

Learning is Changing: The Basics of Blended Learning and Beyond

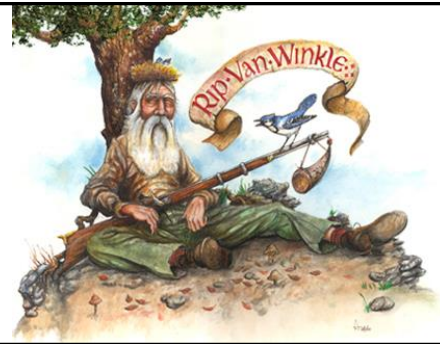
Curt Bonk, Professor, Indiana University
cjbok@indiana.edu
<http://mypage.iu.edu/~cjbok>



(Circa Confucius 551–479 BCE)



Academos
Plato Circa 428–347 BCE



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



The Problem with Learning Technology

Karen Wilcox, November 7, 2014, Chronicle of Higher Education



(on left) An accountant assembling returns at W. Atlee Burpee Company. Photographed in 1943 by Arthur S. Siegel for the Farm Security Administration.

<http://www.museum.ca/learn/5-steps-your-accountant-dont-tell-you/>
<http://www.cpaconnect.ca/learn/5-steps-your-accountant-dont-tell-you/>



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...



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=h4k4FwEoc>



Thirty Ways Learning is Changing...

(i.e., it's more informal, video-based, ubiquitous, collaborative, self-directed, global, mobile, open, massive, etc.)

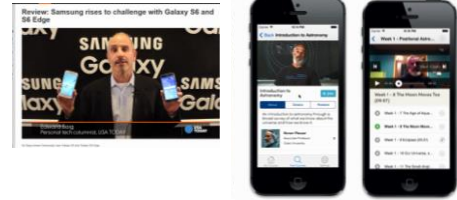


I. Learning is More Mobile

(e.g., mobile courses on smartphone)

April 2, 2015

Review: Samsung rises to challenge with Galaxy S6 and S6 Edge



August 31, 2015

Samsung unveils Gear S2 smartwatch, USA Today, Brett Molina

<http://www.usatoday.com/tech/>



II. Learning is More Flipped



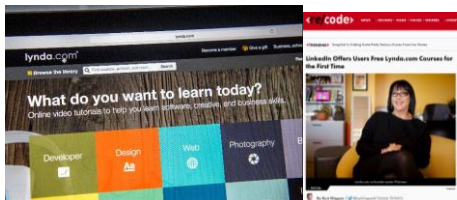
III. Learning is More Video-Based

June 16, 2015

Lynda.com Excel Training, IU

Acquired for \$1.5 Billion, April 23, 2015

<http://www.lynda.com/Excel-tutorials/Excel-2010-Summary-Training/61219-2.html>



August 5, 2015

Shubham Jaglan Overwhelmed by "Dream" Return Home After Double World Championship

Disha Chopra, NDTV Sports

<http://sports.ndtv.com/golf/news/248551-shubham-jaglan-overwhelmed-by-dream-return-home-after-double-world-championship>



IV. Learning is More Visual September 22, 2014

110 Foot Engagement, Elliott Masie's Learning 2014

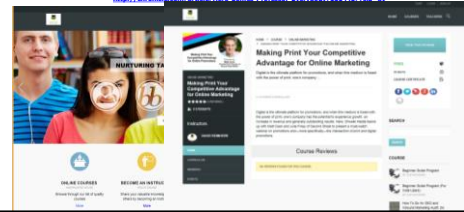
<http://www.learning2014.com/index.php/Item/110-foot-screen-engagement.html>



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/233450>



VI. Learning is Resource Rich March 22, 2015

Madagascar marvel: Divers find fossils of extinct giant lemurs

Daisy Carrington, for CNN, March 22, 2015

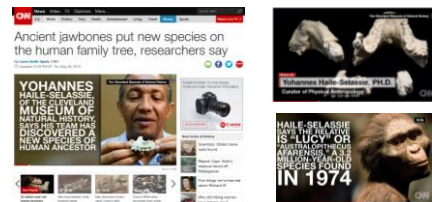
<http://www.cnn.com/2015/03/19/africa/underwater-fossil-lemur-graveyard-madagascar/index.html>



May 28, 2015 (Immediate, Digital, and Resource Rich)

Ancient jawbones put new species on the human family tree, researchers say, Laura Smith-Spark, CNN

<http://www.cnn.com/2015/05/28/africa/ethiopia-fossil-hominin-ancestor/index.html>



May 28, 2015 New species from Ethiopia further expands Middle Pliocene hominin diversity, Nature

<http://www.cnn.com/2015/05/28/africa/ethiopia-fossil-hominin-ancestor/index.html>
<http://www.nature.com/nature/journal/v531/n7553/full/nature14448.html>



VII. Learning is More Informal June 29, 2015

Is Facebook the next frontier for online learning?

Christine Greenhow; greenhow@msu.edu, Andy Henlon

<http://msutoday.msu.edu/news/2015/is-facebook-the-next-frontier-for-online-learning/>



VIII. Learning is More Adventurous May 7, 2015

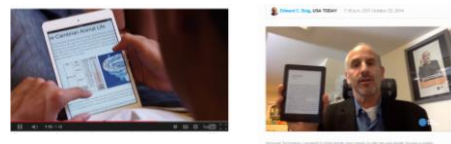
Aaron Doering, Chasing Seals, TEDx

<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



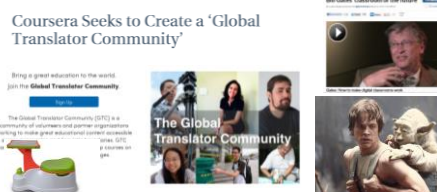
X. Learning is More On Demand May 5, 2014

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>



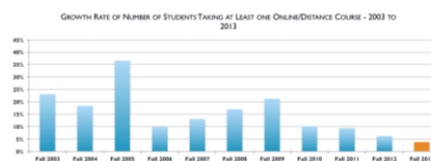
September 1, 2015 XII. Learning is More Social

Facebook says 1 billion people used Facebook on Monday, USA Today
<http://www.usatoday.com/tech/>



February 5, 2015 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
<http://www.onlinelearningconsortium.org/reports/gradelevel.pdf>
<http://edition.cnn.com/video/business/2015/02/11/online-degree-2a-ccc.cnn>



Learning is More Online June 15, 2014

Starbucks offers workers 2 years of free college, CNN Money, Gregory Wallace (from Arizona State online programs)

http://money.com.com/2014/06/15/news/economy/starbucks-scholar-education/index.html?hpid=hp_12
<http://www.prime.com/2014/06/24/starbucks-to-provide-free-college-education-to-thousands-of-workers.html>



XIV. Learning is More Free August 5, 2014

OpenStax Aims To Bring Free Digital Textbooks to High Schools, David Nagel, THE Journal

<http://thejournal.com/articles/2014/08/05/openstax-aims-to-bring-free-digital-textbooks-to-high-schools.aspx>



January 8, 2015

Obama Plan Would Help Many Go to Community College Free

JULIE HIRSCHFELD DAVIS and TAMAR LEWIN, The New York Times

http://www.nytimes.com/2015/01/08/us/politics/obamas-plan-to-help-pay-for-college-at-american-for-some-students.html?_r=1&hp



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

Want something FREE? Introducing the "TEC-VARIETY" book...

<http://tec-variety.com/>



What motivates?

1. TenseClimate: Psychological Safety, Comfort, Sense of Belonging
2. Encouragement: Feedback, Responsiveness, Praise, Supports
3. Curiosity: Surprise, Intrigue, Unknowns
4. Variety: Novelty, Fun, Fantasy
5. Autonomy: Choice, Control, Flexibility, Opportunities
6. Relevance: Meaningful, Authentic, Interesting
7. Interactivity: Collaborative, Team-Based, Community
8. Engagement: Effort, Involvement, Investment
9. Tension: Challenge, Dissonance, Controversy
10. Yielding Products: Goal Driven, Purposeful Vision, Ownership

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>



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/2014XVI/olmooc8>
Softcover (\$30): http://www.parlorpress.com/invasion_of_the_moocs
Free (PDF): http://www.parlorpress.com/pdf/invasion_of_the_moocs.pdf



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.



Jima Ngei: "I had this unrelenting fear that this miracle of free access might evaporate soon."

May 26, 2015

Edtech and MOOC Times in China

Michael Trucano On Tue, 05/12/2015, EduTech
<https://blogs.worldbank.org/edutech/edutech-and-mooc-times-china>



June 26, 2015

In China, Where Everything is a MOOC,

Education Week, Justin Reich, HarvardX Research Fellow
http://blogs.edweek.org/edweek/edweekarchive/2015/06/26/in_china_where_everything_is_a_mooc.html

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
By Bonk, Lee, Reeves, & Reynolds

MOOCs and Open Education Around the World

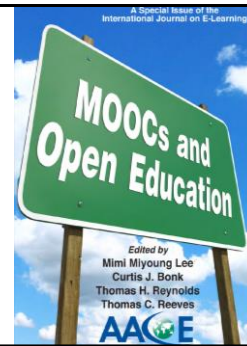
<http://routledge-ny.com/books/details/9781138807419/>



**MOOCs and
Open Education**
AROUND THE WORLD



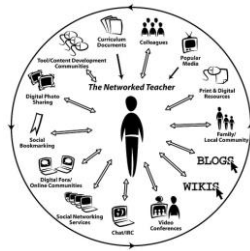
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Edited by
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CURTIS J. BONK
THOMAS H. REYNOLDS
THOMAS C. REEVES

AACE

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!!!

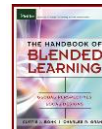


Audience Poll #4: Are we going crazy yet?



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?

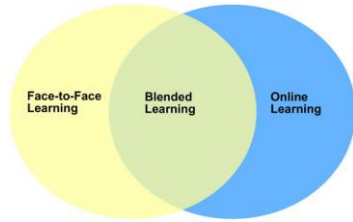


May 31, 2015 MERS, South China Morning Post

Mers case brings back memories of Hong Kong's Sars outbreak



Answer: Blended Learning



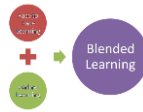
Myth #1: If you read the enough research you will be able to know the impact of blended learning.

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



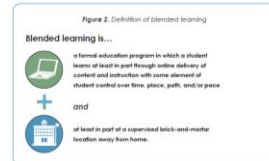
Myths #2: Blended learning is easy to define.
Myth #3: Blended learning is hard to define.
Blending Online and F2F Instruction

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

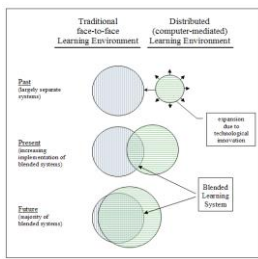


Classifying K-12 Blended Learning Heather Staker and Michael B. Horn, May 2012 <http://www.undirect.org/sites/default/files/Classifying-K-12-Blended-Learning.pdf>

"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."



Historical Emergence of Blended (Graham, 2006)



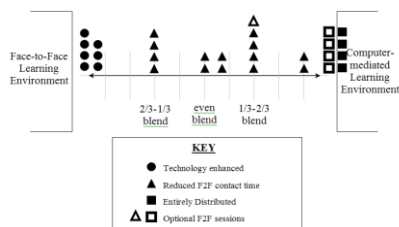
Myth #4: People will know what I am saying when I say "blended learning."
Myth #5: Blended is the same as "hybrid."

The Sloan Consortium

Proportion of content delivered online	Type of Course	Typical Descriptions
0%	Traditional	Course with no online technology used - content is delivered in writing or orally.
1 to 29%	Web facilitated	Course which uses web-based technology to facilitate what is essentially a face-to-face course. Might use Blackboard or WebCT to post the syllabus and assignments, for example.
30 to 79%	Blended/Hybrid	Course that is a blend of the online and face-to-face course. Substantial proportion of the content is delivered online, typically uses online discussions, typically has some face-to-face meetings.
80+%	Online	A course where the vast bulk of the content is delivered online. Typically has no face-to-face meetings.



Myth #6: Knowing "how much" to blend is vital.
Range of Blends in Pew Cases



Source: Graham, C. R., & Allen, S. (2005). Blended learning: An emerging trend in education. In C. Howard & J. V. Boettcher & L. Justice & K. D. Schenk & P. L. Rogers & G. A. Berg (Eds.), *Encyclopedia of Distance Learning* (pp. 172-179). Hershey, PA: Idea Group Inc.

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



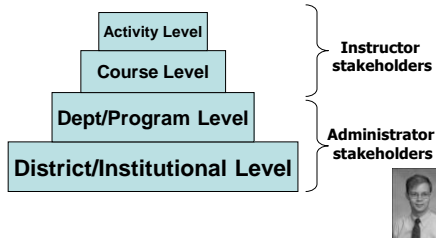
Myth #8: People learn more in face-to-face settings than blended or fully online ones.

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:

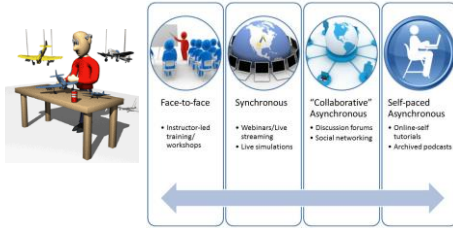


Myth #10: There is a best model of blended.
AMA Special Report, Effectively Implementing a Blended Learning Approach
(Steven Shaw & Nicholas Ignneri, 2006)



Source: American Management Association, AMA at Work

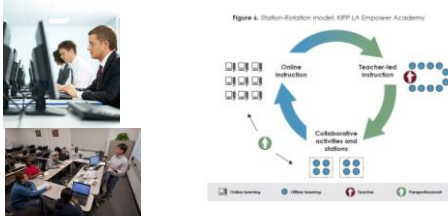
Seven Example Blended Learning Models



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



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



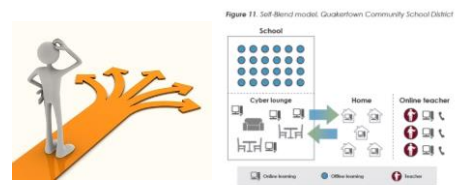
Blended Model #3. Flex (curriculum primarily online with instructors available FTF)



Blended Model #3. Online Lab (lab or field experience component of course is online)



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 F2F; AMA Special Report, Blended Learning Opportunities, Alison Rossett (2006))



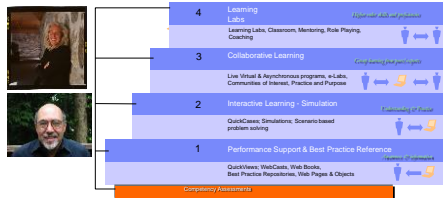
Blended Model #6. Anchor

(start with F2F or what students are familiar with and then move to online; or the opposite and start online and move to F2F)

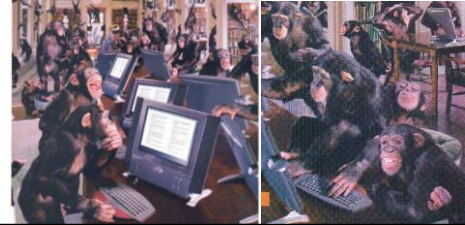


Blended Learning Model #7: Gradual Human (F2F) Approach

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)

<http://money.com/2015/08/19/retirement/savings-20s/index.html>

Millennials & Their Money



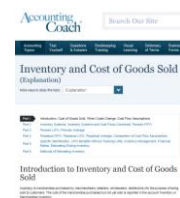
3 tips to getting retirement right in your 20s

3 tips to getting retirement right in your 20s



January 28, 2015 Blended Solution #2. Find Quality Supplemental Text Resources (e.g., Accounting Coach; includes tests, Q&A, visuals, forms, definitions, etc.)

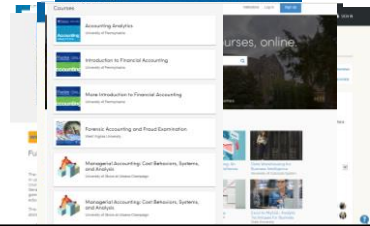
<http://www.accountingcoach.com/inventory-and-cost-of-goods-sold/explanation>



Blended Solution #3. Workplace Internship, Practicum, and Field Experiences Online Reflections

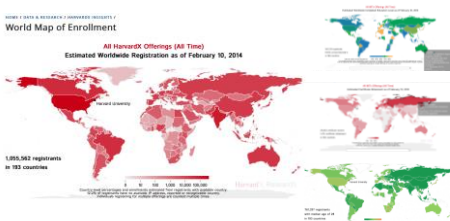


Blended Solution #4. Enroll in a MOOC and Reflect (e.g., see Class Central)



Blended Solution #5. Data Visualization Tools (Harvard and MIT MOOCs)

Lawrence Biemiller, February 20, 2014, Chronicle of HE
<http://www.chronicle.com/article/World-Map-of-Enrollment/234000>



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)



[illegible]

The screenshot shows a YouTube video player with the title "Introduction to the course: The Big Picture". The video content shows a woman standing in front of a screen displaying a presentation slide. The slide contains the following text:

What is the course about?

The course is about the structure of the course and the topics that will be covered. It is a course for students who are interested in the structure of the course and the topics that will be covered.

What is the course structure?

The course is structured as follows:

- 1. Introduction to the course
- 2. The structure of the course
- 3. The topics that will be covered
- 4. The course materials
- 5. The course schedule
- 6. The course evaluation

The video player interface shows the video is at 00:01:17.

[illegible]

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://blogs.fora.tv/2012/05/19/Nolan-Bushnell-Finding-the-Next-Steve-Jobs-the-Power-of-Creativity>



Blended Solution #16. Create Screencasted Tutorials

(Jing, GoView, Screnr, Overstream, Screencast-o-Matic; see http://tec-variety.com/TEC-Variety_links-examples-resources.pdf)



Blended Solution #17. Combining Media (Dual Coding Theory: Wikipedia + Video)

Text: http://en.wikipedia.org/wiki/Ray_Dolby
Video (September 20, 2000): <http://www.gigawatts.com/news/84135/audio-pioneer->



Blended Solution #18. Voice/Audio Feedback

Vocaroo: <http://vocaroo.com/>

<http://vocaroo.com/1/s0YGC44kSjxa>

(Recorded by Curt Bonk for the National Registry Summit in DC)



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

<http://www.plos.org/>; <http://www.plosbiology.org/>

Open Journal of Accounting, 2015, 3, 897-908
<http://dx.doi.org/10.4236/oja.2015.31017> Published Online October 2015 (<http://www.iiste.org/journal/oja>)

Use of Video Clips in a Virtual Learning Environment of Accounting Information Systems Class—A Case Study

Baochen Li*, Liang Song
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Yunnan Technological University, Kunming, China
Email: lfbaochen@163.com, songliang@163.com

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ABSTRACT
It is more challenging for accounting students to learn and engage with the technology trend in the accounting field because of an increasing number of students and a decline in resources. We provide a practical knowledge of how video clips can be created and used to teach accounting information systems. Video clips of how to use Sage 30 Accounting are created by Curt Bonk and distributed to students. The students' learning experiences show that video clips help a lot when they study in accounting information systems class.

Keywords: Accounting Education; Technology in the Classroom; Accounting Information Systems

Blended Solution #20. Free E-books and Course Resources

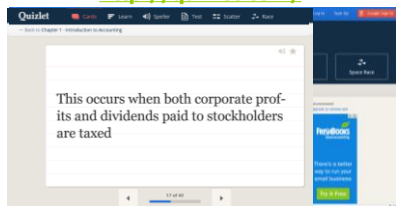
<http://filmstudiesforfree.blogspot.com/p/open-access-film-e-books-list.html>

<http://www.assessments.com/2014/04/10/100-free-online-made-available-by-the-university-of-california-penn.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
<http://chronicle.com/article/When-a-Flipped-Classroom/131551>



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?s=TWTR:income:Statement&detail>
<http://www.marketwatch.com/investing/stock/twtr/financials>
<http://www.nasdaq.com/symbol/twtr/financials?query=income-statement>



Again, this talk covered...

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/>
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