Learning is Changing: The Basics of Blended Learning and Beyond
Curt Bonk, Professor, Indiana University
cjbonk@indiana.edu
http://mypage.iu.edu/~cjbonk

(Circa Confucius 551–479 BCE)

Academos
Plato Circa 428–347 BCE

Audience Poll #1:
Has learning technology ever transformed your life?

The Problem with Learning Technology
Karen Wilcox, November 7, 2014, Chronicle of Higher Education
https://chronicle.com/article/The-Problem-with-Learning-Technology/637532/#!issue=1222786678&spree=0
Life as an accountant/CPA in a high tech company in the 1980s...

Poll #2: Remember what was to be education 2.0?

Fast Forward 30+ Years...
“Anyone can now learn anything from anyone at any time.”

Poll #3: Any Visions of Education 3.0?
Knowledge Navigator (1987)
Apple Computer
http://www.youtube.com/watch?v=hb4AzF6wEoc

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

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

II. Learning is More Flipped

III. Learning is More Video-Based

August 5, 2015
Shubham Jaglan Overwhelmed by "Dream" Return Home After Double World Championship
Disha Chopra, NDTV Sports

August 31, 2015
Samsung unveils Gear S2 smartwatch, USA Today, Brett Molina
http://www.usatoday.com/tech/
IV. Learning is More Visual

September 22, 2014

110 Foot Engagement,
Elliott Masie’s Learning 2014


V. Learning is More Direct from Experts

February 2, 2015

Here Comes Professor Everybody: The 'sharing economy' meets higher education,
Chronicle of Higher Education, Jeffrey R. Young

http://chronicle.com/article/Here-Comes-Professor-Everybody/151445/?cid=at

VI. Learning is Resource Rich

March 22, 2015

Madagascar marvel:
Divers find fossils of extinct giant lemurs
Daisy Carrington, for CNN, March 22, 2015


VII. Learning is More Informal

June 29, 2015

Is Facebook the next frontier for online learning?
Christine Greenhow, greenhow@msu.edu, Andy Henion

http://msutoday.msu.edu/news/2015/is-facebook-the-next-frontier-for-online-learning/
VIII. Learning is More Adventurous
May 7, 2015
Aaron Doering, Chasing Seals, TEDx
http://chasingseals.com/
https://twitter.com/chasingseals

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

X. Learning is More On Demand
May 5, 2014
Mobile MOOCs: New platform challenges conventional MOOCs
eCampus News (https://coursmos.com/)

XI. Learning is More Personal
Localization and Translation of Open Content
Coursera, Global Translator Community, Chronicle of Higher Education
https://www.coursera.org/about/translate

XII. Learning is More Social
Facebook says 1 billion people used Facebook on Monday, USA Today
http://www.usatoday.com/tech/

XIII. Learning is More Online
2014 Survey of Online Learning
Grade Level: Tracking Online Education in the United States, 2014, Online Learning Consortium (formerly Sloan-C), by I. Elaine Allen and Jeff Seaman
Learning is More Online
June 15, 2014
Starbucks offers workers 2 years of free college, CNN Money, Gregory Wallace (from Arizona State online programs)

XIV. 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

Want something FREE?
Introducing the “TEC-VARIETY” book...
http://tec-variety.com/

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

XV. Learning is More Open
(December 2, 2014)
Nature, Openwords, etc.
http://www.openwords.com/
https://www.facebook.com/Openwords

President Obama running onto the stage before delivering remarks at Central High School in Phoenix on Thursday. Credit Doug Mills/The New York Times
XVI. 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#

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
If the MOOC movement has faded, nobody told Jima Ngei. Mr. Ngei, who lives in Port Harcourt, Nigeria, has completed and passed 250.

May 26, 2015
Edtech and MOOC Times in China
Michael Trucano On Tue, 05/12/2015, EduTech

June 26, 2015
In China, Where Everything is a MOOC,
Education Week, Justin Reich, HarvardX Research Fellow
http://blogs.edweek.org/edweek/edtechresearcher/2015/05/in_china_where_everything_is_a_mooc.html?r=284759497
The most memorable line from my recent visit to China was this: “We have 12 million K-12 teachers in China who need to receive this particular in-service training, so we started with a group of about 200,000.”

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.”

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/

The Web of Learning

We are entering a jumping off point...

August 4, 2015
How Nanodegrees Are Disrupting Higher Education
John Waters, Campus Technology
http://campustechnology.com/articles/2015/08/05/how-nanodegrees-are-disrupting-higher-education.aspx

We are entering a jumping off point...
(South University of Science and Technology of China, Wednesday June 10, 2015)
The World is very open! (South University of Science and Technology of China, Wednesday June 10, 2015)

Audience Participation!

WE ALL LEARN!!!

Audience Poll #4: Are we going crazy yet?

Learning is also More Blended...
1. Definitions of blended learning
2. Myths of blended learning
3. Models of blended learning
4. Examples of blended learning

Who Needs Blended and Online Learning?

May 31, 2015
MERS, South China Morning Post
Mers case brings back memories of Hong Kong’s Sars outbreak
Answer: Blended Learning

Myth #1: If you read the enough research you will be able to know the impact of blended learning.

1. Improved Pedagogy
   - More interactive instead of transmissive
   - Authentic, real world, etc.
2. Increased Access/Flexibility
3. Increased Cost Effectiveness

Classifying K-12 Blended Learning
Heather Staker and Michael B. Horn, May 2012

"Blended learning is any time a student learns at least in part at a supervised brick-and-mortar location away from home and at least in part through online delivery with some element of student control over time, place, path, and/or pace."

Myth #2: Blended learning is easy to define.
Myth #3: Blended learning is hard to define.

Blending Online and F2F Instruction

"Blended learning refers to events that combine aspects of online and face-to-face instruction" (Rooney, 2003, p. 26; Ward & LaBranche, 2003, p. 22)

Historical Emergence of Blended Learning (Graham, 2006)

Myth #4: People will know what I am saying when I say "blended learning."
Myth #5: Blended is the same as "hybrid."

The Sloan Consortium

<table>
<thead>
<tr>
<th>Proportion of content delivered online</th>
<th>Type of Course</th>
<th>Typical Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% Traditional</td>
<td></td>
<td>Course with no online technology used; control is delivered in writing or orally.</td>
</tr>
<tr>
<td>0-25% Web Facilitated</td>
<td></td>
<td>Course which uses web-based technology as a support tool but essentially follows the same format. Wright and Blackstone (in Mank 2006) refer to the online elements as &quot;web enhancements.&quot;</td>
</tr>
<tr>
<td>25-75% Blended/Hybrid</td>
<td></td>
<td>Course that is a blend of online and face-to-face instruction; substantial proportion of the content is delivered online. Typically, some online discussions, typically has some face-to-face meetings.</td>
</tr>
<tr>
<td>75-100% Online</td>
<td></td>
<td>A course where the vast bulk of the content is delivered online. Typically, has no face-to-face meetings.</td>
</tr>
</tbody>
</table>
Myth #6: Knowing “how much” to blend is vital.

Range of Blends in Pew Cases

<table>
<thead>
<tr>
<th>Blending Environment</th>
<th>Blending Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face-to-Face Learning Environment</td>
<td>2/3-1/3 Blend</td>
</tr>
<tr>
<td></td>
<td>1/3-2/3 Blend</td>
</tr>
<tr>
<td></td>
<td>Computer-mediated Learning Environment</td>
</tr>
</tbody>
</table>

KEY
- Technology enhanced
- Reduced F2F contact time
- Entirely Distributed
- Optional F2F sessions


Myth #7: Blended learning works everywhere.

Where is Blended Beneficial?
- Intro Classes (Spanish, psych, algebra, biology)
- AP Classes
- Classes with low success rates
- Classes with students working part-time
- Required classes
- Students are rural or spread over a distance
- Classes with certification or standardization
- Classes with new requirements or standards
- Writing intensive classes, theory classes, etc.
- Lab classes?

Examples of Blended Learning
- Put assessments/reviews online
- Online discussions
- Online labs
- Put reference materials on Web
- Deliver pre-work online
- Provide office hours online
- Use mentoring/coaching tool
- Access experts live online

Myth #8: People learn more in face-to-face settings than blended or fully online ones.

Fully Online and Blended Learning Advantages
1. Increased Learning (better papers, higher scores)
2. More effective pedagogy and interaction
3. Course access at one's convenience and flexible completion (e.g., multiple ways to meet course objectives)
4. Reduction in physical class or space needs, commuting, parking, etc.
5. Increased opportunities for human interaction, communication, & contact among students
6. Introverts participate more

Myth #9: Instructors can have a logical discussion with administrators about blended learning.

Models of Blending
Blending occurs at the following four levels:

Activity Level
Course Level
Dept/Program Level
District/Institutional Level

Instructor stakeholders
Administrator stakeholders

Myth #10: There is a best model of blended.

AMA Special Report, Effectively Implementing a Blended Learning Approach (Steven Shaw & Nicholas Igneri, 2006)
Seven Example Blended Learning Models

Blended Model #1. Face-to-Face Primary (online is for remediation of supplement)

Blended Model #2. Rotation (students alternate FTF and Online instruction)

Blended Model #3. Flex (curriculum primarily online with instructors available FTF)

Blended Model #4. Self-Blend (students decide on which courses they take online or which portion of the course is online)
**Blended Model #5. Bookend**  
(first and last part of the course is online and middle portion is FTF; AMA Special Report, Blended Learning Opportunities, Alison Rossett (2006))

**Blended Model #6. Anchor**  
(start with FTF or what students are familiar with and then move to online; or the opposite and start online and move to F2F)

**Blended Learning Model #7:**  
Gradual Human (F2F) Approach  
The IBM Four Tier Learning Model. Blending Learning for Business Impact – IBM’s case for learning success. Nancy Lewis, VP, & Peter Orton, IBM

**Two Dozen (24) Blended Learning Examples**

**August 19, 2015**  
**Blended Solution #1.**  
Use the Media to Supplement Content  
(e.g., CNN Money)  

**January 28, 2015**  
**Blended Solution #2.**  
Find Quality Supplemental Text Resources  
(e.g., Accounting Coach; includes tests, Q&A, visuals, forms, definitions, etc.)  
Blended Solution #3.
Workplace Internship, Practicum, and Field Experiences Online Reflections

Blended Solution #4.
Enroll in a MOOC and Reflect (e.g., see Class Central)

Blended Solution #5.
Data Visualization Tools (Harvard and MIT MOOCs)
Lawrence Biemiller, February 20, 2014, Chronicle of HE

Blended Solution #6.
Expert Question and Answer Sessions

Blended Solution #7.
Cross Institutional Teaming

Blended Solution #8.
Online Role Play or Debate (e.g., documentary production)
Blended Solution #9.
Reflect on Virtual Timelines
(Dipity, xtimeline, Simile, etc.)

Blended Solution #10.
Short Video Anchors
(e.g., TubeChop of V-PORTAL: Video Primers in an Online Repository of e-Teaching and Learning)
Curt Bonk: http://www.tubechop.com/watch/378732

Blended Solution #11.
Collaborative Video Annotations and Discussions (Craig Howard, IU)

Blended Solution #12.
Educational Videos:
CNN, BBC, TED, TED-Ed, ForaTV
https://www.ted.com/talks/bill_gates_how_state_budgets_are_breaking_us_schools?language=en

Blended Solution #13.
Video Tutorials, Demonstrations, and How-To’s
Investopedia (videos, tutorials, etc.)
http://www.investopedia.com/video/play/deferred-revenue/

Blended Solution #14.
Educational Videos:
CNN, BBC, TED, TED-Ed, ForaTV
CNN Hero Marilyn Price: Changing Tires & Changing Lives
http://www.cnn.com/videos/tv/2015/05/21/cnnheroes-price-extra.cnn
http://www.cnn.com/specials/cnn-heroes
Blended Solution #15.
Fora TV
(i.e., “the Conference Channel” or “YouTube for Thinkers;” (Live and
On-Demand Videos from the World’s Best Conferences and Events;
Nolan Bushnell: Finding the Next Steve Jobs & the Power of Creativity)
http://library.fora.tv/
http://library.fora.tv/2013/05/19/Nolan_Bushnell_Finding_the_Next_Steve_Jobs_the_Power_of_Creativity

Blended Solution #16.
Create Screencasted Tutorials
(Jing, GoView, Screenr, Overstream, Screencast-o-Matic; see http://tec-v

Blended Solution #17.
Combining Media (Dual Coding Theory: Wikipedia + Video)
Video: http://www.gigwise.com/news/84155/audio-pioneer-

Blended Solution #18.
Voice/Audio Feedback
Vocaroo: http://vocaroo.com/
(Recorded by Curt Bonk for the National Registry Summit in DC)

Blended Solution #19
Reading from Open Access Journals
(e.g., PLOS)

Blended Solution #20.
Free E-books and Course Resources
http://filmstudiesforfree.blogspot.com/p/open-access-film-e-books-list.html
Blended Solution #21.  
Online Practice Tests and Interactive Flash Cards  
http://quizlet.com/

Blended Solution #22. 
Student Collaborative Knowledge Building and Sharing  
(e.g., Popplet:  http://popplet.com/)

Blended Solution #23.  
Flipping the Classroom  
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

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.

Blended Solution #24.  
Analyzing Financial Statements (e.g., Twitter)  
https://finance.yahoo.com/q/is?s=TWTR+Income+Statement&annual  
http://www.marketwatch.com/investing/stock/twtr/financials  

Again, this talk covered...
1. 1 Definition of blended learning  
2. 10 Myths of blended learning  
3. 7 Models of blended learning  
4. 24 Examples of blended learning

Any Questions or Comments?  
Slides at: TrainingShare.com  
Papers: PublicationShare.com  
Free book: http://tec-variety.com/  
Dr. Curt Bonk – CJBonk@Indiana.edu