-NLh58bIIk
- d. September 26, 2018, Learning Engineers and Higher Ed Change, Joshua Kim, Inside Higher Ed, https://www.insidehighered.com/blogs/technology-and-learning/learning-engineers-and-higher-ed-change
- e. July 24, 2018, Searchable Directory of Vendors of Online Learning Products and Services, A Searchable Directory of 3,200+ Vendors of Online Learning Products and Services Worldwide, Contact North, https://teachonline.ca/tools-trends/searchable-directory-vendors-online-learning-products-and-services
- f. May 2018, Ten Guiding Principles for the Use of Technology in Learning, Contact North, https://teachonline.ca/sites/default/files/tools-trends/downloads/10 guiding principles for use of technology in learning.pdf
- g. April 8, 2018, How Ed Tech Is Exploiting Students, Chris Gilliard, *The Chronicle of Higher Education*, https://www.chronicle.com/article/How-Ed-Tech-Is-Exploiting/243020?cid=cp197
- h. March 22, 2018, Jeffrey Selingo, The Third Education Revolution, The Atlantic. https://www.theatlantic.com/education/archive/2018/03/the-third-education-revolution/556091/
- November 13, 2017, The Greatest Computer Network You've Never Heard Of Ernie Smith, *Motherboard* https://motherboard.vice.com/en_us/article/pa3vvg/the-greatest-computer-network-youve-never-heard-of
- j. September 27, 2017, A Newer Education for Our Era, Cathy Davison, *The Chronicle of Higher Education*, http://www.chronicle.com/article/A-Newer-Education-for-Our-Era/241313
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Note: Rajiv Jhangiani, Surrey, BC, Canada, <u>rajiv.jhangiani@kpu.ca</u>, teaches psychology at Kwantlen Polytechnic University.

University Homepage: http://www.kpu.ca/arts/psychology/faculty/rajiv-jhangiani

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Open Ed, Outdoor/Environmental/Adventure Learning People and Web Sites:

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- 2. Brian J. Ford: http://www.brianjford.com/user/tellymonitor and http://www.brianjford.com/
- 3. Cassandra Brooks: http://www.cassandrabrooks.com/
- 4. Center for Open Science: https://cos.io//
- 5. Code.org: https://code.org/ (and **Video** (2:33): https://www.youtube.com/watch?v=mFPg96gdPkc
- 6. College Consortium: https://www.collegeconsortium.org/
- 7. Commonwealth of Learning (many reports): https://www.col.org/; https://www.col.org/resources
- 8. Coursera: https://www.coursera.org/
- 9. Dead Sea Scrolls: http://www.deadseascrolls.org.il/explore-the-archive
- 10. edX: https://www.edx.org/course
- 11. Eve Beglarian's River Project: http://evbvd.com/riverblog/about/
- 12. Explo.tv: http://www.exploratorium.edu/tv/index.php
- 13. Explore.org: http://explore.org/
- 14. Exploratorium Ice Stories: http://icestories.exploratorium.edu/dispatches/
- 15. Explore Arctic: http://www.explore.org/search/?q=arctic
- 16. ExplorersWeb: https://explorersweb.com/; http://www.mounteverest.net
- 17. The Freshwater Switchyard of the Arctic Ocean: http://psc.apl.washington.edu/switchyard/overview.html
- 18. GoNorth (Polar Husky)!: http://www.polarhusky.com/2006/home2006.asp
- 19. Google Map Gallery (New September 16, 2014): http://maps.google.com/gallery/
- 20. History for Music Lovers: http://www.youtube.com/user/historyteachers
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- 22. Ice Stories: http://icestories.exploratorium.edu/dispatches/
- 23. Impossible to Possible: http://impossible2possible.com/home (Atacama Extreme 2011: http://impossible2possible.com/atacama/home)
- 24. Intro to Open Education course (Fall 2016 from David Wiley): http://openeducation.us/2016/
- 25. Jason Project: http://www.jason.org/public/whatis/start.aspx
- 26. Jon Bowermaster (Notes from Sea Level): http://www.jonbowermaster.com/
- 27. Journey North: http://www.learner.org/jnorth/
- 28. The Last Ocean Project: http://lastocean-project.org/ and http://www.lastocean.com
- 29. Mountainworld Productions: http://www.mountainworldproductions.com/
- 30. Nautilus Live: http://www.nautiluslive.org/
- 31. Newseum Ed: https://newseumed.org/ and https://newse
- 32. Noodle: https://www.noodle.com/
- 33. Ocean.com: http://www.ocean.com/
- 34. OER World Map: https://oerworldmap.org/
- 35. Omnium Outreach Projects: http://omniumworld.com/oop/
- 36. One World Expeditions: http://www.oneworldjourneys.com/
- 37. OpenEd: http://www.opened.io/
- 38. Open Education Group: https://openedgroup.org/
- 39. OpenLearning: https://www.openlearning.com/
- 40. Openwords: https://www.facebook.com/Openwords
- 41. Online Learning Consortium: https://onlinelearningconsortium.org/read/
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- 44. Patrick Hollingworth: http://patrickhollingworth.com/
- 45. Penguin Science: http://www.penguinscience.com/index.php
- 46. Polar Bears International: http://www.polarbearsinternational.org/
- 47. The Poles.com: http://www.thepoles.com/
- 48. PolyglotPal's Channel: http://www.youtube.com/user/PolyglotPal
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- 50. Skills Commons: https://www.skillscommons.org/
- 51. SPARC (the Scholarly Publishing and Academic Resources Coalition): https://sparcopen.org/
- 52. Spot the Station: The International Space Station: https://spotthestation.nasa.gov/
- 53. Rich Wilson: https://www.vendeeglobe.org/en/skippers/69/rich-wilson
- 54. Wayne Hodgins: http://waynehodgins.typepad.com/about.html
- 55. Travel Blog: http://www.travelblog.org/
- 56. Zac Sunderland: http://www.zacsunderland.com/

Live and Immediate Science

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- 2. The Link: http://www.revealingthelink.com/
- 3. Nautilus Live: http://www.nautiluslive.org/
- 4. Ocean Explorer: http://oceanexplorer.noaa.gov/welcome.html
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Week 6. (February 11) Open Educational Resources (OER) and OpenCourseWare (OCW)

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Articles in this issue include:

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- b. Evaluating NTU's OpenCourseWare Project with Google Analytics: User Characteristics, Course Preferences, and Usage Patterns, bu Feng-Ru Sheu & Meilun Shih (former IU students), http://www.irrodl.org/index.php/irrodl/article/view/3025/4219
- c. Incentivizing the Production and Use of Open Educational Resources in Higher Education Institutions, by David Annand and Tilley Jensen, http://www.irrodl.org/index.php/irrodl/article/view/3009/4226
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- e. Student Perceptions of College Faculty Who Use OER, Gabrielle Vojtech & Judy Grissett, http://www.irrodl.org/index.php/irrodl/article/view/3032/4215
- f. Tracking the Money for Open Educational Resources in South African Basic Education: What We Don't Know, by Sarah Goodier, http://www.irrodl.org/index.php/irrodl/article/view/2990/4225
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 http://www.youtube.com/watch?v=JzNHvmSv8TI

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Inexpensive Online Learning and MOOC Related Organizations and Institutions:

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- 2. edX: https://www.edx.org/
- 3. edX high school initiative: https://www.edx.org/high-school-initiative
- 4. edX partners: https://www.edx.org/schools-partners
- 5. FutureLearn: https://www.futurelearn.com/
- 6. Global Freshman Academy, edX: https://www.edx.org/how-it-works
- 7. Handbook of Open Universities: http://wikieducator.org/Handbook_of_Open_Universities
- 8. MITX: https://www.edx.org/university_profile/MITx
- 9. NovoEd: https://novoed.com/
 - 1. Philanthropy University: https://novoed.com/philanthropy-initiative?referral_token=NOVOED-CC
- 10. Peer 2 Peer University (P2PU): https://www.p2pu.org/en/
- 11. Straighter Line: http://www.straighterline.com/courses-run-by-professors.html
- 12. Udacity: http://www.udacity.com/
- 13. Udemy: http://www.udemy.com/
- 14. University of the People: http://www.uopeople.edu/

Somewhat Shady and/or Nefarious Websites (there are many others):

- ✓ BoostMyGrade.com: http://www.boostmygrade.com/
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Or read: anything on MOOCs from:

Justin Reich of MIT: https://scholar.google.com/citations?user=ihnlfqIAAAAJ&hl=en
Andrew Ho of Harvard: https://scholar.google.com/citations?user=oxiFUrEAAAAJ&hl=en

Interviews of Bonk et al. on MOOCs and Open Education:

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Some Language Learning Sites:

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 - e. Japanese: http://japanese.about.com/
 - f. Mandarin: http://mandarin.about.com/
 - g. Spanish: http://spanish.about.com/
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- 3. BBC Learning English: http://www.bbc.co.uk/worldservice/learningenglish/
- 4. Babbel: http://www.babbel.com/
- 5. Chatterbox (learn languages with refugees): https://wearechatterbox.org/
- 6. ChinesePod: http://chinesepod.com/
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Week 11. (March 25) Connectivism, Social Media, and Participatory Learning

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- a. Why Do Academics Use Academic Social Networking Sites?, http://www.irrodl.org/index.php/irrodl/article/view/2643/4044
- b. Enriching Higher Education with Social Media: Development and Evaluation of a Social Media Toolkit, http://www.irrodl.org/index.php/irrodl/article/view/2656/4043
- c. The Effects of Integrating Social Learning Environment with Online Learning, http://www.irrodl.org/index.php/irrodl/article/view/2645/4031
- d. Properties of Teacher Networks in Twitter: Are They Related to Community-Based Peer Production?, http://www.irrodl.org/index.php/irrodl/article/view/2644/4036
- e. Using Social Learning Networks (SLNs) in Higher Education: Edmodo Through the Lenses of Academics, http://www.irrodl.org/index.php/irrodl/article/view/2623/4037
- f. Analysis of Social Media Influencers and Trends on Online and Mobile Learning, http://www.irrodl.org/index.php/irrodl/article/view/2640/4027
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Stephen Downes (http://www.downes.ca/) (2012, May) "Connectivism ad Connected Knowledge: Essays on Meaning and Learning Networks": Available: http://www.downes.ca/files/Connective Knowledge-19May2012.pdf.

Resources and Videos:

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- ii. The Changing Nature of Knowledge: http://www.youtube.com/watch?v=YMcTHndpzYg&feature=related
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- k. July 11, 2017, Going 'phigital?' 4 things schools need to know about Generation Z Todd Kominiak, TrustEd, http://trustedk12.com/phigital-digital-learning/

- July 8, 2017, 3 big ways today's college students are different from just a decade ago, Meris Stansbury, eCampus News, https://www.ecampusnews.com/campus-administration/college-students-different/?all
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Week 12. (April 1) Interactive, Global, and Collaborative Learning (including wikis and learning spaces, etc.)

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Note: More articles from Mimi Miyoung Lee at ResearchGate: https://www.researchgate.net/profile/Mimi_Lee5

For more related to online videoconferencing, see:

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 - i. Georgetown Learning Initiatives, Soliya Connect: http://gli.georgetown.edu/#soliya
 - ii. Connect from Soliya: https://vimeo.com/38328511
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https://www.usatoday.com/story/tech/2018/07/25/california-youth-learning-code-prison-help-san-quentin-inmates/810122002/

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Week 12 Tidbits Part 2: Classroom Space Articles:

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Videos and Resources of New or Remodeled Academic Buildings for Collaboration:

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- 3. Ohio State's New Library: http://www.youtube.com/watch?v=ak7FEQjxqBY
- 4. Saltire Centre at Glasgow Caledonian (Scotland): http://www.youtube.com/watch?v=xBsGeDa44ic&feature=related
- 5. Sydney Centre for Innovation in Learning, http://www.scil.nsw.edu.au/
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- ii. Stanford d.school—case study, Steelcase (3:33; December 6, 2010): http://www.youtube.com/watch?v=NSjezj7_6mc&feature=related
- 8. Izzy Plus and Baker College 21st Century Learning, April 26, 2012 (4:12); http://vimeo.com/39202414
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- March 30, 2017, Simplifying Timeline Creation with TimeLineCurator, Amy Cavender, The Chronicle of Higher Education, http://www.chronicle.com/blogs/profhacker/simplifying-timeline-creation-with-timelinecurator/63822

Collaborative Projects:

- 1. Asia Society: http://asiasociety.org/education;
- 2. Center for the Study of Global Change: http://www.indiana.edu/~global/
- 3. Choices Program (Brown University): http://www.choices.edu/
- 4. ePals: http://www.epals.com/ (now is part of Cricket Media: www.CricketMedia.com)
- 5. Flat Connections Project: http://www.flatconnections.com/
- 6. Global Education Benchmarking Group: http://gebg.org/
- 7. Global Nomads Group: http://gng.org/
- 8. iEARN: http://www.iearn.org/
- 9. Infinite Family: http://www.infinitefamily.org/
- 10. Mentor.net (for engineering, science, and mathematics): http://www.mentornet.net/
- 11. The News Literacy Project: http://www.thenewsliteracyproject.org/ (mentoring young people into journalism)
- 12. Omnium Outreach Projects: http://omniumworld.com/oop/
- 13. Penguin science: http://www.penguinscience.com/education/postcards.php
- 14. Soliya: http://www.soliya.net/
- 15. TakingITGlobal: https://www.tigweb.org/
- 16. Tutor/Mentor Institute (Daniel Bassell): http://www.tutormentorexchange.net/
- 17. World Leadership School: http://www.worldleadershipschool.com/
- 18. World Savvy: http://www.worldsavvy.org/

Tools for Collaboration:

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- 2. AnyMeeting: http://www.anymeeting.com/
- 3. Collanos: http://www.collanos.com/
- 4. ConceptShare: http://www.conceptshare.com/

- 5. Course Networking: https://www.thecn.com/
- 6. Google Groups: http://groups.google.com;
- 7. Google Docs: http://docs.google.com
- 8. Diigo: http://www.diigo.com/
- 9. Elluminate: http://www.elluminate.com/
- 10. Facebook: http://www.facebook.com/
- 11. Flipgrid: https://flipgrid.com/
- 12. FreeConferenceCall: https://www.freeconferencecall.com/
- 13. Google Hangouts: http://www.google.com/
- 14. GoToMeeting: https://www3.gotomeeting.com/
- 15. GroupTweet: http://www.grouptweet.com/
- 16. Ning: http://www.ning.com/
- 17. OpenStudy: http://openstudy.com/
- 18. PBworks: http://pbworks.com/
- 19. Piratepad: http://piratepad.net/front-page/
- 20. PrimaryPad: http://primarypad.com/ (recommended by "TypeWithMe")
- 21. SlideRocket: http://www.sliderocket.com/
- 22. Skillshare: http://www.skillshare.com/learn
- 23. Skype: http://www.skype.com/
- 24. Slideshare: http://www.slideshare.net/
- 25. StartWright (virtual teams): http://www.startwright.com/virtual.htm
- 26. Twiddla: http://www.twiddla.com/
- 27. Twitter: http://twitter.com/
- 28. Ustream: http://www.ustream.tv/
- 29. WebEx: http://www.webex.com/
- 30. Yahoo! Groups: http://groups.yahoo.com;
- 31. Zoho Writer: http://writer.zoho.com/home?serviceurl=%2Findex.do
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http://www.medienpaed.com/19/traxler1107.pdf

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More from Paul Kim

Pocket School and other projects (e.g., Seeds of Empowerment: http://seedsofempowerment.org/ ote: See Canvas for many articles on mobile learning from Paul Kim at Stanford. He was the class guest in the fall of 2010.). Paul Kim's Homepage: http://www.stanford.edu/~phkim/ Various articles: https://www.dropbox.com/sh/xrvmtpkhe5vhrn1/AABy84P4pjuWo37ZlZa4K-Hja?dl=0

Seeds of Empowerment videos (Paul Kim, Stanford):

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- 2. India Pocket School video: http://www.youtube.com/watch?v=OKyP kWPifM
- 3. Mexico Pocket: http://ldt.stanford.edu/~educ39107/paulk/IFL/trip1/Camalu1_0004.wmv
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Mobile Learning:

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 Lisa Fischer, *CNN Tech*, http://money.cnn.com/video/technology/2018/05/11/boston-dynamics-atlas-spotmini-run-navigate-orig.cnnmoney/index.html
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