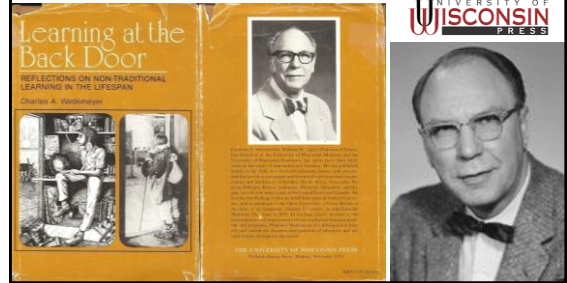


E-Learning: An Update to the Future Worldwide

Curtis J. Bonk, Professor, Indiana University
cjbonk@indiana.edu
<http://mypage.iu.edu/~cjbonk/>



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



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



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



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/>



Looking to the Past...



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



Knowledge Navigator (1987) Apple Computer

<http://www.youtube.com/watch?v=hbAAzF6wFoc>

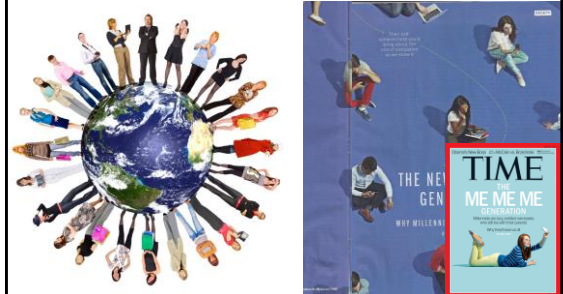


Fast Forward 25+ Years... "Anyone can now learn anything from anyone at any time."



May 20, 2013 The New Greatest Generation: Why Millennials will Save Us All, Time, Joel Stein

<http://www.time.com/time/magazine/article/0,9171,2143001,00.html>



Audience Polls #2:

- I. Who remembers where they were when they found out that Steve Jobs died?
- II. Who remembers what they were doing on 9/11?
- III. Who remembers what they were doing on 4/11 (i.e., April 4, 2001)?



Charles Vest (April 4, 2001)

<http://web.mit.edu/newsoffice/2001/ocw.html>

"This is about something bigger than MIT. I hope other universities will see us as educational leaders in this arena, and we very much hope that OpenCourseWare will draw other universities to do the same. We would be delighted if -- over time -- we have a world wide web of knowledge that raises the quality of learning -- and ultimately, the quality of life -- around the globe."



Fast Forward to February 2014 MIT OCW and the OpenCourseWare Consortium



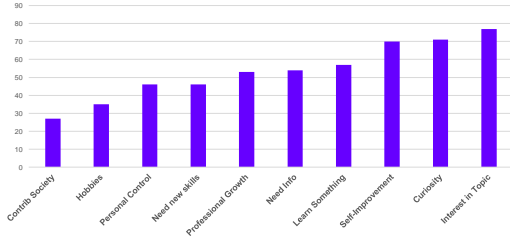
MIT OpenCourseWare (OCW)

<http://ocw.mit.edu/index.htm>



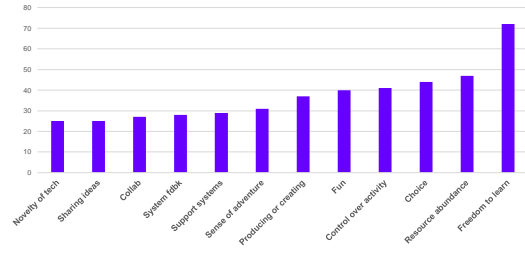
Reasons to explore?

Main Reason Explore the Web Informally to Learn
(MIT OCW Group; Note: Check all that apply)



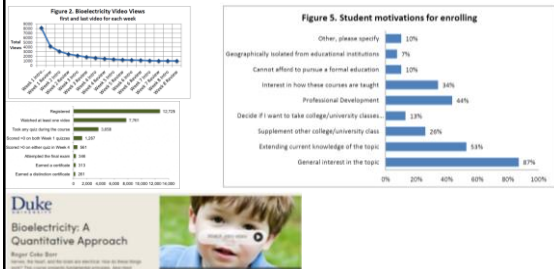
Factors leading to success or personal change?

Factors Leading to Success or Personal Change When Exploring Online
(MIT OCW Group; Note: Check all that apply)

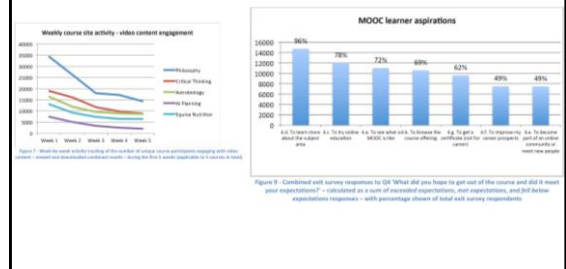


February 5, 2013 Bioelectricity: A Quantitative Approach, Duke University's First MOOC

http://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/8216/Duke_Bioelectricity_MOOC_Fall2012.pdf



May 2013 MOOCs @ Edinburgh 2013- Report #1



October 31, 2013

U.S. Teams Up With Operator of Online Courses to Plan a Global Network, Tamar Lewin, NY Times

http://www.nytimes.com/2013/10/31/education/edtech/global-network-of-free-online-courses.html?hpid=hp_tech-table-main&hp_hp-top-table-main&_r=3&_hpid=hp_hp-top-table-main

From Seoul, South Korea, to La Paz, Mexico, Coursera is partnering with local institutions to create "Global Learning Hubs," the company announced Oct. 31.



September 16, 2013

Rwandan Degree Program Aims for a 'University in a Box', Chronicle of Higher Education, Megan O'Neil

<http://chronicle.com/article/Rwandan-Degree-Program-Aims/141631/>



Students attend an orientation session at Kepler, a new hybrid program in Kigali, Rwanda, which will use MOOCs and classroom time to help students earn competency-based associate degrees.

October 31, 2013

The launch of OERu: Towards free learning opportunities for all students worldwide, BC Campus (Canada)

<http://bccampus.ca/2013/10/31/the-launch-of-oeru-towards-free-learning-opportunities-for-all-students-worldwide/>

The launch of OERu: Towards free learning opportunities for all students worldwide



August 5, 2013

Free Online Higher Education: 5 Best MOOCs

By **Kannan Sankaran, Epoch Times**

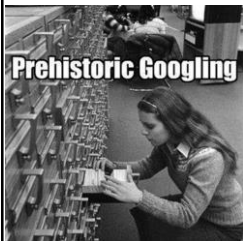
<http://www.theepochtimes.com/n3/229540-5-best-moocs-for-free-online-higher-education/>

MOOC at UPenn; Recession Fuels Explosion of Online Learning

<http://on.aol.com/video/recession-fuels-explosion-of-online-learning-517885097>



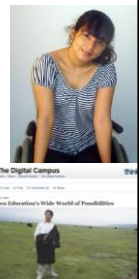
**Part I. Learning is Changing
New Technologies =
New Delivery Methods...**



I. Learning is More Open

(80-Year-Old WGU Texas Grad Keeps His Promise, November 30, 2012, Reeve Hamilton, Texas Tribune)

THE TEXAS TRIBUNE
An 80-Year-Old Graduate With an Online Marketing Degree Kept His Promise



II. Learning is More Video-Based

Adora Svitak, WFP Youth Representative - 2013 ECOSOC Youth Forum, March 27, 2013

"Shaping tomorrow's innovators: Leveraging science, technology, innovation and culture for today's youth". Statement by the World Food Programme Youth Representative, the Adora Svitak of the 2013 ECOSOC Youth Forum.



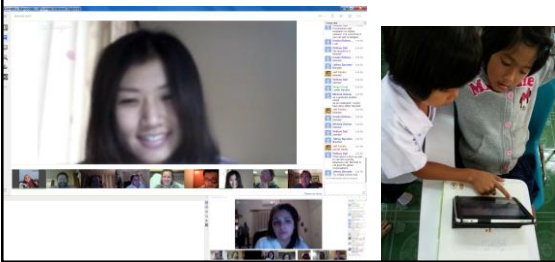
III. Learning is More Flipped

One Man, One Computer, 10 Million Students: How Khan Academy Is Reinventing Education, Forbes, November 19, 2013, Michael Noer
<http://www.forbes.com/sites/michaelnoer/2013/11/02/one-man-one-computer-10-million-students-how-khan-academy-is-reinventing-education/>
 The One World Schoolhouse (Twelve, Oct. 2, 2012)



IV. Learning also is More Collaborative

Collaboration and Discussion in Google Hangouts or with iPad, Jan. 28, 2013 (Carrie Gong from Beijing Normal University)



V. Learning is More Mobile

Open Learning on Smartphone (Coursera, December 8, 2013)

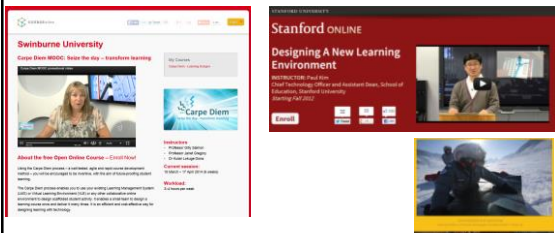
<http://blog.coursera.org/post/69518553384/this-holiday-season-learn-on-the-go-will-be-the-new>



March 2014

VI. Learning is More Massive

Courses on How to Design Learning Environments (Gilly Salmon, Swinburne University, Melbourne and Paul Kim from Stanford University, Aaron Doering, University of Minnesota)



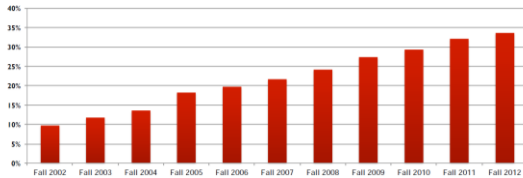
VII. Learning is More Social

Facebook reaches one billion users, CNN Money, Aaron Smith, October 4, 2012



January 2014
VIII. Learning is More Online
Grade Change: Tracking Online Education in the United States, 2013, The Sloan Consortium, I. Elaine Allen & Jeff Seaman, 2013 Survey of Online Learning Report
<http://sloanconsortium.org/publications/survey/grade-change-2013>
 Direct connect: <http://www.onlinelearningurvey.com/reports/gradechange.pdf>

ONLINE ENROLLMENT AS A PERCENT OF TOTAL ENROLLMENT: FALL 2002 - FALL 2012



IX. Learning is More Personal
iPotty Aims To Entertain Toddlers During Toilet Training, Mashable, Kate Freeman (January 10, 2013)
<http://mashable.com/2013/01/10/ipotty/>



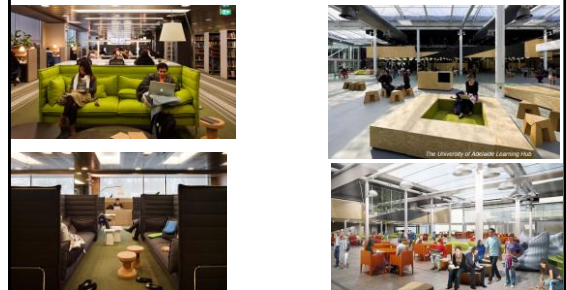
Mashable
 iPotty Aims To Entertain Toddlers During Toilet Training

X. Learning is More Modifiable
Inside Look: Learning Spaces, Meeting classroom teaching and collaboration expectations, University Business, Feb. 22, 2013
<http://www.universitybusiness.com/article/inside-look-learning-spaces>



XI. 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>



XII. Learning is More Global
UC Irvine (2013 report)

Example 3: Fundamentals of Japanese

Dr. Hidemi Riggs, Fall 2012 & Winter 2013, Tech-enhanced: [LIVE! Advanced Japanese \(Distance Learning\)](#), Skype video conferencing tool, Active Learning, Formats: 5 - 1A lectures (24 students maximum); 3 - 2A lectures (24 students maximum); 2 - 3A lectures (24 students maximum)



XIII. Learning is More Ubiquitous

Flexible displays bend what's possible for computers, Jon Swartz, USA Today (May 4, 2012)



IXV. Learning is More Instantaneous

April 9, 2013

HER Computer fashions face social test: Can wearable computers fit in? Scott Martin, USA Today
<http://www.usatoday.com/story/tech/2013/04/09/google-apple-switch-glass-jarvis-iphone-ike-microsoft-samsung/37916>
(i.e., magnify moles or injuries, see vital signs, live stream surgeries, access previous PT sessions, access research and drug info, etc.)
<http://www.futureofhealthcare.com/story/google-glasses-could-have-strong-potential-healthcare-use/2013-02-18>



XV. Learning is More Technology-Based

DataWind Prepared \$20 Tablet Computer for Indian Market

Jan 30, 2013 4:10 AM EST

A Canada-based company believes it can revolutionize education in India by rolling out a \$20 tablet computer.

Share 125 Like 275 Tweet 140

What can you buy for \$20? A lunch for two? A new shirt? A few groceries? For India's 220 million schoolchildren, \$20 may soon buy a tablet computer.



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."

Poll #3: Is this a revolution in education today?

A. Yes...

B. No...



April 15, 2013 World will soon be "Webified"

Google boss: Entire world will be online by 2020, Doug Gross, CNN

http://www.cnn.com/2013/04/15/tech/web/eric-schmidt-internet/index.html?hgt=hp_13

Google boss: Entire world will be online by 2020



Google Wi-Fi from the Sky, Steven Levy, pp. 126-131, Wired, September 2013

<http://www.wired.com/gadgetlab/2013/08/googlex-project-loon/>



Google X chief Astro Teller (left) and Project Loon's first leader, Rich DeVaul, holding the system's ground-based antennas.

The World is very open! (at least in Norway and the Philippines)

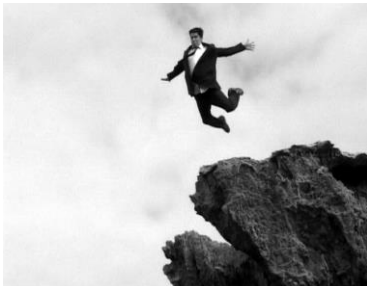


January 29, 2014 Maybe it is not so open!

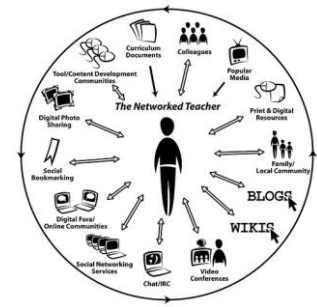
(e.g., MOOCs and the Promise of Internationalization,
The Chronicle of Higher Education, Christina C. Davidson)

<http://chronicle.com/View/FullStory/20140129/moocs-and-the-promise-of-internationalization?cid=ipr&ipr=education>

We are entering a jumping off point...



The Web of Learning



Framework #1: WE-ALL-LEARN: Ten Forces that Opened the Learning World



- **W**eb Searching in the World of e-Books (i.e., Darwin)
- **E**-Learning and Blended Learning
- **A**vailability of Open Source and Free Software (e.g., Moodle)
- **L**everaged Resources and OpenCourseWare (e.g., MIT)
- **L**earning Object Repositories and Portals (i.e., shared content)
- **L**earner Participation in Open Info Communities (YouTube)
- **E**lectronic Collaboration and Interaction (sync and async)
- **A**lternate Reality Learning (Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)
- **R**ead-Time Mobility and Portability (e.g., iPhone)
- **N**etworks of Personalized Learning (Blogs, RSS)



Audience Participation!

WE

ALL

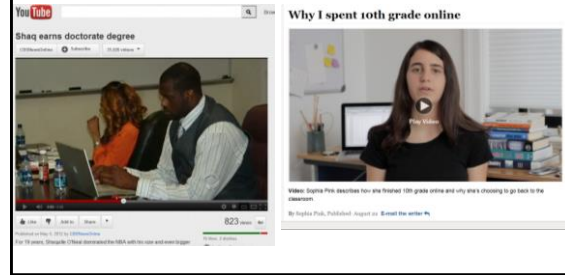
LEARN!!!



Opener #1. Web Searching (e.g., Google, MSN, Yahoo!) in the World of e-Books (i.e., Darwin, Shakespeare, etc.)

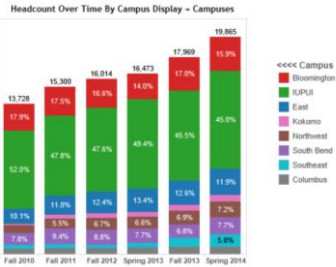


Opener #2. E-Learning and Blended Learning

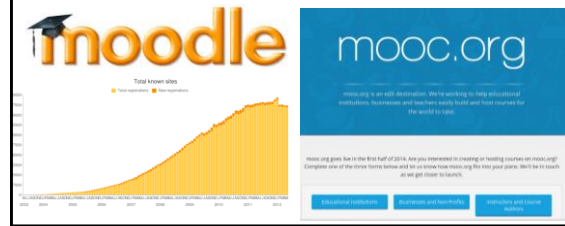


February 2014 IU Online Enrollments (at least one class online)

http://public.iuhouseofwolves.com/Views/Students/AllIUXOnlineClass/Dashboard/AllIUXOnlineCamped-ykdisplay_count.asp



Opener #3. Availability of Open Source and Free Software Moodle (July 18, 2013: 72 million users in 237 countries, 84,518 sites, 7.6 million courses)



Opener #4. Leveraged Resources and OpenCourseWare (OCW) (e.g., free courses from Harvard Edx, MITx, CORE, OOPS)

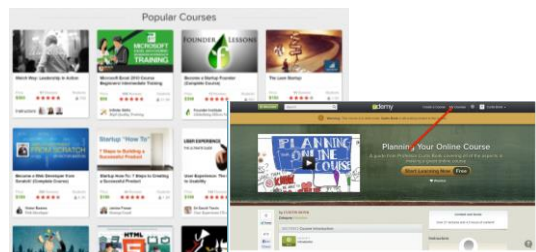
Saylor.org: <http://www.saylor.org/>
RedHoop: <http://redhoop.org/>



OOPS
OOPS! Opensource OpenCourseware Prototype System
The Foundation of Fantasy Culture and Arts

November 4, 2012 Udemy (professors create own courses) (e.g., "Planning Your Online Course")

<https://www.udemy.com/courses/>



Opener #5. Online Learning Object Repositories and Portals (shared content)

<http://www.deedseascrolls.org/ii/explore-the-archive>
http://www.deedseascrolls.org/ii/explore-the-archive/search?q=site_en:Quimran_Cave_4
<http://www.deedseascrolls.org/ii/home>

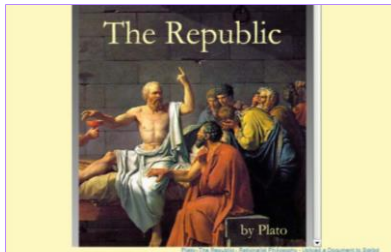


October 2010, The V-PORTAL (Bonk, IU) "Video Primers in an Online Repository for e-Teaching and Learning" V-PORTAL, TravelinEdMan (27 free/open YouTube videos)

<http://www.youtube.com/user/TravelinEdMan>



Opener #6. Learner Participation in Open Information Communities (e.g., Wikipedia, YouTube, Scribd)



WIKIPEDIA
The Free Encyclopedia

Opener #7. Electronic Collaboration and Interaction (synchronous & asynchronous)

Soliya Connect

<http://gli.georgetown.edu/#soliya>



Opener #8. Alternate Reality Learning (Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)

Video games may improve brain power in older adults

<http://www.usatoday.com/story/news/nation/2013/09/04/video-games-brain-power-dementia/2762523/>



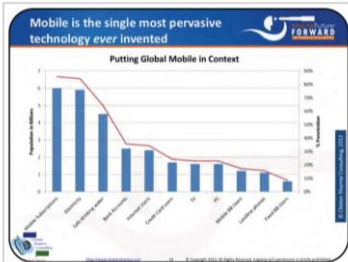
Opener #9. Real-Time Mobility and Portability (e.g., iPhone, iPads, smart watches (September 4, 2013))

The Samsung Galaxy Gear smartwatch

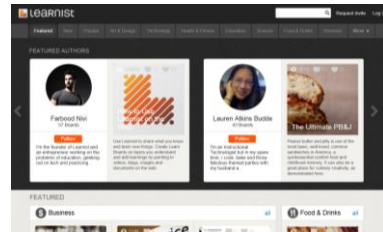


Mobile is the Most Pervasive Technology Ever

Judy Brown, Keynote talk, "Learning in Hand With Mobile Technology," Wisconsin Distance Teaching and Learning Conference, August 10, 2012



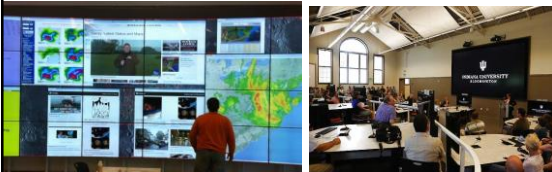
Opener #10. Networks of Personalized Learning (Blogs, Podcasts, Facebook, and RSS feeds, etc.)



May 22, 2013

Video Walls of Experts (IQ Wall) Indiana University unveils high-tech classroom The Herald-Times, Mike Leonard

<http://www.indianaconsumerquest.com/main.asp?sectionID=315&subSectionID=135&nodeID=6998>



What about the Instructor in the Open World?



Instructor as Curator



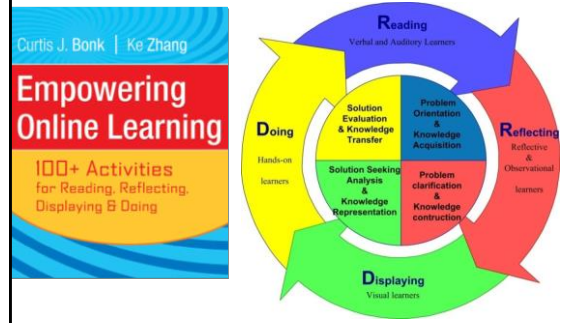
Instructor as Concierge



How can technology address diverse learner needs?



Framework #2: The R2D2 Model



The R2D2 Method

1. Read (Auditory and Verbal Learners)
2. Reflect (Reflective Learners)
3. Display (Visual Learners)
4. Do (Tactile, Kinesthetic, Exploratory Learners)



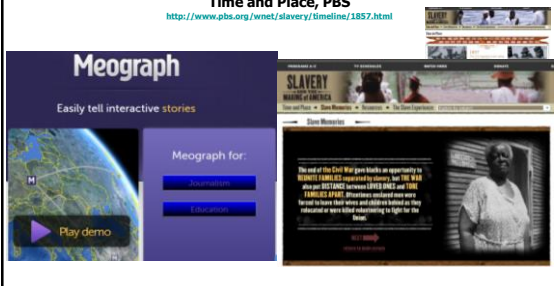
1. Auditory or Verbal Learners

- Auditory and verbal learners prefer words, spoken or written explanations.



Read 1a. Collect and Listen to Interactive Stories

(e.g., Meograph: <http://www.meograph.com/>)
Timelines with Oral Histories, Slavery and the Making of America
Time and Place, PBS
<http://www.pbs.org/wnet/slavery/timeline/1857.html>



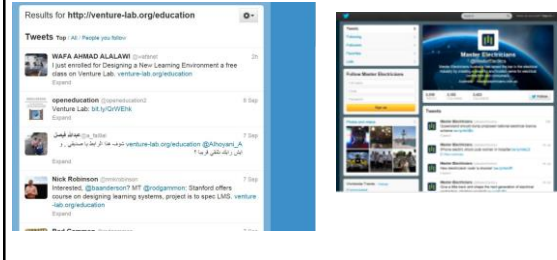
Read 1b. Grammer Checkers (e.g., Grammarly, Ginger, GrammarCheck, PaperRater, and SpellCheckPlus)

<http://www.grammarly.com/>



Read 1c. Follow on Twitter

<http://venture-lab.org/education>
<https://twitter.com/electricians>



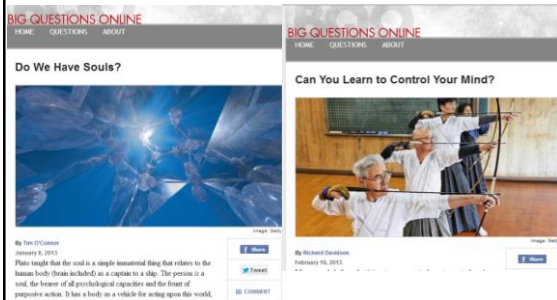
2. Reflective and Observational Learners

- Reflective and observational learners prefer to reflect, observe, view, and watch learning; they make careful judgments and view things from different perspectives



Reflect 2a. Big Issue Reflections (Big Questions Online (BQO)), January 8, 2013 (e.g., Do We Have Souls?)

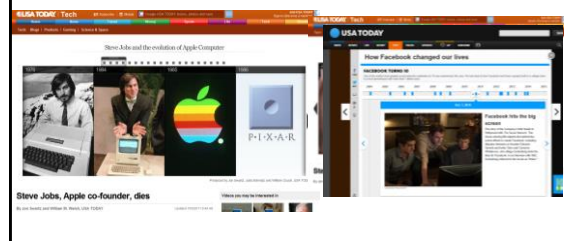
<https://www.bigquestionsonline.com/content/do-we-have-souls>



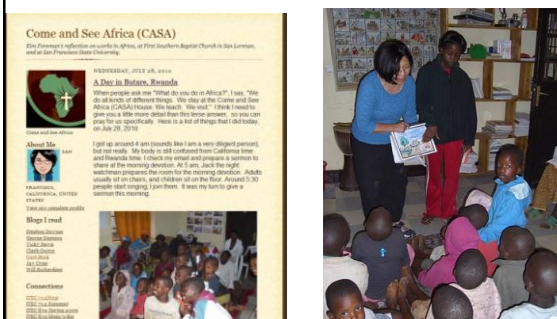
Reflect 2b.

Reflect on Virtual Timelines (Dipity, xtimeline, Simile, etc.)

<http://www.usatoday.com/story/tech/2014/02/02/facebook-timeline-cultural-impact/506729/>
<http://www.usatoday.com/tech/news/story/2011-09-22/steve-jobs-dies/50672498/1>
<http://www.usatoday.com/news/destinations/story/2011-08-25/Martin-Luther-King-3-Memorial-in-Washington-A-close-look/5113472/1?cap=2-Mem>

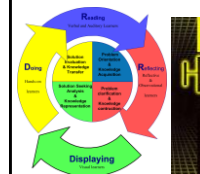


Reflect 2c. Cultural Blogs (e.g., Dr. Kim Foreman, San Fran State University, Come and See Africa Blog; <http://comeandseeafrica.blogspot.com/>)

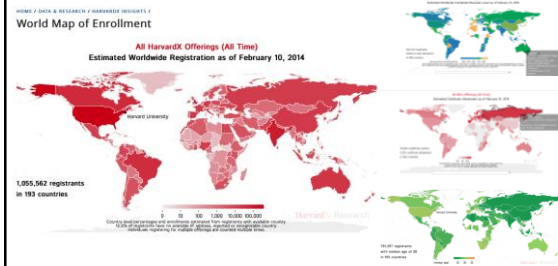


3. Visual Learners

- Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.



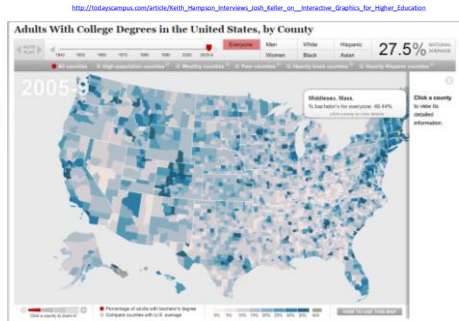
Display 3a. Data Visualization Tools
(Harvard and MIT MOOCs) Lawrence Biemiller,
 February 20, 2014, Chronicle of Higher Education
<http://chronicle.com/blogs/conversation/entry/visualizing-harvard-mit-mooc-enrollment-20140220>



Display 3b. Videos for clinical education
 (Sungkyunkwan University School of Medicine,
www.mededu.or.kr)



Display 3c. Interactive Map Timelines
 (adults with college degrees by county, May 7, 2012)



4. Tactile/Kinesthetic Learners

- Tactile/kinesthetic senses can be engaged in the learning process are role play, dramatization, cooperative games, simulations, creative movement and dance, multi-sensory activities, manipulatives and hands-on projects.



Do 4a. Student Class Documentaries
 Umida's R546 Documentary Project
http://www.youtube.com/watch?v=EMLTzqCV_5A



Do 4b. Uploading Mobile Books
 (e.g., BookRix, <http://www.bookrix.com/>)



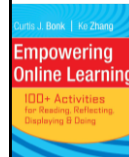
Do 4c. Student Mobile App Creation

The App Builder: <http://www.theappbuilder.com/>
Mintian Guo (April 2013): <http://myapp.is/r685final>

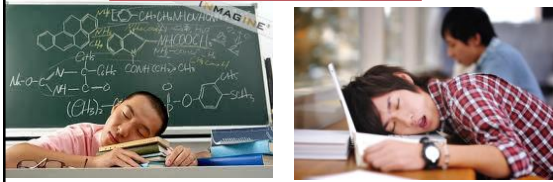


Poll #4: What phase of the R2D2 Method do you like best?

- A. Read (Auditory and Verbal Learners)
- B. Reflect (Reflective Learners)
- C. Display (Visual Learners)
- D. Do (Tactile, Kinesthetic, Exploratory Learners)



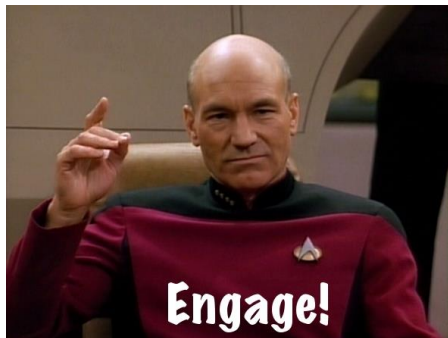
How do we engage online?



What did Jean-Luc Picard say?



That's right, Engage!



Ok, Million Dollar Question: What words come to mind when I say that I want to motivate learners?



Motivation Research Highlights (Jere Brophy, Michigan State University)

1. **Supportive**, appropriate **challenge**, **meaningful**, moderation/optimal.
2. Teach **goal** setting and self-reinforcement.
3. Offer **rewards** for good/improved performance.
4. Novelty, **variety**, **choice**, adaptable to interests.
5. Game-like, **fun**, fantasy, curiosity, suspense, active.
6. Higher levels, divergence, dissonance, **peer interaction**.
7. Allow to create finished **products**.
8. Provide immediate **feedback**, advance organizers.
9. Show intensity, **enthusiasm**, interest, minimize anxiety.
10. Make content **personal**, concrete, familiar.



Intrinsic Motivation



“...innate propensity to engage one’s interests and exercise one’s capabilities, and, in doing so, to seek out and master optimal challenges
(i.e., it emerges from needs, inner strivings, and personal curiosity for growth)

See: Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. NY: Plenum Press.



Framework #3: TEC-VARIETY for Online Motivation and Retention

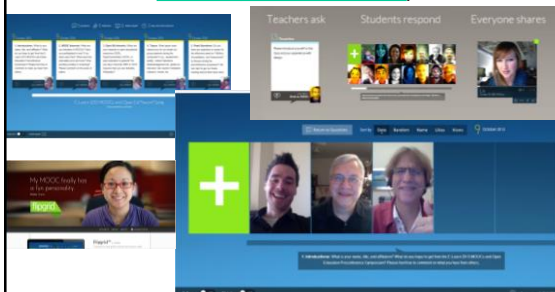
1. **Tone/Climate**: Psych Safety, Comfort, Belonging
2. **Encouragement, Feedback**: Responsive, Supports
3. **Curiosity**: Fun, Fantasy, Control
- ...
4. **Variety**: Novelty, Intrigue, Unknowns
5. **Autonomy**: Choice: Flexibility, Opportunities
6. **Relevance**: Meaningful, Authentic, Interesting
7. **Interactive**: Collaborative, Team-Based, Community
8. **Engagement**: Effort, Involvement, Excitement
9. **Tension**: Challenge, Dissonance, Controversy
10. **Yields Products**: Goal Driven, Products, Success, Ownership

Examples of TEC-VARIETY



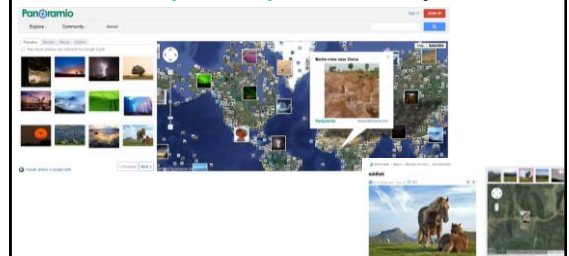
1. Tone/Climate: A. Video Introductions, e.g., Flipgrid

<http://flipgrid.com/#429f88c5>



1. Tone/Climate: B. Share Visuals of Favorite Places

(e.g., Panoramio, <http://www.panoramio.com/>)



2. Encouragement, Feedback, etc.: A. Voice Feedback

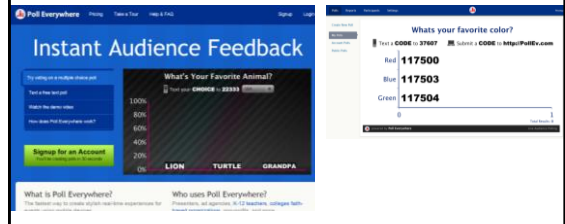
Vocaroo; <http://vocaroo.com/>
<http://vocaroo.com/i/s1Rx6glU8rfd> (Suan Dosit)



2. Encouragement, Feedback, etc.: B. Blog and Website Polling

(e.g., Poll Everywhere, BlogPolls, BlogPoll, MicroPoll)

<http://www.pollerywhere.com/>



3. Curiosity, Fun: A. Tracking the Life of a Scientist

(e.g., Brian J. Ford, independent scientist)

<http://www.youtube.com/user/tellymonitor#p/a/u/1/LhGeApsKjasr>
<http://www.labnews.co.uk/news/prehistoric-revolution/>

LaboratoryNews



3. Curiosity, Fun: B. Something in the News

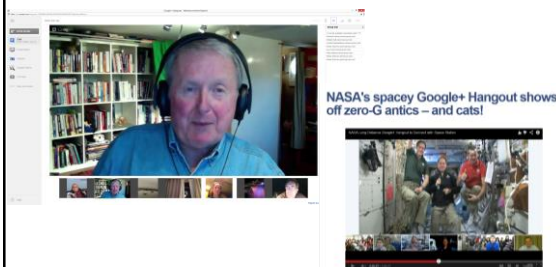
(e.g., Fauja Singh, 101, finishes last race, February 24, 2013)
http://espn.go.com/sports/endorurance/story/_/id/8979487/fauja-singh-101-cape-carew-10k-hong-kong

Fauja Singh, 101, finishes last race



4. Variety, Novelty, Fun: A. External Guests

(e.g., Jay Cross, Internet Time Group)



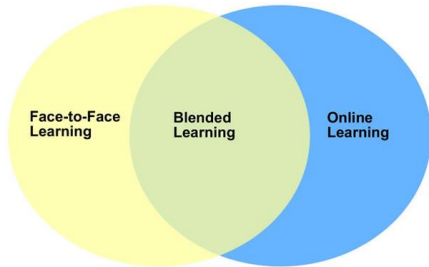
5. Autonomy, Choice: A. Demonstrate, Explore, and Share Websites

Commonwealth of Learning, March 2013

http://www.col.org/news/Connections/2013Mar/Documents/Connections_March2013.pdf



Answer: Blended Learning



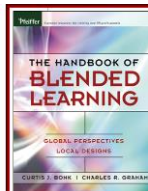
What I will discuss...

1. Definitions of blended learning
2. Myths of blended learning
3. Models of blended learning
4. Examples of blended learning



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

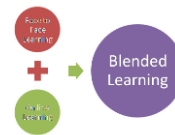
1. Improved Pedagogy
 - More interactive instead of transmissive
 - Authentic, real world, etc.
2. Increased Access/Flexibility
3. Increased Cost Effectiveness



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

Blending Online and F2F Instruction

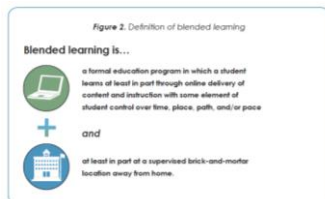
“Blended learning refers to events that combine aspects of online and face-to-face instruction” (Rooney, 2003, p. 26; Ward & LaBranche, 2003, p. 22)



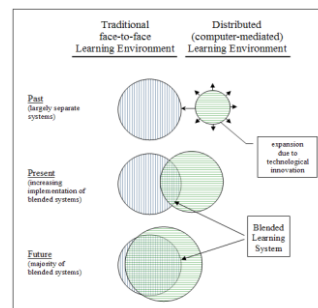
Classifying K-12 Blended Learning

Heather Staker and Michael B. Horn, May 2012
<http://www.projectred.org/uploads/The-Rise-of-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)

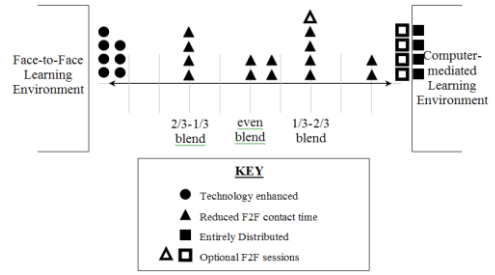


Myth #4: People will know what I am saying when I say "blended learning."
Myth #5: Blended is the same as "hybrid."
The Sloan Consortium

Proportion of content delivered online	Type of Course	Typical Description
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

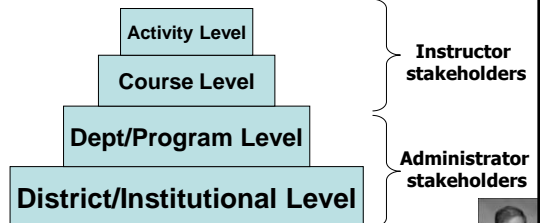
1. Increased Learning (better papers, higher scores)
2. More effective pedagogy and interaction
3. Course access at one's convenience and flexible completion (e.g., multiple ways to meet course objectives)
4. Reduction in physical class or space needs, commuting, parking, etc.
5. Increased opportunities 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:

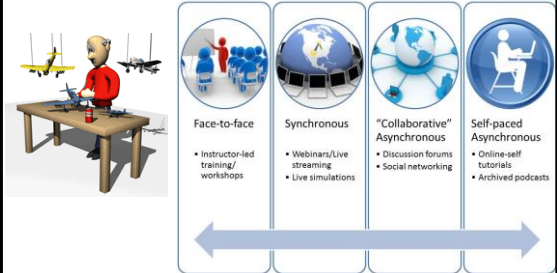


Myth #10: There is a best model of blended.
**AMA Special Report, Effectively
 Implementing a Blended Learning Approach**
 (Steven Shaw & Nicholas Igneri, 2006)



Source: American Management Association, AMA at Work

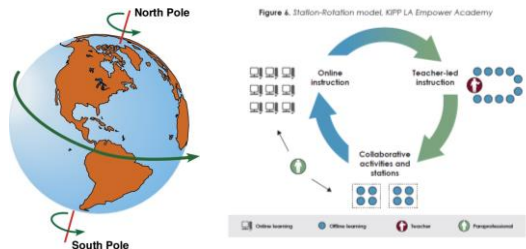
7 Blended Learning Models



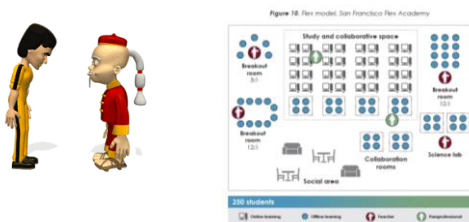
Blended Model #1. Face-to-Face Primary
 (online is for remediation of supplement)



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



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

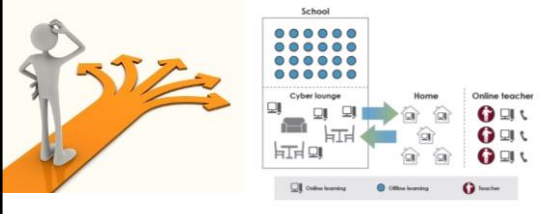


Blended Model #4. Online Lab
 (lab or field experience component of course is online)



Blended Model #5. Self-Blend (students decide on which courses they take online or which portion of the course is online)

Figure 11. Self-Blend model. Quakerstown Community School District



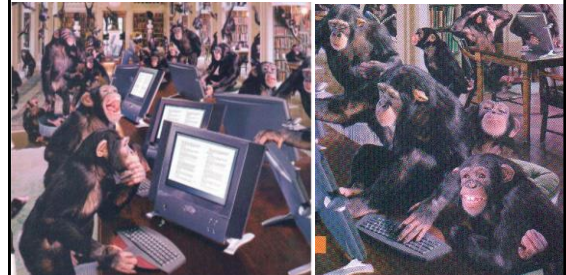
Blended Model #6. Bookend (first and last part of the course is online and middle portion is FTF; AMA Special Report, Blended Learning Opportunities, Alison Rossett (2006))



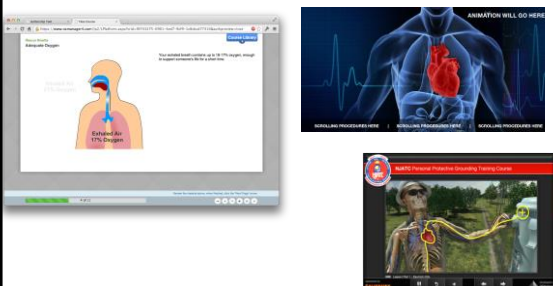
Blended Model #7. Anchor (start with FTF or what students are familiar with and then move to online)



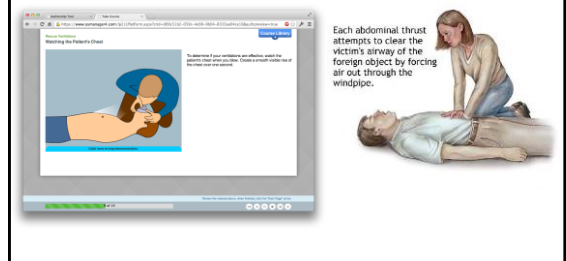
15 Blended Learning Examples



Blended Solution #1. Concept Animations



Blended Solution #2. Concept Demonstrations



Blended Solution #9. Anchor Course Concepts and Activities in Brief Shared Online Videos

Dealing with Burn Injuries

Electrical Wiring

Electrical Industry Network 113 views

Blended Solution #10. Mobile Apps for the other training and resources

People First Aid Procedures

Step 5

Respiratory Emergency
Poisons Heat Related
Medical Problems Cuts/Wounds
Cold Related Burns/Scalds
A-Z AID

Repeat 30 compressions and 2 rescue breaths.
Return to the chest and provide ongoing cycles of 30 compressions and 2 rescue breaths.

Time/Warnings

Blended Solution #11. Comparison and Contrast Maps (e.g., New USDA climate zone map reflects northward warming trends, By Janice Lloyd, USA TODAY, January 26, 2012) <http://www.usatoday.com/news/nation/environment/story/2012-01-26/USDA-climate-zone-map/52787142/1>

New USDA climate zone map reflects northward warming trends

General Embryology
Development of the Head and Neck
Development of the Limbs
Urinary and Reproductive Embryology

Blended Solution #12. Human Embryology Animations (Valerie O'Loughlin, Indiana University)

Human Embryology Animations

General Embryology
Development of the Head and Neck
Development of the Limbs
Urinary and Reproductive Embryology

Development of the
limbs and
Genetic control

fetal period

Blended Solution #13. Concept Mapping and Timeline Tools (VUE, Bubbl.us, Cmap, Freemind, Gliffy, Mindmeister, or Mindomo)

Inspiration

Now Available!
Inspiration Maps
for iPad

bubbl.us

Critical thinking
Cooperative learning
Creativity
Motivation
Brainstorming

Blended Solution #14. Survey Research and Market Analysis (e.g., SurveyShare, Zoomerang, SurveyMonkey)

SurveyMonkey

Create Surveys. Get Answers. Start Today

Design Collect Analyze

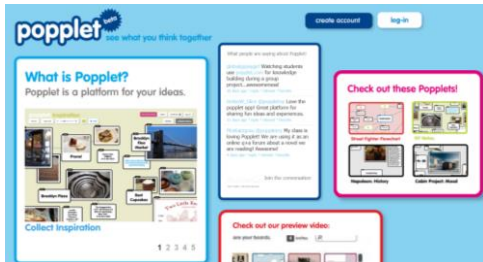
Need to Reach a Targeted Audience?

Surveys Made Easy

Electrician Median Wage By State

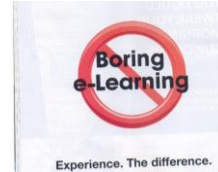
SurveyShare

Blended Solution #15.
Student Collaborative Knowledge Building and Sharing
 (e.g., Popplet: <http://popplet.com/>)



Again, this talk covered...

1. 1 Definition of blended learning
2. 10 Myths of blended learning
3. 7 Models of blended learning
4. 15 Examples of blended learning



December 13, 2013
Former MIT president Charles M. Vest dies at 72
As the Institute's leader from 1990 to 2004, he
sparked a period of dynamism.
Steve Bradt, MIT News Office

<http://web.mit.edu/newsoffice/2013/former-mit-president-charles-m-vest-dies-at-72-1213.html>



Former MIT president Charles M. Vest dies at 72
 As the Institute's leader from 1990 to 2004, he sparked a period of dynamism.

Steve Bradt '87 News Office



Any Questions?

Try the R2D2 Model!
Try TEC-VARIETY too...



Slides at: TrainingShare.com

Papers: PublicationShare.com

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

Dr. Curt Bonk – CJBonk@Indiana.edu

