Poll #1:
Are you interested in Education 3.0?
A = Yes
B = No
C = Not sure

Why Education 3.0?
(Global Education Leaders Program (GELP))
http://gelponline.org/
- Globalization and Demographic Shifts
- Technological Revolution
  - Transfer of ownership to students
  - Collaborative learning technologies
  - Holistic change in complex and interdependent system
  - Higher-order thinking focus

March 2015
America’s Skills Challenge: Millennials and the Future
Madeline Goodman, Anita Sands, and Richard Coley, ETS

Education 3.0:
My, Our Learning World is Changing!
Curtis J. Bonk, Professor, Indiana University
cjbonk@indiana.edu
http://mypage.iu.edu/~cjbonk/

Education 3.0: ‘Learning Psychology’—Embracing Better Ways to Teach
Jeff Borden, Pearson, October 28, 2013
- Calculations (active)
- Compelling questions
- Communication of results
- Critical Thinking
  - No single theory, report, or strategy (Vygotsky + McGonigal + Mezirow + Knowles + Pink + Gardner + Wiggins + Etc.)

Education 3.0

Education 3.0: ‘Learning Psychology’
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  - No single theory, report, or strategy (Vygotsky + McGonigal + Mezirow + Knowles + Pink + Gardner + Wiggins + Etc.)
What skills do we need in the 21st Century?
http://21stcenturyskillsbook.com/
http://toped.svefoundation.org/2011/08/05/the-digital-natives-are-coming/

Poll#2:
Read any good books lately?
Ten Books About Education 3.0

1. Drive: The Surprising Truth About What Motivates Us
Daniel Pink (2009)

Motivation 3.0
• Freedom, challenge, purpose
• Creative, interesting, etc.
• self-directed work
• Intrinsic motivation
• Life as play and possibility
• Engagement and mastery
• Autonomy

2. Invent to Learn:
Making, Tinkering, and Engineering in the Classroom
Sylvia Libow Martinez & Gary Stager (2013)
http://www.inventtolearn.com/

3. Finding Your Element:
How to Discover Your Talents and Passions and Transform Your Life
Sir Ken Robinson and Lou Aronica (2013)
http://www.inventtolearn.com/

Finding Your Element:
How to Discover Your Talents and Passions and Transform Your Life
By Lou Aronica and Ken Robinson (2013)
http://www.inventtolearn.com/

• Find your zone (deep in the throes of exploration and personal passion)
• Think differently (make fresh connections and analogies; avoid groupthink)
• Do something, develop your creative ideas
• Use your imagination, play with ideas
• Free and open exchange of ideas
• Encourage expression of personal ideas/feelings
4. The Highest Goal: The Secret That Sustains You in Every Moment
http://creatinginnovators.com/

- Find real meaning
- Become a generative leader
- What makes you feel connected, motivated, sustained
- Travel your own path
- Go beyond passion and success
- Relate from your heart
- Turn fears into breakthroughs

5. Creating Innovators: The Making of Young People Who Will Change the World
Tony Wagner (2012)
http://creatinginnovators.com/

- Play
- Passion
- Purpose and life goals
- Open cultures of innovation and interdisciplinary problem solving
- Collaboration
- Intrinsic motivation

Carol Dweck (2006)
http://mindsetonline.com/index.html
http://mindsetonline.com/testyourmindset/step1.php

- Growth vs. fixed (i.e., entity) theories of intelligence
- Intelligence is not fixed
- Practice, practice, practice
- Do not blame others
- Learning goals over performance goals
- Asks: What can I learn from this?
- Asks: How can I improve?
7. Creativity, Inc.
Ed Catmull, President of Pixar Animation and Disney Animation
http://www.creativityincbook.com/

8. The Influence of Technology and Globalization on the Lives of Students.

TakingITGlobal
https://www.tigweb.org/about/

World Savvy
(global competency matrices)
http://worldsavvy.org/

9. Powers of Two:
Joshua Wolf Shenk (2014)
http://www.shenk.net/powersoftwo/

10. The Innovators:
Walter Isaacson (2014)
http://books.simonandschuster.com/The-Innovators/Walter-Isaacson/9781476708690
Poll #3: Listen to the Radio Lately?
November 14, 2014
School lessons by radio in Sierra Leone, Liberia, IRIN (Humanitarian News and Analysis), MONROVIA/FREETOWN/DAKAR
http://www.pce.uw.edu/about/leadership/

Poll #4: Turn on the TV Lately?
November 14, 2014 (2:25)
Why online ed disrupts the traditional model, Fareed Zakaria GPS, CNN, On GPS, Stuart Butler & Anant Agarwal explain why students are drawn to online higher education: tuition debt & exciting new technologies

Poll #5: Read Your Email Lately?
January 15, 2015

Poll #6: Read Any Research Lately?
October 25, 2014

Education 1.0
1728: 1st correspondence course advertised Boston (learn shorthand from Caleb Phillips thru weekly mailed lessons)
The First University Correspondence Course (University of London, External Program, 1858)
1728-1990s — Generally postal system based
1930s — phonograph and radio
1950s and 1960s — television
1970s and 1980s — VHS tapes
1980s and 1990s — DVD

More Education 1.0
September 15, 2014
Open, Distance and Online Learning: A Brief History, Sir John Daniel
http://vimeo.com/106002761 (password knou)
Notes and Slides: http://sirjohn.ca/wordpress/?page_id=29
May 20, 2015
Tech Woes at Small Colleges: If it's broken, and it probably is, then adapt, Chronicle of Higher Education, Jon Nichols

May 10, 2013
10 ed-tech tools of the 70s, 80s, and 90s
eSchool News, Meris Stansbury
http://www.eschoolnews.com/2013/05/10/10-ed-tech-tools-of-the-70s-80s-and-90s/print/

Life as an accountant/CPA in a high tech company in the 1980s...

Fall 2014, On Wisconsin
MOOC, Meet MORC (Massive Open Radio Course)
WHA, UW Madison, College of the Air, 1933, Vocational Training dedicated to Agriculture, and later Home Economics and Typing

Took Correspondence & TV Courses
(thanks to Bob Clasen and Charles Wedemeyer, the University of Wisconsin)

Education 2.0?
Visions of Education 3.0?
Knowledge Navigator (1987)
Apple Computer
http://www.youtube.com/watch?v=hB4AzF6wEoc

Fast Forward 25+ Years...
“Anyone can now learn anything from anyone at any time.”

Thirty Ways Learning is Changing...
(i.e., it’s more informal, video-based, ubiquitous, collaborative, self-directed, global, mobile, open, massive, etc.)

Learning is Technology Based
New Technologies = New Delivery Methods...

I. Learning is More Mobile
(e.g., mobile courses on smartphone)
April 2, 2015
Review: Samsung rises to challenge with Galaxy S6 and S6 Edge

April 9, 2015
I’ll Buy the Apple Watch, Ed Baig, USA Today
May 14, 2015
Smartphone separation anxiety: How bad is your nomophobia?, Today Health, Meghan Holohan
http://www.today.com/health/smartphone-separation-anxiety-how-bad-yours-t20786

Readers: Are we headed for a smartphone zombie apocalypse?, CNN, Nicole Saidi,
October 4, 2012

II. Learning is More Flipped
January 7, 2015
When a Flipped-Classroom Pioneer Hands Off His Video Lectures, This Is What Happens, Jeffrey R. Young, The Chronicle of Higher Education
http://chronicle.com/article/When-a-Flipped-Classroom/151031

A student watches a video of Norman Nemrow’s accounting class. Mr. Nemrow started the video lectures nearly 15 years ago at Brigham Young U. He is now retired, but students still watch him on the screen.

III. Learning is More Video-Based
February 15, 2015
Lynda.com Excel Training, IU

IV. Learning is More Visual
September 22, 2014
110 Foot Engagement, Elliott Masie’s Learning 2014

V. Learning is More Touch Sensored
October 16, 2013
Corporate Classrooms: Adapting to Change
Chief Learning Officer, Frank Kalman
VI. Learning is More Game-Based
October 21, 2014
Sexy iPad Air 2 is fabulous but not a must upgrade, Edward Baig, USA Today
http://www.usatoday.com/story/tech/columnist/baig/2014/10/21/ipad-air2-fabulous-tablet-is-not-must-upgrade/17658295/

VII. Learning is More Immersive
April 2, 2015
The Quest to Put More Reality in Virtual Reality, Review: Samsung rises to challenge with Galaxy S6 and S6 Edge, Edward Baig, USA Today

A technician uses virtual reality to test out new military hardware before it’s ever put into production.

VIII. Learning also is More Collaborative
March 26, 2014
Flat Connections: Welcome to Flat Connections - Learning about the world, with the world
http://www.flatconnections.com/
Global Collaboration Projects that Go Way Beyond Skype

IX. Learning is More Social
October 24, 2014
Facebook launches Rooms app for anonymous sharing of interests, USA Today, Jessica Guynn
January 22, 2015
Noodle, Google Helpouts, Gooru
When Can I Skip Taking the GRE or GMAT?
https://www.noodle.com/articles/when-can-i-skip-taking-the-gre-or-gmat
https://www.noodle.com/

XII. Learning is More Synchronous
Dubai to Puerto Rico (Edgar Leon)
https://www.youtube.com/watch?v=Imxw0YwTh2Y&list=UUClhOjnvl1pEXd9Skv_Iw

XIII. Learning is More Digital
October 23, 2014
New Amazon Kindle is a Voyage into eReader luxury, USA Today, Edward C. Baig

XIV. Learning is Resource Rich
March 22, 2015
Madagascar marvel: Divers find fossils of extinct giant lemurs
Daisy Carrington, for CNN, March 22, 2015

XV. Learning is More Informal
October 13, 2013
A Dozen Ways To Promote Informal Learning
Chief Learning Officer, Saul Carliner
http://www.clomedia.com/articles/a-dozen-ways-to-promote-informal-learning

XVI. Learning is More Competency-Based
July 31, 2014
Hire Education: Mastery, Modularization, and the Workforce Revolution, Michelle R. Weise and Clayton M. Christensen, The Christensen Institute
http://www.christenseninstitute.org/publications/hire/
XVII. Learning is More On Demand  
May 5, 2014  
Mobile MOOCs: New platform challenges conventional MOOCs  
eCampus News (https://coursmos.com/)

XVIII. Learning is More Hands-On  
February 2, 2015  
Makey Makey and the Kano  
http://makeymakey.com/  
https://vimeo.com/60307041

XIX. Learning is More Personal  
February 2, 2015  
iPotty Aims To Entertain Toddlers During Toilet Training, Mashable, Kate Freeman  
(January 10, 2013)  
http://mashable.com/2013/01/10/potty/

XX. Learning is More Communal  
April 30, 2014  
New Learning Hubs Locations Hosted by The New York Public Library and Seven Other Int’l Partners, Coursera Learning Hubs  
https://www.coursera.org/about/programs/learningHubs  

XXI. Learning is More Online  
February 5, 2015  
2014 Survey of Online LearningGrade Level: Tracking Online Education in the United States, 2014, Online Learning Consortium (formerly Sloan-C), by I. Elaine Allen and Jeff Seaman  
January 23, 2015
Gates Newsletter

Learning is More Online
June 15, 2014
Starbucks offers workers 2 years of free college, CNN Money, Gregory Wallace
(from Arizona State online programs)

XII. Learning is More Modifiable
Inside Look: Learning Spaces, Meeting classroom teaching and collaboration expectations, University Business, Feb. 22, 2013

XIII. Learning is More Comfortable
Design for Students, with Students, “Hub Central”, the $42 million University of Adelaide learning hub opened in October 2011, May 8, 2012, Mike Roberts
http://designbuildsource.com.au/design-for-students-with-students

XIV. Learning is More Ubiquitous
September 23, 2014
Elliott Masie’s (i-Beacon; Bluetooth low energy proximity sensing)

XV. Learning is More Instantaneous
April 9, 2013
HER Computer fashions face social test: Can wearable computers fit in? Scott Martin, USA Today
(i.e., magnify moles or injuries, see vital signs, live stream surgeries, access previous PT sessions, access research and drug info, etc.)
http://www.fiercemobilehealthcare.com/story/google-glasses-could-have-strong-potential-healthcare-use/2013-03-18
XVI. Learning is More Free
August 5, 2014
OpenStax Aims To Bring Free Digital Textbooks to High Schools, David Nagel, THE Journal

January 8, 2015
Obama Plan Would Help Many Go to Community College Free
JULIE HIRSCHFELD DAVIS and TAMAR LEWIN, The New York Times

The V-PORTAL (Bonk, IU)
"Video Primers in an Online Repository for e-Teaching and Learning" V-PORTAL, TravelinEdMan (27 free/open YouTube videos)
http://www.youtube.com/user/TravelinEdMan

XXVII. Learning is More Self-Directed
February 2013
TED Talks
(Build a School in the Cloud; Self-Organized Learning Environments (SOLEs), TED Talk from Sugata Mitra
http://www.ted.com/talks/sugata_mitra_build_a_school_in_the_cloud.html

XXVIII. Learning is More Global
August 1, 2014
Can You Really Teach a MOOC in a Refugee Camp?, Chronicle of Higher Education, Steve Kolowich

May/June 2014

Two men living in Dadaab, a refugee camp in Kenya, would watch lecture videos and take online quizzes at a nearby United Nations compound. (InZone)
XIX. Learning is More Open  
(December 2, 2014)  
Nature, Openwords, etc.  
http://www.openwords.com/  
https://www.facebook.com/Openwords

XXX. Learning is More Massive  
Sample Course: Open Knowledge:  
Changing the Global Course of Learning  
September 2, 2014 to December 12, 2014, Stanford  
https://class.stanford.edu/courses/Education/OpenKnowledge/Fall2014/about/  
Softcover ($30): http://www.parlorpress.com/invasion_of_the_moocs  

Global Health Initiatives  
October 7, 2014  
Online Mooc courses deliver Ebola health advice, BBC News, Sean Coughlan  

April 20, 2015  
250 MOOCs and Counting: One Man’s Educational Journey, Chronicle of Higher Education  
http://chronicle.com/article/250-MOOCsCounting-One/229397/?cid=at

Let’s Review:  
Learning is Changing...  
i.e., it’s more informal, video-based, ubiquitous, collaborative, self-directed, global, mobile, open, massive, etc.)

Frank Basile, an aircraft technician, took an MITx course on circuits and electronics to increase his knowledge.  
Joe Alfonso, a financial adviser from Oregon, is taking the online finance course as a “refresher.”

May 17, 2015  
Why Is The University Still Here?  
TechCrunch, Danny Crichton  
https://techcrunch.com/2015/05/17/why-is-the-university-still-here/#.cczeiq:nR1s
Things are heating up!
http://routledge-ny.com/books/details/9781138807419/

MOOCs and Open Education Around the World
http://routledge-ny.com/books/details/9781138807419/

MOOCs and Open Education

The Web of Learning

We are entering a jumping off point...

The World is Open for Learning!
Dr. Jiao Jianli, Professor of Educational Technology,
Director of Future Education Research Centre
Deputy Dean of School of Information Technology in Education,
South China Normal University
http://jiao.blogbus.com/
The World is very open!
(in Ho Chi Minh City, Vietnam, Wednesday March 12th)

Framework: WE-ALL-LEARN:
Ten Forces that Opened the Learning World
- Web Searching in the World of e-Books (i.e., Darwin)
- E-Learning and Blended Learning
- Availability of Open Source and Free Software (e.g., Moodle)
- Leveraged Resources and OpenCourseWare (e.g., MIT)
- Learning Object Repositories and Portals (i.e., shared content)
- Learner Participation in Open Info Communities (YouTube)
- Electronic Collaboration and Interaction (sync and async)
- Alternate Reality Learning (Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)
- Real-Time Mobility and Portability (e.g., iPhone)
- Networks of Personalized Learning (Blogs, RSS)

Audience Participation!
WE ALL LEARN!!!

Poll #7: How do you now view the instructor in the Open World of Education 3.0?
From Instructor as Credit Manager...

Poll #8: To Instructor as Orchestra Conductor or Concierge?
Poll #9: Instructor as Counselor?

Poll #10: Instructor as Course Ambassador?

Poll #11: Instructor as Curator?

How About Instruction as a Cognitive Apprenticeship?

Education 3.0?
Introducing the free “TEC-VARIETY” Framework...
http://tec-variety.com/

1. Tone/Climate: A. Threaded Video Discussions, e.g., Flipgrid
http://flipgrid.com/#429f88c5
October 4, 2014
2. Encouragement, Feedback, etc.:  
   A. Class Facebook Group  
   Dr. Bonk’s creative fun time group (R546)  
   https://www.facebook.com/groups/830496290323899/  

3. Curiosity, Fun:  
   A. Design Article Database in Pinterest,  
      Jenny Webeck  
   https://www.pinterest.com/jennifertwebeck/emerging-learning-technologies/  

4. Variety, Novelty, Fun:  
   A. Teach from Vietnam to the World  
      BBC News Asia, August 14, 2013  
      Even though he is now very elderly Vinh Bao (age 96) still teaches music,  
      using his computer to coach pupils across the globe.  

5. Autonomy, Choice:  
   A. Design Multimedia Glossaries  
      Ozgur Ozdemir, December 2012  
      http://r685glossary.shutterfly.com  
      Umida Khikmatillaeva, Dec. 2011, P540  
      http://learningplanet.shutterfly.com/  

6. Relevance, Meaningfulness:  
   A. Guest Chats (e.g., Emily Hixon, January 20, 2015)  
      https://connect.iu.edu/p259wpia9j/  

7. Interactive, Collaborative:  
   A. Backchannel Chat (TodaysMeet)  
      https://todaysmeet.com/  
      R678_Emerging_Learning_Technologies  
      https://todaysmeet.com/R678_Emerging_Learning_Technologies
8. Engagement, Effort: A. Guest Speaker Quotes (Rey Junco, February 25, 2013)

9. Tension, Challenge, etc.: A. Controversial Issue Debates

March 13, 2015
RS11 Midterm Video How to Create an Authentic Environment in a Content-Driven School?, R511, Nick and Nik
https://www.youtube.com/watch?v=Bcr3_aZT_xQ&feature=youtu.be

10. Yields Products, Goals: A. Student Created Mobile Apps and Videos

Commitments: Stop and Share:
Which principle(s) of TEC-VARIETY will you use?
Tone/Climate
Encouragement, Feedback
Curiosity
Variety
Autonomy
Relevance
Interactive
Engagement
Tension
Yields Products

Framework #2: The R2D2 Model

January 28, 2015
Read 1a. Twitter Fed Class Discussions
Live-Tweeting Assignments: To Use or Not to Use?
The Chronicle of Higher Education, Adeline Koh
http://chronicle.com/blogs/profhacker/live-tweeting-assignments-to-use-or-not-to-use/58949
Reflect 2a.
Interpreting Infographics
July 24, 2014

Woman in Computer Science
http://graduatedegrees.online.njit.edu/mscs-resources/mscs-infographics/women-in-computer-science

Display 3a. (April 28, 2015)
Concept Mapping and Timeline Tools
(Bubbl.us, Cmap, Gliffy, Spicynodes, or Mindomo)
http://www.spicynodes.org/index.html

Do 4a. Student Music Recordings on Course Content
April 26, 2015
IST Groove Song, Jeffrey Jenkins, R511
https://soundcloud.com/jeffjenkins25/ist-groove
The World is Open, Jill Kaufman, R678
https://www.youtube.com/watch?v=ZRGV0Mg5Ymw&feature=youtu.be

Poll #12: Which do you prefer...
(A) TEC-VARIETY or (B) R2D2?

Where are we headed?
Where is Education 3.0?

Any Comments or Questions?
Slides at: TrainingShare.com
Papers: PublicationShare.com
Book: http://tec-variety.com/
Email: curt@worldisopen.com