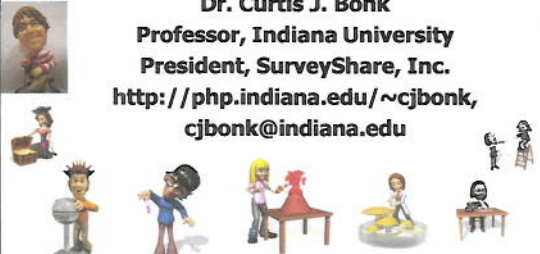



Best Practices for Online Learning: R2D2 the TEC-VARIETY

Dr. Curtis J. Bonk
 Professor, Indiana University
 President, SurveyShare, Inc.
<http://php.indiana.edu/~cjbbonk>,
cjbbonk@indiana.edu




21 Things That Became Obsolete This Decade

December 11, 2009, Silicon Alley Insider



15 Gadgets that Changed Everything This Decade

December 9, 2009, Jay Yarow, Silicon Alley Insider




Yonsei University, Seoul, Korea



Technology for Learning Expands

College tech 'catching up' with students
 Kathleen Gray & Robin Erb, USA TODAY, Oct. 6, 2009




Senior Emily Smak, 20, tries out the treadmill workstation in one of the study lounges in the new Education and Human Services Building at Central Michigan University. There is a new iMac computer attached to it so students can get a little exercise while doing homework or other things on the computer.

Mobile Learning and Blended Learning Exploding

College tech 'catching up' with students
 Kathleen Gray & Robin Erb, USA TODAY, Oct 6, 2009

- At Abilene Christian (University)...about 2,800 students and 70% of the 250 professors use the Apple technology for instructional purposes.
 - Art students use app to draft sketch and send it to the teacher and other students for advice before starting the real art pieces.
 - A drama teacher takes video of the lead dancer in a production and sends that along to other students for rehearsal.



Verdict is in on Apple iPad: It's a winner, Edward Baig, April 1, 2010

First iPad buyers excited, curious
By Brandon Griggs and John D. Sutter, CNN, April 3, 2010

Seton Hill University, 2,100 students. All fulltime students get an iPad and Incoming freshmen will also receive a 13-inch MacBook laptop, April 2010.

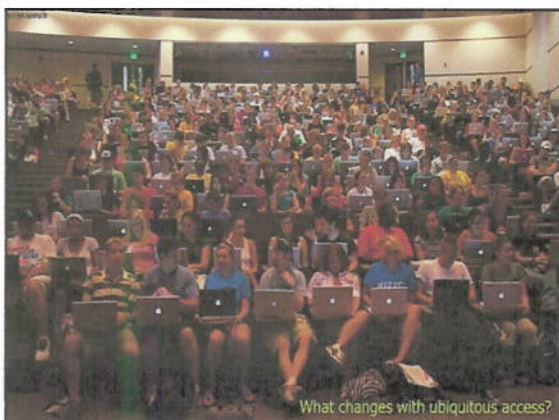
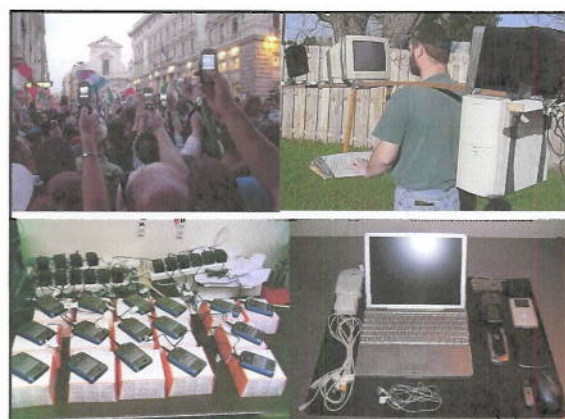
An iPad for Everyone

Seton Hill University will give a new Apple iPad to every full-time student in fall 2010.

More to know: The Philadelphia-based office of University Center Technology Advantage Program, the leading provider of digital content for technology and educational institutions, explains that Seton Hill students will be among students all across the country who will benefit from the program.

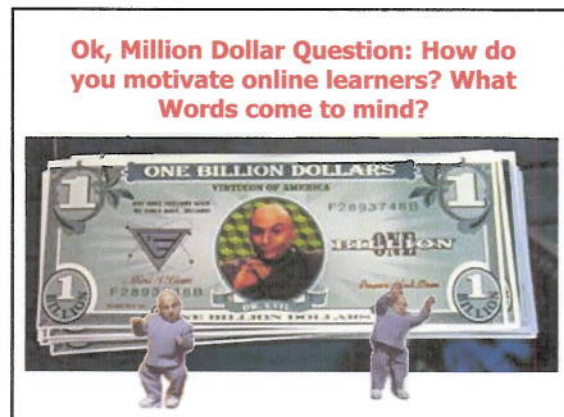
For more information on the Seton Hill Technology Advantage program, please visit the website: www.setonhill.edu/technology.

Continued on next slide.



Part I. Some Online Motivational Ideas

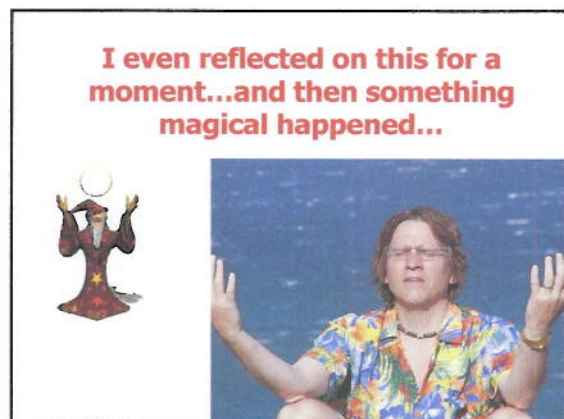
THE ECONOMY OF SUCCESS STRATEGIES • JANUARY 25, 2010



Intrinsic Motivation

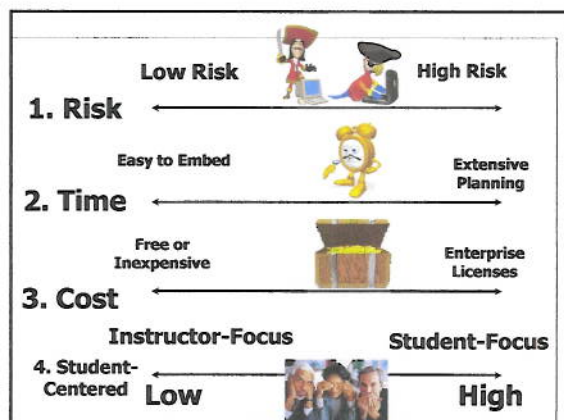
“...innate propensity to engage one’s interests and exercise one’s capabilities, and, in doing so, to seek out and master optimal challenges
(i.e., it emerges from needs, inner strivings, and personal curiosity for growth)

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



Magic #1: TEC-VARIETY Model 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



1. Tone/Climate: Social Ice Breakers

A. Public Commitments:

Have students share how they will fit the coursework into their busy schedules



B. Favorite Websites

1. Everyone posts 1-2 of their favorite Websites and explain why.
2. Peers comment on or rate them.



1. Tone/Climate: C. Video Course Intros (examples from Northern Virginia Community College and Indiana University KD (online MBA) program)



2. Encouragement, Feedback, etc.:

A. Online Self-Testing (e.g., self study in vocabulary, anatomy, chemistry, dissection, etc.)

Upper Extremity Muscles



Which of the following are ANTONYMS for the word MAXIMUM?

- A. clear, understandable, fatemorable, unrightful
- B. non-phazy, twofold, proun
- C. ritain, withhold, keep, bold
- D. make happy, cheer, assure, please
- E. smaller, least, minimum, lesser

A B C D

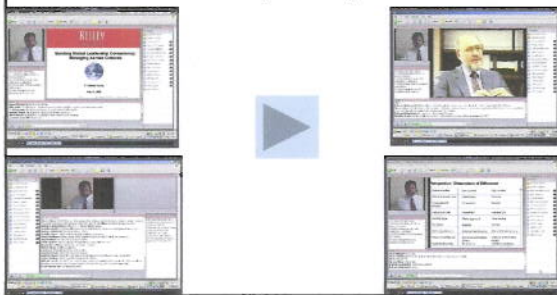


2. Encouragement, Feedback, etc.:

B. Tutorials with Screen Capture (e.g., Jing, Screener)



2. Encouragement, Feedback, etc.:
c. Instructor Presentation in Synchronous Sessions (Breeze/Adobe Connect Pro, Elluminate, WebEx, Dim Dim)



3. Curiosity, Fun:

A. Online News (Giant jellyfish, Tiny T. rex, and Ardi)



3. Curiosity, Fun: B. Online Games
(e.g., public health; the POD game Points-of-Dispensing (PODs))

4. Variety, Novelty:
A. Cool Resource Provider or Tech Demos

- Have students sign up to be a cool resource provider once during the semester.
- Have them find additional paper, people, electronic resources, etc.
- Share and explain what found with class.

PS40 Cool Resource Provider and Moderator Sign Up Sheet

4. Variety, Novelty:
B. Expert Chats

1. Agree to a weekly chat time.
2. Bring in expert for discussion or post discussion topics or issues.
3. Summarize or debrief on chat discussion.

4. Variety, Novelty: C. Synchronous Session with Guest Expert

4. Variety, Novelty:
D. Online Referenceware

5. Autonomy, Choice: A. Online Literature Search (Class Google Jockeys)
(links to text, soundtracks, video clips, etc.)

5. Autonomy, Choice:
B. Famous Person Web Explorations, Searches, Twitter Tracking, and Interviews
 (e.g., Thomas Friedman, NY Times reporter)

The screenshot shows a web page for Thomas L. Friedman. On the left, there is a video player with the title "Intro: What is the Flat World?". On the right, there is a Twitter feed with several tweets. The page also features a navigation menu and a search bar.

5. Autonomy, Choice:
C. Online Cases (e.g., Mark Braun, IU)

The screenshot displays an online pathology case study interface. It includes a list of cases on the left, a central area with a list of 20 numbered cases, and a right-hand panel with microscopic images and a list of 10 cases. The interface is designed for interactive learning and case review.

6. Relevance, Meaningfulness:
A. 60 Second Recap, Jenny Sawyer
<http://www.60secondrecap.com/>
 Access to students: Lend me your earbuds!
 English major, 24, rambunctiously recaps the classics in 60-second Web videos; By Greg Toppo; USA TODAY, September 2009

The screenshot shows the 60 Second Recap website. It features a video player with a woman speaking, a list of recaps for various books, and a navigation menu. The website is designed to provide quick, accessible summaries of classic literature.

6. Relevance, Meaningfulness:
B. Online Simulations and Demonstrations
 (e.g., self study in anatomy or chemistry, virtual autopsy, dissection, etc.)

The screenshot displays an online simulation interface. It includes a central area with a diagram of a human body, a list of simulation options, and a right-hand panel with images of a virtual dissection. The interface is designed for interactive learning and self-study.

7. Interactive, Collaborative:
A. Online Language Learning
 (ECpod, Mixxer, Livemocha, Babbel, KanTalk)

The screenshot shows an online language learning interface. It features a video player with a woman speaking, a list of language learning options, and a navigation menu. The website is designed to provide interactive and collaborative language learning experiences.

7. Interactive, Collaborative:
B. Collaborative Groups (Ning, Google Groups, MSN Groups, Yahoo Groups, Diigo)

The screenshot displays a Ning collaborative group interface. It includes a list of group members, a search bar, and a navigation menu. The interface is designed for collaborative learning and group interaction.

9. Tension, Challenge, etc.: A. Ethical Medical Debates

Students to protest human body exhibit

Maggie Ybarra
Issue date: 25/02 Section: News

Plasticized human corpses will be on display inside Curatorial Center through May.

But a group of UHM medical students says it will protest the exhibit because it's

9. Tension, Challenge, etc.: B. Electronic Guests & Mentoring

(Simon Fraser University News:
<http://www.sfu.ca/mediasprts/news/2001/Sept6/hightech.html>)

10. Yields Products, Goals: A. Student YouTube Products

<http://www.youtube.com/watch?v=xiwS1ryPzsQ>
http://www.youtube.com/watch?v=x3FJy4Pn_E
<http://www.youtube.com/watch?v=eD1awpaSuP0>

Poll #1: How many ideas did you get so far?

- 0 if I am lucky.
- Just 1.
- 2, yes, 2...just 2!
- Do I hear 3? 3!!!!
- 4-5.
- 5-10.
- More than 10.

99 seconds: What have you learned so far?

- Solid and Fuzzy in groups of two to four

II. Addressing Diverse Learners

Magic #2: The R2D2 Model

Empowering Online Learning

100+ Activities for Reading, Reflecting, Displaying & Doing

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. Publishing in Open Access Journals (e.g., PLOS)

Read 1b. Course Announcements (e.g., Teaching with Twitter)

Read 1c. Podcast Paper Reflections

Read 1d. Podcasting Medical Lectures (School of Dentistry, Univ of Michigan)
 Educause Quarterly, 29(3), 2006,
<http://connect.educause.edu/Library/EDUCAUSE+Quarterly/PodcastingLectures/39987>

The image shows a screenshot of an iTunes library with a list of podcasts. To the right, there is a diagram titled 'Audio Acquisition via Computer' showing a flow from a computer to a speaker. Below that is a diagram titled 'Instructional Design Process' showing a circular flow between 'Design', 'Development', 'Implementation', and 'Evaluation'.

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

The image features a circular diagram with four quadrants labeled 'Design', 'Development', 'Implementation', and 'Evaluation'. To the right of the diagram are three photographs of people: a person in a blue jacket, a man in a yellow shirt, and a woman in a white lab coat.

Reflect 2a. Critical Friend Blog Postings

The image shows two screenshots of blog posts. The first is titled 'My Weblog chapter is just hanging there' and the second is titled 'Education at Facebook'. Both posts contain text and small images.

Reflect 2b. Expert and Domain Specific Blogs (English Teacher Blogs)

The English Blog

The image shows a screenshot of a website titled 'The English Blog'. It features a 'Film of the Week' section with a poster for the movie 'THIS IS IT' and a 'Google' search bar.

Reflect 2c. Analyze Online Cases (problems, solutions, etc.)

The image shows a screenshot of a website with a header that reads 'Making The Power Of Medical Education - Being'. The page contains text, images of medical professionals, and a diagram of a person's head.

Reflect 2d. Workplace and Field Reflections

The image is a collage of several photographs showing medical professionals in various settings, including a hospital room, a classroom, and a group of people.

Reflect 2e. Watch or Listen to Online Conferences

TSC-VARIETY Model for Online Motivation and Retention

- Topic-Close
- Encouragement, Feedback, Curiosity
- Variety
- Autonomy
- Interference
- Engagement
- Trust
- Visible Products

Reflect 2f. Expert Video Reflections and Scaffolds online (E-Reading First Ohio; reflect, share, and compare)

Psychiatric Interviews

3. Visual Learners

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

Display 3a. Pubcasts! (videos of scientific papers and science)

NSF, the Public Library of Science, and the San Diego Supercomputing Center created a YouTube for scientists to help demystify important research papers. See SciVee

Display 3b. Anchored Instruction Discussions (YouTube, CNN, BBC, TeacherTube, CurrentTV)

- In a synchronous lecture interrupt it with a summary video (could be a movie clip) explaining a key principle or concept.
- Refer back to that video during lecture.
- Debrief on effectiveness of it.

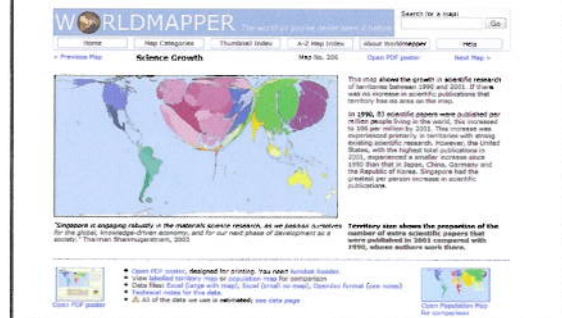
Display 3c. Adventure Learning

Australian adventurer Don McIntyre and teenage circumnavigator Mike Perham to re-enact Capt William Bligh's epic mutiny on the Bounty open boat voyage, September 9, 2009

Display 3d. Concept Mapping and Timeline Tools (VUE, Bubbl.us, Cmap, Freemind, Glify, Mindmeister, or Mindomo)



Display 3e. World Trends and Indices (e.g. Worldmapper)



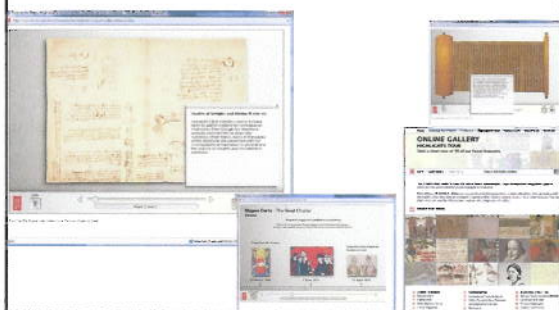
Display 3f. United Nations Opens World Digital Library, April 21, 2009
Chronicle of Higher Ed, <http://www.wdl.org/en/>



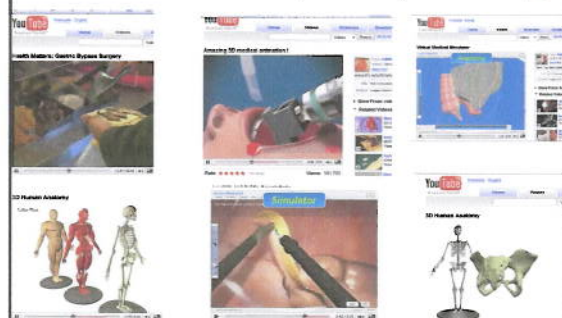
Display 3g. Shared Online Video (e.g., Howcast, WonderHowTo, Clip Chef, Link TV, Fora TV, etc.)



Display 3h. Online Historical Document (e.g., Turning The Pages, British Library)



Display 3i. Medical Animations and Videos (find anchoring event (YouTube, CNN, BBC, TeacherTube, CurrentTV))



Display 3j. Online Timelines (US Presidents)

This screenshot shows a digital timeline interface for US Presidents. It features a grid of small portraits on the left and larger, detailed profiles on the right. Two profiles are visible: one for Sarah Lee and another for William Jefferson Clinton, each with a circular portrait and biographical text.

Display 3k. Videos of the Periodic Table

This screenshot displays a website titled "THE PERIODIC TABLE OF VIDEOS". It features a grid of periodic tables, each with a small video thumbnail overlaid on it. The thumbnails show various people and laboratory equipment, suggesting educational videos for each element.

Display 3L. Online History Portals and Resources (Civil Rights Digital Library and Amistad)

This screenshot shows the homepage of the Civil Rights Digital Library. It includes a "Welcome to the Civil Rights Digital Library" message, a list of "BASIC SERVICES" such as Home, Search, and About, and a section for "AMISTAD" with a portrait of a man.

Display 3m. Human Embryology Animations (Valerie O'Loughlin, Indiana University)

This screenshot shows a website titled "Human Embryology Animations" by Valerie O'Loughlin. It features several diagrams and text boxes explaining embryonic development. One diagram shows a developing fetus, and another shows a cross-section of an embryo with labels for different parts.

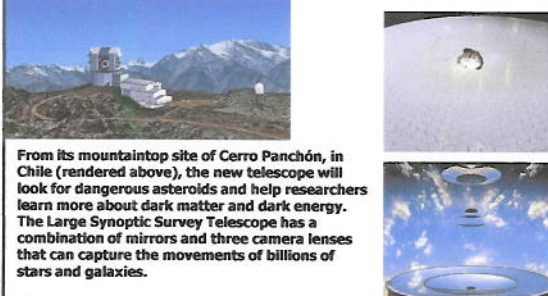
Display 3n. Download and Use Online 3D Sketches (Google SketchUp; download <http://sketchup.google.com/3dwarehouse>)

This screenshot shows the Google 3D Warehouse website. It displays a 3D model of a bridge structure. The page includes a search bar, navigation options like "Image" and "Map", and a "Download Model" button.

Display 3o. Indexing Sounds in Cities with Google Maps

This screenshot shows a Google Maps interface with several red sound icons overlaid on a city map. To the right, there is a video player showing a person speaking, likely related to the "Indexing Sounds in Cities" project.

Display 3p. Space Portals (e.g., A New Motion Picture of the Universe, With Free Admission for Colleges Large and Small, By Ben Terris, Chronicle of HE, Feb 7, 2010)



From its mountaintop site of Cerro Panchón, in Chile (rendered above), the new telescope will look for dangerous asteroids and help researchers learn more about dark matter and dark energy. The Large Synoptic Survey Telescope has a combination of mirrors and three camera lenses that can capture the movements of billions of stars and galaxies.

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. Wikibooks: International Collaboration (Web 2.0 and Emerging Learning Technologies (The WELT))

Web 2.0 and Emerging Learning Technologies

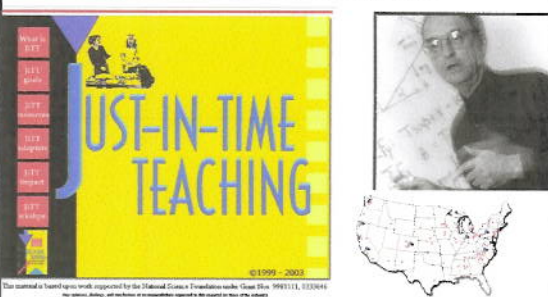
From Wikibooks, the open content textbooks collect: Table of Contents




Do 4b. Survey Research and Market Analysis
(e.g., Mister Poll, MicroPoll, Zoomerang, SurveyShare)



Do 4c. Online Warm-ups Activities Just-In-Time-Teaching (JiTT)
<http://webphysics.iupui.edu/jitt/jitt.html>



Do 4d. Syllabus, Glossary, etc. in wiki: Students sign up for tasks
(Ron Owston, York University)



Do 4e. Podcasts for students of pronunciation class (e.g., Tzu-Su Chen, Taiwan)

Do 4f. Create Video Blogs

- Have students create a blog with videos or a video blog.
- Have them do a final reflection on it.

Do 4g. Virtual World and Podcast Reenactments

Do 4h. Medical Simulations in YouTube and Second Life

Poll #2: How many ideas did you get from the second part of this talk?

- None—you are an idiot.
- 1 (and it is a lonely #).
- 2 (it can be as bad as one).
- 3-5
- 6-10
- Higher than I can count!

**Try the R2D2 Method!
Try TEC-VARIETY!
And hope for some magic!!!**

Sample papers : <http://www.publicationshare.com/>
 Archived talks: <http://www.trainingshare.com/>