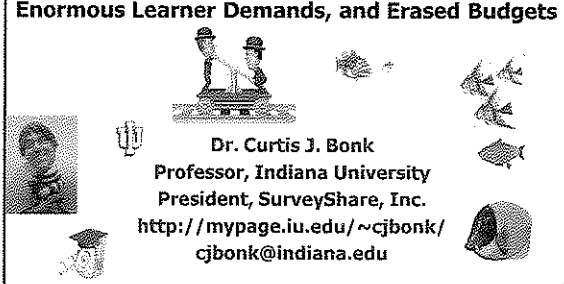


kentucky learning depot    kentucky learning depot    kentucky learning depot    kentucky learning depot    kentucky learning depot

**The Perfect E-Storm:  
Emerging Technology, Enhanced Pedagogy,  
Enormous Learner Demands, and Erased Budgets**



Dr. Curtis J. Bonk  
Professor, Indiana University  
President, SurveyShare, Inc.  
<http://mypage.iu.edu/~cjbbonk/>  
[cjbbonk@indiana.edu](mailto:cjbbonk@indiana.edu)

### Four Storms are Approaching!




New video shows tsunami power

### 21<sup>st</sup> Century Technology: Podcasts and Wikis and Blogs, Oh My!!!!



### College technology 'catching up' with students

By Kathleen Gray and Robin Erb, USA TODAY,  
October 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.

### Ok, Million Dollar Question: Which technology will impact us the most?




### Storm 1. Emerging Learning Technologies

1. Assistive Technologies
2. Blogs and Online Diaries
3. OpenCourseWare and Open Educational Resources
4. Digital Books
5. Social Networking Technology
6. Intelligent Agents
7. Wikis and Wikibooks
8. Online Games and Simulations (Massive Multiplayer Gaming)
9. Shared Online Video (YouTube, TeacherTube)
10. Peer-to-Peer Collaboration
11. Reusable Content Objects
12. Videostreaming, IP Videoconferencing
13. Virtual Worlds/Reality
14. Wearable Computing
15. Wireless Tech: Tablet PCs, Handheld Devices
16. Digital Portfolios

**Poll #1: Bonk's Web Addiction Questionnaire (check all that apply)**

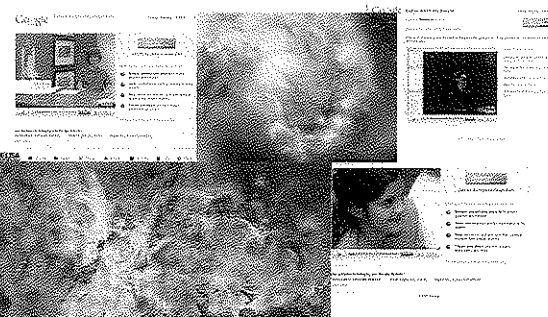
1. Own 2 or more cell phones with Internet access.
2. Own 2 or more laptop computers with wireless connections.
3. Check email in the morning, noon, and at night.
4. Suffer from nervous tension when you cannot get on email.
5. Are checking email, updating your Facebook account, or text messaging right now.



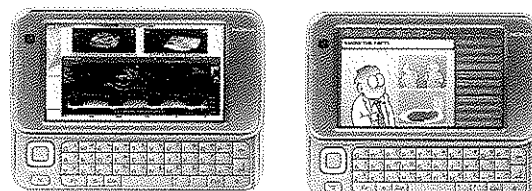
**1. New Search Technology (timeline oriented)**




**2. Google Sky**  
**What if the World was Beyond our World?**  
 (NASA's Hubble Space) USA Today, August 22, 2007



**3. Mobile Health and Medical Education**  
 (Courtesy of Paul Kim, Stanford University)



**4. Mobile Technology Expert Advice**  
 (e.g., Live Happy Practitioner Directory)  
<http://www.signalpatterns.com/practitioner>



**5. iPhone Applications**  
 Pull yourself away from that iPhone and read this story, By Mary Brophy Marcus, USA Today, October 5, 2009

- 50 million iPhone users and 85,000 applications.



Pull yourself away from that iPhone and read this story

**6. Social Networking Gaming (e.g., Farmville)**  
 For social networks, it's game on, USA Today, Jon Swartz, Thursday October 15, 2009

**7. iPhone e-books**  
 (e.g., Shortcovers; <http://shortcovers.com/>)

**8. e-Book Readers**  
 (e.g., Barnes & Noble unveils its e-reader, USA Today, October 21, 2009)

**9. Digital Textbook Projects (Korea)**  
 dictionary, email and forums, games, simulations, hyperlinks, multimedia, authoring, data search, study aids, evaluation, etc.  
 (112 schools as of 2009; free for all schools by 2013)  
<http://www.dtbook.kr/eng/index.jsp>  
[http://teachertube.com/members/viewVideo.php?video\\_id=105496&title=Digital\\_Textbook\\_in\\_Korea](http://teachertube.com/members/viewVideo.php?video_id=105496&title=Digital_Textbook_in_Korea)

**9. Continued...In a Digital Future, Textbooks Are History, NY Times, August 9, 2009**

**10. Scanning and Printing**  
**Google to Reincarnate Digital Books**  
 Sept 17, 2009, By MICHAEL LIEDTKE AP Technology Writer

**11. LibraryThing: The World's Largest Online Book Club** (you can be a "thingamabrarian;" 850,000 users and 35 million books on member bookshelves)

The screenshot shows the LibraryThing website. At the top, there's a navigation menu with options like 'Home', 'My Library', 'My Friends', 'My Groups', 'My Lists', 'My Reviews', 'My Recommendations', 'My Activity', 'My Settings', and 'My Account'. Below the navigation, there's a main content area with a large image of a person and several smaller book covers. The text below the image says 'LibraryThing' and 'The World's Largest Online Book Club'.

**12. BookTV**  
<http://www.booktv.org/>

Top Nonfiction Authors and Books

The screenshot shows the BookTV website. At the top, there's a navigation menu with options like 'Home', 'About', 'Contact', 'FAQ', 'Privacy Policy', and 'Terms of Service'. Below the navigation, there's a main content area with a large video player and several smaller text blocks. The text below the video player says 'After Words: Gwen Hill, "The Break" the Age of Obama' interviewed by Dan The New York Times'.

**13. Book Websites**  
(e.g., Brain Rules, John Medina)  
<http://www.brainrules.net/>

The screenshot shows the Brain Rules website. At the top, there's a navigation menu with options like 'Home', 'About', 'Contact', 'FAQ', 'Privacy Policy', and 'Terms of Service'. Below the navigation, there's a main content area with a large video player and several smaller text blocks. The text below the video player says 'John Medina, Author "Brain Rules"'.

**14. YouTube as Class**

The screenshot shows a YouTube channel page. At the top, there's a navigation menu with options like 'Home', 'Videos', 'Playlists', 'Channels', 'About', and 'Settings'. Below the navigation, there's a main content area with several video thumbnails and their titles. The thumbnails show various people and scenes, likely related to the channel's content.

**15. TED**  
Tech Confab With a Conscience Goes Global  
USA Today, July 21, 2009

The screenshot shows a TED talk video player. At the top, there's a navigation menu with options like 'Home', 'Videos', 'Playlists', 'Channels', 'About', and 'Settings'. Below the navigation, there's a main content area with a large video player and several smaller text blocks. The text below the video player says 'Tech confab with a conscience goes global'.

**16. Video Supported Language Learning**  
(e.g., ECPod)

The screenshot shows the ECPod website. At the top, there's a navigation menu with options like 'Home', 'About', 'Contact', 'FAQ', 'Privacy Policy', and 'Terms of Service'. Below the navigation, there's a main content area with a grid of video thumbnails and their titles. The thumbnails show various people and scenes, likely related to the channel's content.

**17. Live Streaming**  
 (e.g., Zoo Animals on Demand)  
 USA Today, September 8, 2009  
 Littlest patients find distraction, comfort in live feeds from zoos

**17. Continued**  
**Livestream University Feeds (Colgate)**  
<http://www.livestream.com/colgateuniversity>

**19. OpenCourseWare and OER**  
 (MIT Highlights for High School and BLOSSOMS Project)

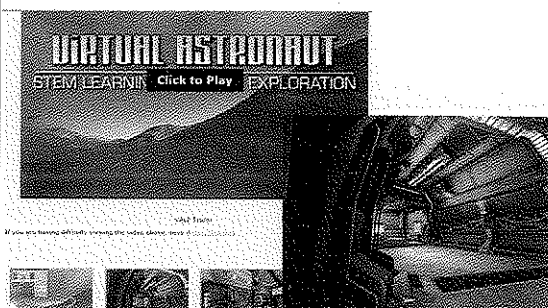
**20. Online News Coverage**  
 Ray of hope in Afghanistan  
 Greg Mortenson is educating the children of Afghanistan one school at a time.  
 (CNN's Christiane Amanpour)

**21. Mobile Video Blogging**  
 (Stanford, Paul Kim)

**22. Medical Simulations in YouTube**  
 Can Training in Second Life Teach Doctors to Save Real Lives? Discover, by Melissa Lafsky published online July 16, 2009

### 23. Simulations

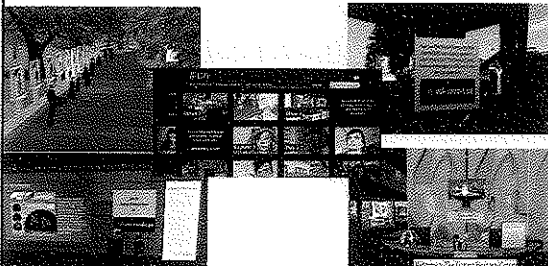
(e.g., Virtual Astronaut from WisdomTools)



The image shows a screenshot of the 'Virtual Astronaut' simulation. The title 'VIRTUAL ASTRONAUT' is at the top, with 'STEM LEARNING' and 'Click to Play' in the middle, and 'EXPLORATION' on the right. Below the title is a large image of a space station interior with a curved wall and a window. There are smaller thumbnail images at the bottom left.

### 24. Second Life

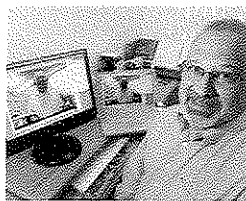
The Learning Inworld blog posts examples from the Second Life education community.



The image shows a virtual world environment, likely Second Life. It features various educational structures, including a large building with a sign that says 'LIFE' and another that says 'LIFE LEARNING'. There are also smaller structures and avatars scattered throughout the scene.

### 25. Video Chat Collaboration

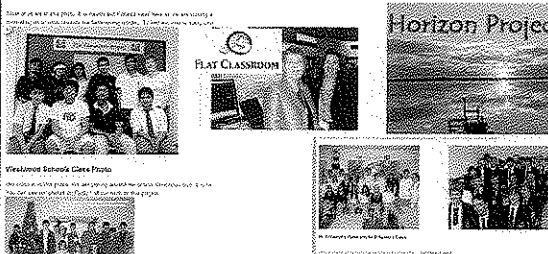
U. of La Verne Welcomes the World, One Fulbright Lecturer at a Time, Karin Fischer, Chronicle of HE, October 18, 2009



Jack W. Meek, a professor at the U. of La Verne, video-chats with Marcos A. Pedlowski, a Brazilian scholar with whom he did a study of community participation in municipal planning. They met through Mr. Pedlowski's participation in a Fulbright visiting-lecturer program.

### 26. Global Collaboration

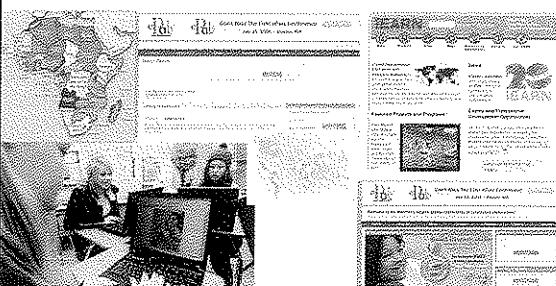
(e.g., Flat Classroom Projects!)  
(combine blogs, videoconferencing, chat, async discussion, etc.)



The image is a collage of images related to global collaboration. It includes a group photo of students, a sign that says 'FLAT CLASSROOM', and a sign that says 'Horizon Project'. There are also smaller images of people and text.

### 26. Global Collaboration continued


EPals and iEARN (International Education and Resource Network)



The image shows a screenshot of the EPals and iEARN websites. The EPals website is on the left, and the iEARN website is on the right. The EPals website features a map of the world and a list of countries. The iEARN website features a list of projects and a search bar.

### 27. Interactive Videoconferencing

Global Nomads Group  
<http://www.gng.org/home.html>



The image shows a screenshot of the Global Nomads Group website. It features several small images of people in videoconferencing sessions. The website is titled 'Global Nomads Group' and has the URL 'http://www.gng.org/home.html'.

### 28. Hole-in-the-Wall technology, Sugata Mitra

The image shows a screenshot of a website on the left, featuring text and small images. On the right is a portrait of Sugata Mitra, a man with glasses and a white shirt.

### On to Storm 2... Escalating (Learner) Demands

A collage of black and white photographs showing student protests. Visible signs include "EDUCATION PAYS", "I, U STUDENTS UNITE!", and "SCHOOL IS A BATTLEFIELD".

### Growth of Online Learning in Secondary Schools (Florida Virtual School; AP American History)

A bar chart titled "FVMS Completion History" showing data from 2000 to 2007. Below the chart are screenshots of the Florida Virtual School website, including the logo and navigation menus.

### Keeping Pace with K-12 Online Learning: A Review of State-Level Policy and Practice

A horizontal bar chart showing the number of programs reporting various percentage changes in course requests. The x-axis is labeled "Number of Programs Reporting Change" and ranges from 0 to 18. The y-axis lists percentage change categories: Increase 5-50%, Increase 20-49%, Increase 11-20%, Increase 1-10%, No Change, Decline 5-10%, Decline 11-20%, Decline 20-50%, and Decline 50%+.

### 4.3 The Michigan Virtual School Report

A table titled "Figure 3: MVSB Courses and Online Enrollments 1999-2007" with columns for Year, Courses, and Enrollments. Below the table is a bar chart showing enrollment trends and a map of Michigan.

### 'Distance learning' gets its close-up

By G. Jeffrey MacDonald, Special for USA TODAY, November 2007

- More than two-thirds of all U.S. colleges and universities offer online courses, and 35% of schools offer programs that are entirely online, according to the Sloan survey, and 20% of the USA's 17 million college students say they have taken at least one course online.

**For-Profit Colleges, Growing Fast, Say They Are Key to Obama's Degree Goals, By Jennifer Gonzalez, Chronicle of Higher Ed, Nov 8, 2009**



Students at the Kaplan Career Institute in Boston study medical billing in one of the for-profit college's computer labs.

**Dog Get Degree, The Chronicle of Higher Ed, Sept 23, 2009, Unmuzzling Diploma Mills: Dog Earns M.B.A. Online, Marc Parry**

**THE CHRONICLE**  
of Higher Education

Friday, September 25, 2009

Home News Opinion & Ideas Arts & Programs Jobs The Future Jobs & Salaries Events

**The Wired Campus**

Home News Technology The Wired Campus

Unmuzzling Diploma Mills: Dog Earns M.B.A. Online  
by Marc Parry

Send to students.

How's this for "buzzing" diploma mills? GetUnmuzzled.com, an online learning cooperative group, managed to produce an online M.B.A. for its mascot, a dog named Chester Ludlow.

The Vermont pug earned his thesis by putting over 800 pages of research on the history of the dog breed into a database.

Unmuzzling Diploma Mills: Dog Earns M.B.A. Online

**We're in the Midst of Storm 3: Erased Budgets**

**STIMULUS STATE**  
ESTIMATED FISCAL YEAR 2010

CNN.com

Obama to urge investment in high-tech education

**Report: 10 states face looming budget disasters**

By Judy Lin, Associated Press Writer

SACRAMENTO, Calif. — A study released Wednesday warning that nine states are heading toward an economic disaster similar to California's ongoing fiscal crisis that has been marred by cuts and budget-aussing deficits.

The budget woes could mean higher taxes, accelerated layoffs of government employees, fewer services in the most populous states.

Arizona, Florida, Illinois, Rhode Island and Wisconsin.

The analysis urged lawmakers to act quickly to avert economic disaster.

**Obama to Invest in High-Tech Education, CNN Money, September 21, 2009**

CNNMoney.com

**Obama urges investment in high-tech education**

The president says training Americans for jobs of the future will help create a more stable foundation for the economy.

New YORK (CNNMoney.com) — President Obama on Monday promised to invest in the nation's economy by investing in education for high-tech industries.

The president unveiled a new "education strategy" that builds on \$100 billion of economic stimulus funds to support entrepreneurship, education, infrastructure and other investments.

The plan aims to make the U.S. economy more competitive and help prevent possible "boom and bust" cycles in the



## Call for 5 Million Additional Community College Graduates

**The Page** *Roll over to the White House*

**Fact Sheet: Obama's Community College Initiative**

THE AMERICAN EDUCATION INITIATIVE IS STRONGER AMERICAN SCHOOLS THROUGH COMMUNITY COLLEGE

There's the time to build a faster, stronger foundation for growth that will not only withstand future economic storms, but speed our recovery and progress in a global economy. It's time to extend our community colleges so that they provide Americans of all ages a chance to learn the skills and knowledge necessary to compete for the jobs of the future.

— President Barack Obama

## Obama Course-Giveaway Backlash?, by Marc Parry, August 10, 2009

**The Wired Campus**

THE WIRE | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030

August 10, 2009

**Obama Course-Giveaway Backlash?**

By Marc Parry

Education, K-12 - K-12, maybe backlash is too strong a word.

But some distance-learning leaders are starting to voice questions about Obama's new public education proposal, a credit course giveaway for first-time students in public Web-based courses.

*Joel Kolberg, a U. of Wisconsin at Milwaukee student, does some of his coursework online. Colleges would get help offering online classes under a new Obama administration plan, but some distance education leaders are starting to question it.*

## College technology 'catching up' with students

By Kathleen Gray and Robin Erb, USA TODAY, October 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.


the ONE IPHONE PER STUDENT project

## On to Storm 4: Enhanced Teaching (a swirling storm)

## Part I: Some Online Motivational Ideas

## We are not motivating students with the technologies that they love


**Ok, Million Dollar Question: How do you motivate online learners? What Words come to mind?**



**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.




**Poll #2: Which of these is the most important for motivating students? (Pick just one)**

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



**I even reflected on this for a moment...**



**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. Risk** ← Low Risk → High Risk

**2. Time** ← Easy to Embed → Extensive Planning

**3. Cost** ← Free or Inexpensive → Enterprise Licenses

**4. Student-Centered** ← Instructor-Focus (Low) → Student-Focus (High)

**1. Tone/Climate: A. 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 MANIPULUM?

- A. chiro, hydroxyacidic, fabricable, intelligible
- B. non-plastic, useful, porous
- C. rotunda, vitellid, keep, laid
- D. chiro, laquei, chess, assist, passor
- E. vitellid, least, rotundum, limes

A  B  C  D  E

1 / 20

**2. Encouragement, Feedback, etc.:**  
**B. Tutorials with Screen Capture**  
 (e.g., Jing, Screnr)

**2. Encouragement, Feedback, etc.:**  
**C. Instructor Presentation in Synchronous Sessions**  
 (Breeze, Elluminate, WebEx, etc.)

**3. Curiosity, Fun:**  
**A. Exploration and Demonstration: Virtual Tours and Timelines (HyperHistory)**  
<http://simile.mit.edu/timeline/>

**3. Curiosity, Fun:**  
**B. Online News**  
 (Giant jellyfish, Tiny T. rex, and Ardi)

Japanese fishermen brace for giant jellyfish

First U.S. man since 1982 wins NYC race

Australia: Boat sinks with 39 on board

**4. Variety, Novelty:**  
**A. Adding voice to email, docs (Yack Pack, VoiceThread)**

The image shows two overlapping screenshots. The top one is for 'Yack Pack', a web interface for adding voice to email and documents. The bottom one is for 'VoiceThread', showing a document with audio annotations and a video chat window.

**4. Variety, Novelty:**  
**B. Free Text Chats (Bonk, 2007; Mei-Ya Liang, 2007)**

**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.**

The image contains two screenshots. The left one shows a text chat window with a list of participants and a message history. The right one shows a person in a virtual 3D environment, possibly a virtual world or a video chat window.

**5. Autonomy, Choice: A. Online Literature Search (Class Google Jockeys)**

The image is split into two parts. On the left, a man in a suit sits at a desk with a large, curved, futuristic-looking screen. On the right, a classroom scene shows a teacher at the front and students at their desks, with a projector screen displaying content.

**5. Autonomy, Choice: B. Clickers; Innovation is but one click away...**

The image is a collage of four photos. Top left: A group of students in a classroom holding up clickers. Top right: A large group of students in a lecture hall. Bottom left: A person pointing at a whiteboard with text. Bottom right: A person holding up a mobile device, possibly a clicker or a phone.


**5. Autonomy, Choice: C. Famous Person Homepage Explorations (e.g., Thomas Friedman, NY Times reporter)**

The image shows a screenshot of a news website for Thomas Friedman. It features a video player on the left with a man speaking, and several text articles on the right with headlines and images.

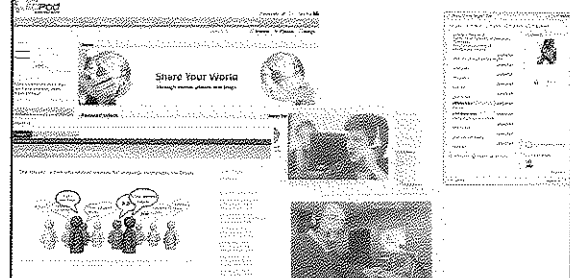
**6. Relevance, Meaningfulness: A. Mobile News (New York Times): A new way to take your news with you on the iPhone and iPod touch**

The image is a screenshot of a YouTube video player. The video title is 'Connected: Part 1: Social Uses'. The video content shows various mobile devices (iPhone, iPod touch) displaying news content, along with a person interacting with a device.

**6. Relevance, Meaningfulness:**  
**B. 60 Second Recap**  
<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

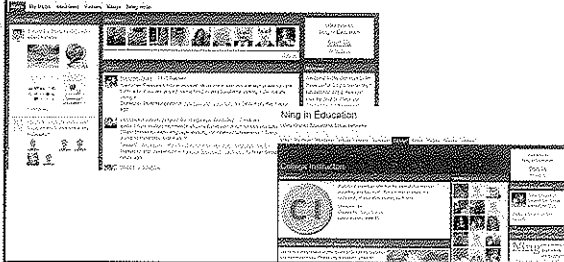


**7. Interactive, Collaborative:**  
**A. Online Language Learning**  
 (ECpod, Mixxer, Livemocha, Babbel, KanTalk)



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

Ning in Education




**7. Interactive, Collaborative:**  
**C. Collaborative Documents (Google Docs)**

Google docs

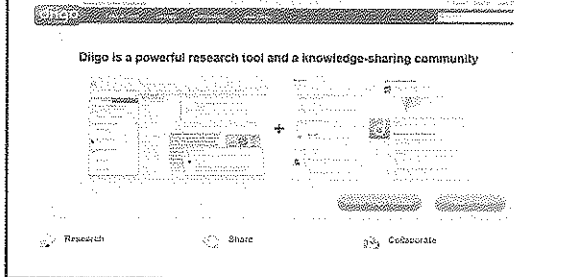
Create and share your work online

- Upload content and create your documents
- Edit online. Full-featured
- Edit and share documents
- Take changes in real time
- Files are stored securely online
- No file size
- Includes: text/journals




**7. Interactive, Collaborative:**  
**D. Collaborative Bookmarking (Diigo, Delicious)**

Diigo is a powerful research tool and a knowledge-sharing community



**8. Engagement, Effort:**  
**A. Synchronous and Asynchronous Events**  
 (e.g., Breeze + Video + Online Forum + Online Papers)



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

Students to protest human body exhibit

Maggie Ybars  
 Issue date: 04-06 Seattle News  
 URL: [http://www.seattlepi.com](#)

### 10. Yields Products, Goals: A. Movie Festivals, Concept Maps, Video Papers, Virtual Timelines, Digital Movies

### 10. Yields Products, Goals: B. Video Blogs

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

### 99 seconds: What have you learned so far?

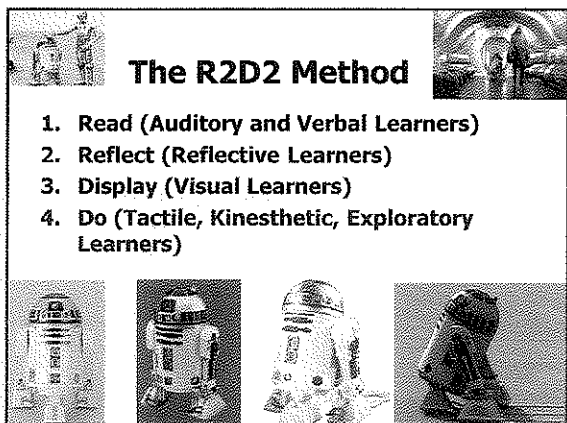
- Solid and Fuzzy in groups of two to four

### Addressing Learning Styles

### The R2D2 Model

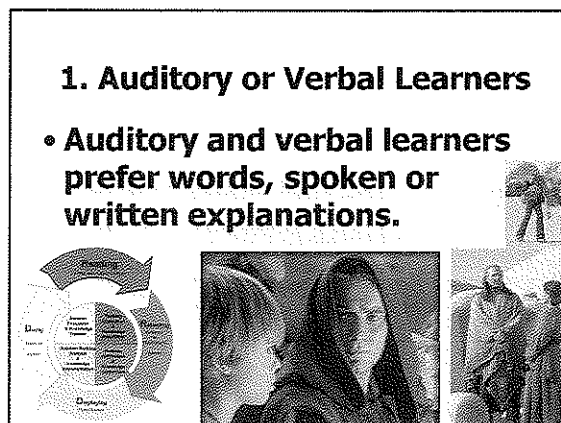
## The R2D2 Method

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

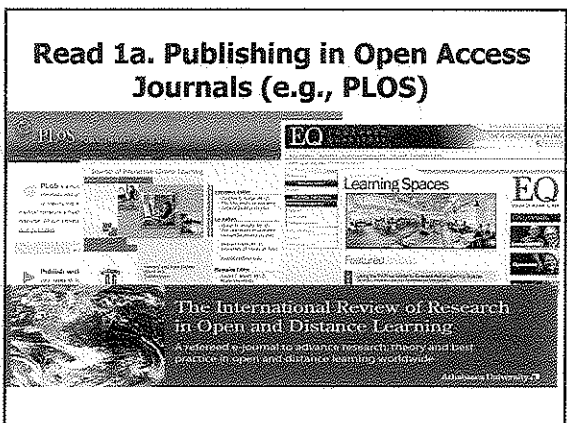


## 1. Auditory or Verbal Learners

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

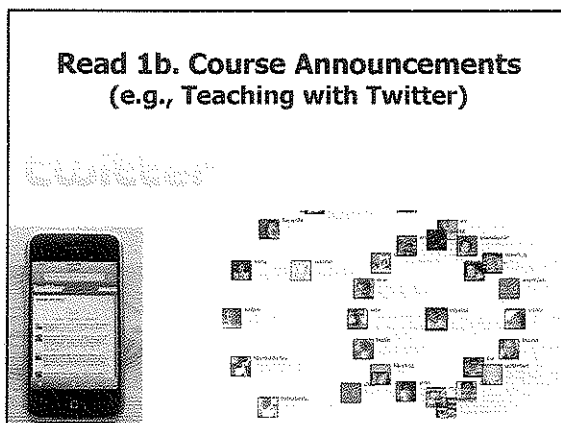


## Read 1a. Publishing in Open Access Journals (e.g., PLOS)



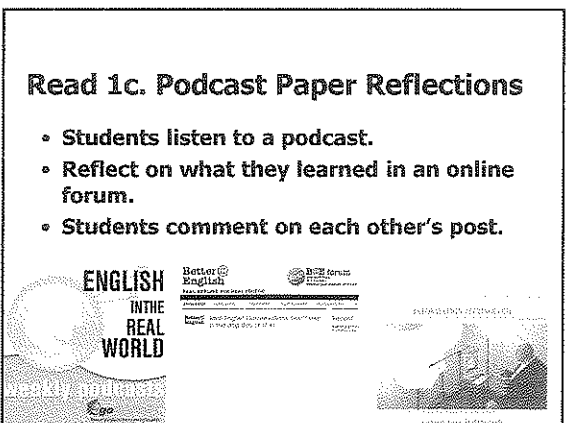
The International Review of Research in Open and Distance Learning

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



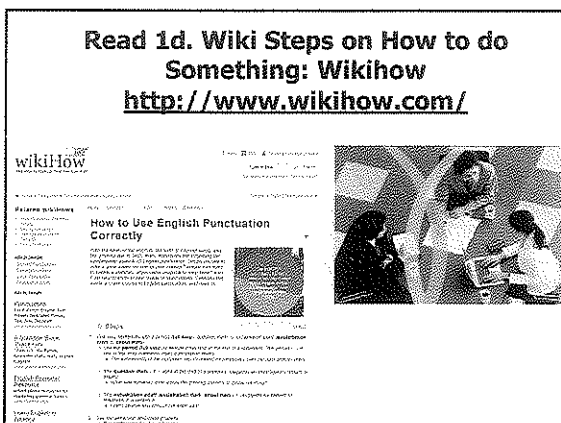
## Read 1c. Podcast Paper Reflections

- Students listen to a podcast.
- Reflect on what they learned in an online forum.
- Students comment on each other's post.



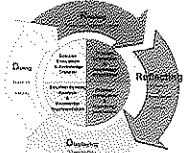

## Read 1d. Wiki Steps on How to do Something: Wikihow

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




## 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

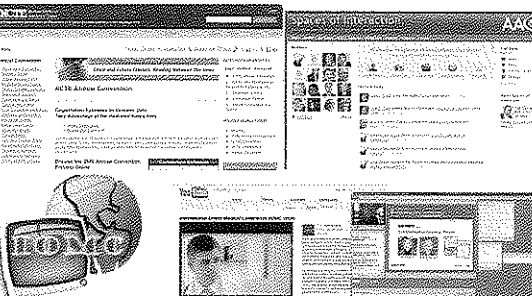
## Reflect 2a. Critical Friend Blog Postings



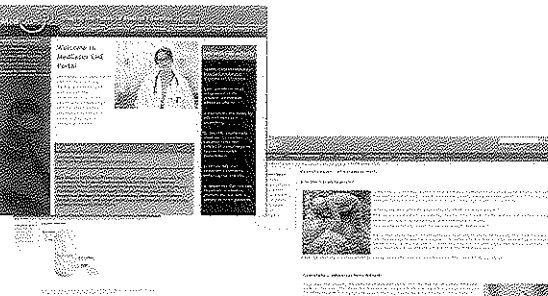
## Reflect 2b. Expert and Domain Specific Blogs (English Teacher Blogs)



## Reflect 2c. Watch or Listen to Online Conferences

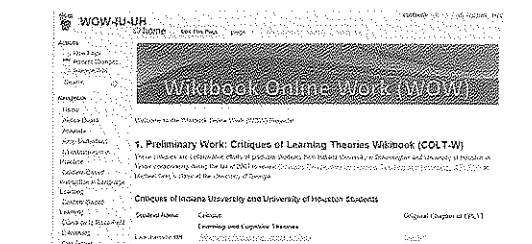


## Reflect 2d. Analyze Online Cases (problems, solutions, etc.)



## Reflect 2e. Wikibook Critique

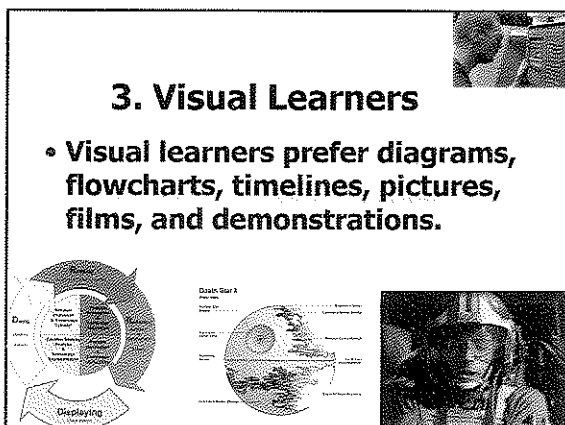
- Ask students to critique a wikibook or page from Wikipedia





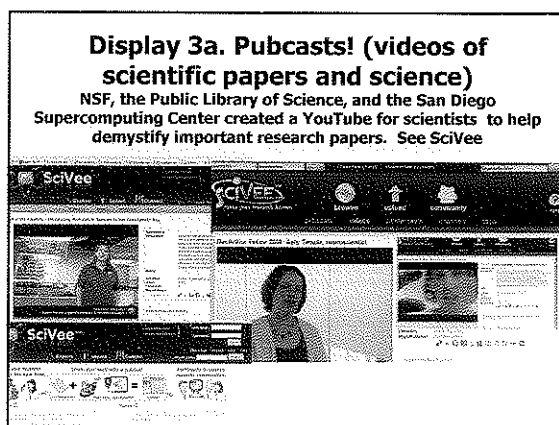
### 3. Visual Learners

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



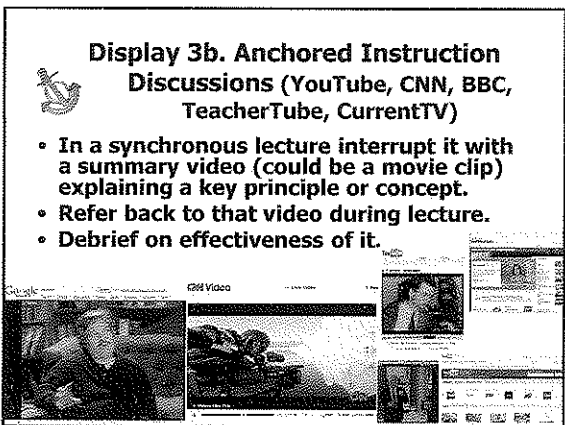
### Display 3a. Pubcasts! (videos of scientific papers and science)

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

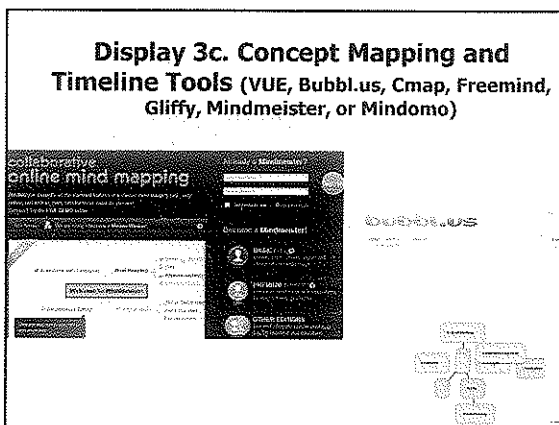


### Display 3b. Anchored Instruction Discussions (YouTube, CNN, BBC, TeacherTube, CurrentTV)

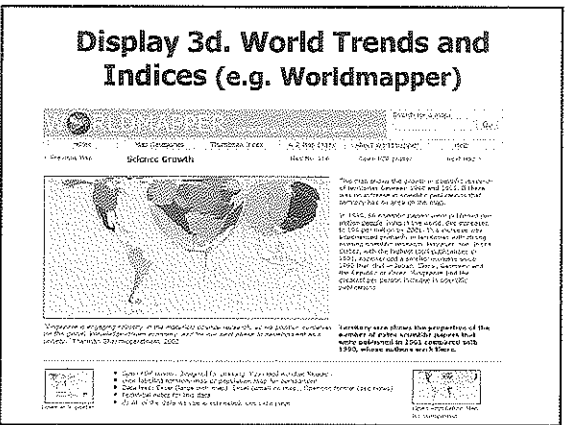
- In a synchronous lecture interrupt it with a summary video (could be a movie clip) explaining a key principle or concept.
- Refer back to that video during lecture.
- Debrief on effectiveness of it.



### Display 3c. Concept Mapping and Timeline Tools (VUE, Bubbl.us, Cmap, Freemind, Gliffy, Mindmeister, or Mindomo)

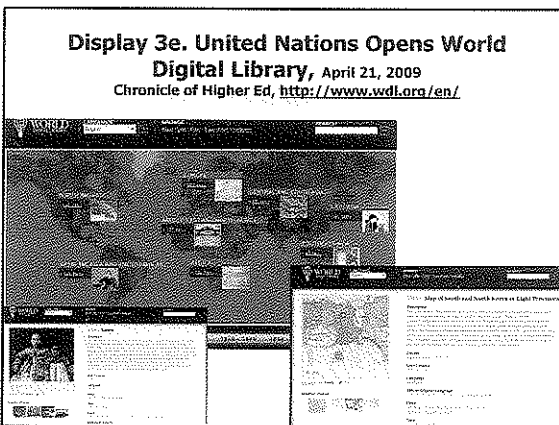


### Display 3d. World Trends and Indices (e.g. Worldmapper)



### Display 3e. United Nations Opens World Digital Library, April 21, 2009

Chronicle of Higher Ed, <http://www.wdl.org/en/>



### Display 3f. Shared Online Video (e.g., Howcast, WonderHowTo, Clip Chef)

This screenshot shows a video player interface from a website like Howcast or WonderHowTo. It features a video player with a play button, a progress bar, and a search bar. The website header includes navigation links and a logo.

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

This screenshot displays an online historical document viewer. It shows a scanned page of text with a navigation interface on the right side, including options for zooming and scrolling through the document.

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

This block contains a collage of various medical animation and video thumbnails. It includes images of anatomical diagrams, medical procedures, and video player interfaces from different sources.

### Display 3i. Online Timelines (US Presidents)

This screenshot shows an online timeline for US Presidents. It features a grid of portraits and names of presidents, with a detailed view of a specific president's information and a portrait on the right.

### Display 3j. Videos of the Periodic Table

This screenshot shows a website titled "THE PERIODIC TABLE OF VIDEOS". It features a periodic table of elements where each element is linked to a video. The interface includes a search bar and a list of video thumbnails.

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

This screenshot displays the Civil Rights Digital Library website. It features a header with the library's name, a navigation menu, and a main content area with text and a portrait of a historical figure.

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

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

### 4. Tactile/Kinesthetic Learners

- Tactile/kinesthetic senses can be engaged in the learning process as 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-source textbooks project. Title: 4a. Genera

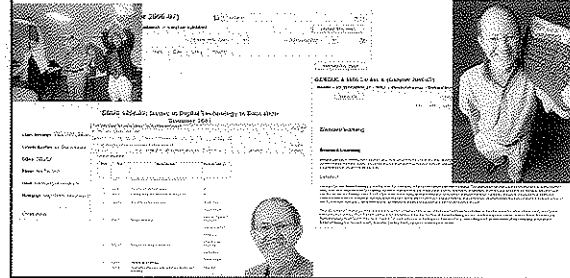
### Do 4b. Survey Research and Market Analysis (e.g., Mister Poll, MicroPoll, Zoomerang, SurveyShare)

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

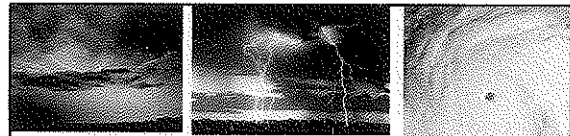
**Do 4d. Online Performances  
Virtual Worlds/Reality/MMOG**  
(e.g., Shakespeare plays reenacted)



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



**Read 1f. Podcasts for students of  
pronunciation class**  
(e.g., Tzu-Su Chen, Taiwan)



**Recap of the Perfect E-Storm....**

1. Emerging Technology
2. Escalating (Learner) Demands
3. Erased Budgets
4. Enhanced Teaching



**Try the R2D2 Method!!!  
Try TEC-VARIETY!!!**

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



Any questions, comments, or concerns?

