#### The Flat World Swung Open: **How Web Technology Is Revolutionizing Training and Education**

Curtis J. Bonk, Professor, Indiana University President, SurveyShare cjbonk@indiana.edu

http://php.indiana.edu/~cjbonk



1-1-6







#### The Ten Forces that **Flattened the World**

Triple Convergence: (1) new economic players, (2) playing fields, and (3) processes.

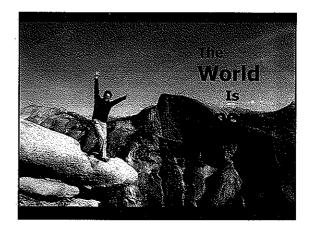
- 1. 11/9/89: Berlin Wall came down

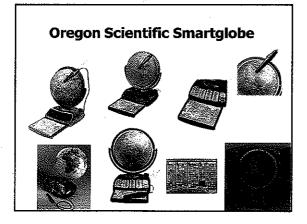
- 11/9/89: Senin Wall came down 8/9/95: Netscape went public Work Flow Software (e.g., PayPal and eBay) Open-Sourcing (Self organ collab communities; Mosiac, Apache, Wikipedia, Linux, Mozilla) Outsourcing (Y2K)

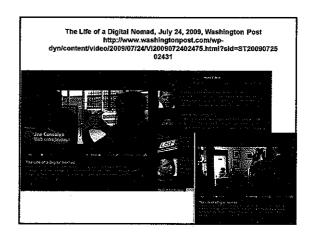
- Outsourcing (Y2K)
  Offshoring (e.g., China, Mexico, Thailand)
  Supply-Chaining (e.g., Walmart)
  Insourcing (UPS fixing Toshiba laptops)
  In-forming (e.g., Google, Yahoo!, MSN Web Search)
  The Steroids: Digital, Mobile, Personal, and Virtual
  (wireless, file sharing, VoIP, video camera in phone)





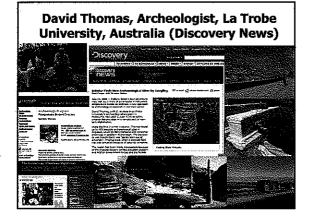












College technology 'catching up' with students By Kathleen Gray and Robin Erb, USA TODAY, October 6, 2009



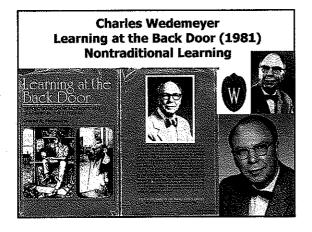
Senior Emily Smak, 20, tries out the treadmill workstation in one of the study lounges in the new Education and Human Services Building at Central Michigan University. There is a new iMac computer attached to it so students can get a little exercise while doing homework or other things on the computer.

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

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







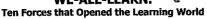
Poll #2: If you had to pick your favorite way to learn, what would it be like?

- Face-to-face (FTF)
- **Fully online**
- Blended (combining online and
- Television, correspondence, or
- Self-study and self-service



#### **WE-ALL-LEARN:**





- Web Searching in the World of e-Books (i.e., Darwin) The Lee
- E-Learning and Blended Learning
- Availability of Open Source and Free Software (e.g., Moodle)
- Leveraged Resources and OpenCourseWare (e.g., MIT)
- Learning Object Repositories and Portals (i.e., shared content)
- Learner Participation in Open Info Communities (YouTube)
- Electronic Collaboration and Interaction (sync and async)
- Alternate Reality Learning (Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)
- Real-Time Mobility and Portability (e.g., iPhone)
- Networks of Personalized Learning (Blogs, RSS)



#### **Audience Participation!**

**1. WE** 





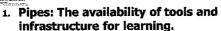


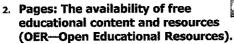


3. LEARN!!!

#### **Triple Learning Technology** Convergence of "WE-ALL-LEARN"







3. Participatory Learning Culture: A move towards a culture of open access to information, international collaboration, and global sharing.





#### 4th P? Processing Speed

Scientists develop fastest computer June 9, 2008, H. JOSEF HEBERT, AP

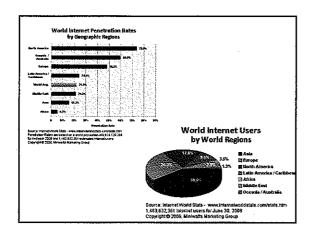
■ To put the computer's speed in perspective, it has roughly the computing power of 100,000 of today's most powerful laptops stacked 1.5 miles high, according to IBM. Or, if each of the world's 6 billion people worked on hand-held computers for 24 hours a day, it would take them 46 years to do what the Roadrunner computer can do in a single day.









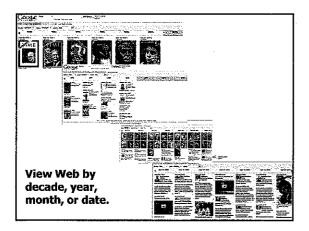


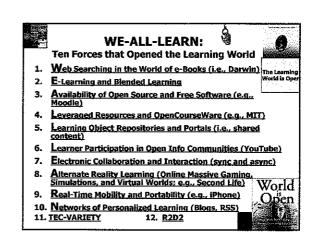


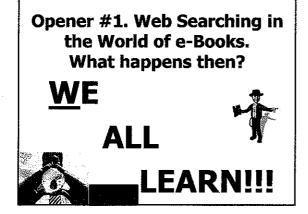


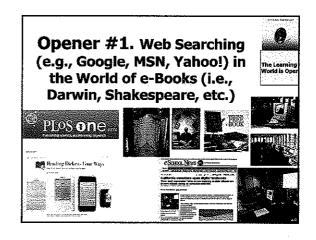
#### Norm Kamikow Editor in Chief, CLO, April 2009, page 4

- Recently, I read a startling statistic: More than 53 trillion digital pages will exist online by 2010.
- I found this metaphor, based on commonly accepted measures of time, explaining order of magnitude between a million, a billion and a trillion. A million seconds was 12 days ago. A billion seconds ago, it was roughly May 1977, a span of 32 years. A trillion seconds ago, the Stone Age started.





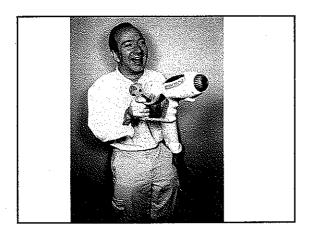


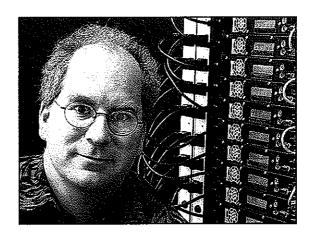






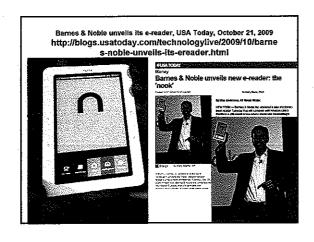
Narissa Mayer leads the company's product management efforts on search products — web search, Integer nave, books, products, maps, Google Earth, Google Toolbar, Google Deaktrp, Google Health, Google Search Remark Earth and the user Interface and web searve hears at lett time. Her efforts have included designing and developing Google's search laterate laterationalizing the other to more than 100 Languages, defining Google News, Grail, and Oriest, and Jaunching more than 100 Features and products on Google.com

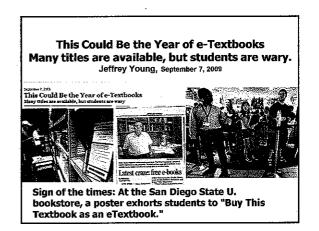


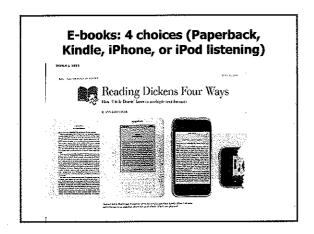


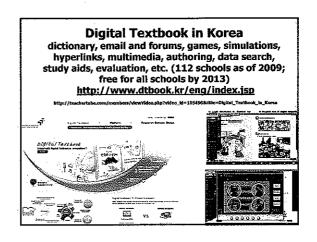


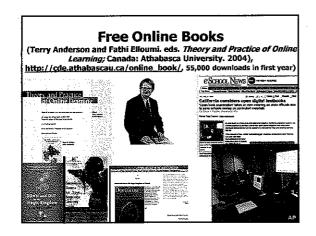


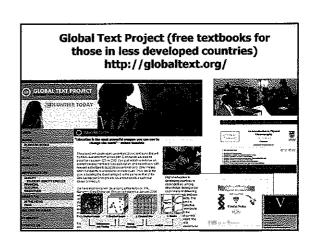




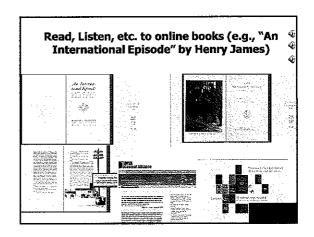


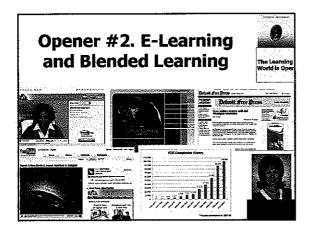


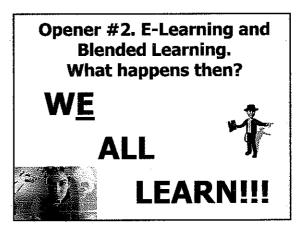








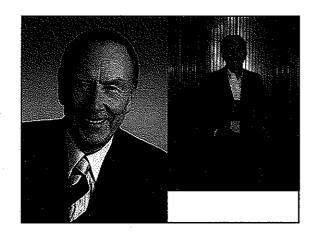


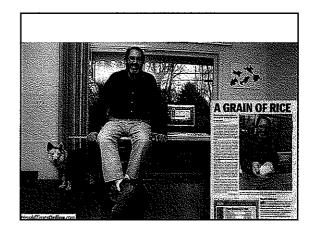


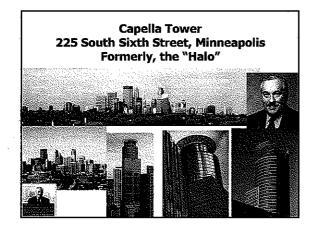
Poll #3: Where will e-learning grow the most during the coming decade?

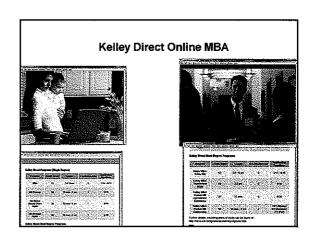
- Preschool and elementary school
- Middle and high school
- **Community college level**
- 4 year colleges and universities
- Corporate, government, and military training
- Informal adult learning
- Other

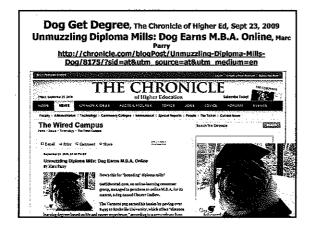












Teaching Under Fire and Online From 'Mortaritaville' in Iraq. October 5, 2009, Chronicle of Higher Ed



Cheryl Wachenheim, an associate professor at North Dakota State U., was deployed to Iraq but decided to keep teaching her economics classes online.

"It was especially easy to teach about shortages and surpluses," she says. "When we heard that the base had Diet Mountain Dew, I can't even explain how exciting that was, and I could explain firsthand just what a shortage can do."

#### **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)

#### If have a Strategic Plan...

- = 60 percent share with employees
- 24 percent put on website for anyone to download
- 37 percent say it is working; another 27 percent say it is not working
- 70 percent say it is addresses online learning
- 47 percent say it addresses BL; 37 percent say it does not
- 32 percent say organization has a specific model or framework for BL; 48 percent say

#### Which will promote blended learning the most?

Increasing use of real world cases stories and examples in training	34.58
Increased collaboration, community building, and global connectedness	26.17
Increasingly individualized or personalized e- learning	11.21
Increasing focus related to on-demand learning	9.35
Learners/employees making their own learning decisions	8.41
The blurring of the lines between work and learning	8.41
Increased use of hand-held and mobile devices	1.87

#### **AMA Special Report, Blended Learning Opportunities**

Alison Rossett (2006)

- 1. Anchor Blend: Start FTF, then online
- 2. Bookend Blend: Three part: e.g., online preassessments, then FTF, and then online post assessments
- 3. Field Blend: Assets, resources, and choices including perhaps FTF







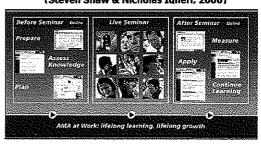
#### AMA Special Report, Blended **Learning Opportunities** Alison Rossett (2006)

13300 1. What Magni Go in McDirec		
Live fare-to-face (formal)  Instructor-led classroom (F2F)  Workshops  Coaching, mentoring  On-the-jeh (OT1) training  Work-based problems	Live face-to-face (informal)  • Cellegial relationships  • Work tours  • Apprenticeships	
Virtual collaboration/synchronous  - Live e-learning classes  - E-cooking, e-mentoring  - Instant messaging, SMS	Virtual collaboration/asynchroness  - Email  - Online communities and discussion bounds  - Listneys  - Blogs, wikis, podensts	
Self-paced fearuling (print, CIMPVD, electroale, wireless)  Othins modules  Othins resource links  Simulations as ecurators  Assensaments and self-assensaments  Workbooks, readings	Performance support  Online help systems  Fring job aids  Online knowledge databases  Documentation  Performance support tools	

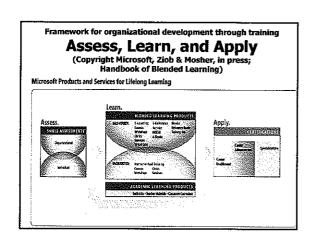
Adapted from (Rossett, Douglis, & France, 2003, July)

**AMA Special Report, Effectively** Implementing a Blended Learning Approach

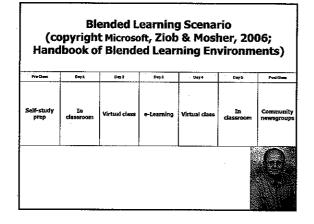
(Steven Shaw & Nicholas Igneri, 2006)

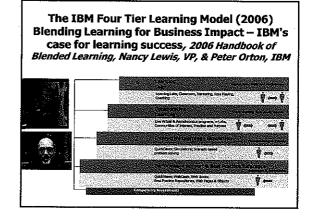


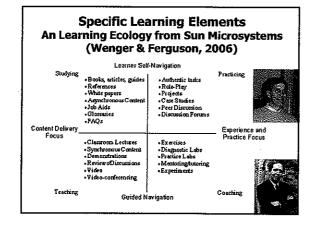
rce: American Management Association, AMA at Work

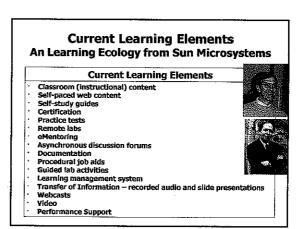


#### **Blended Learning Form Factors** (copyright Microsoft, Ziob & Mosher, 2006; Handbook of Blended Learning Environments Tools for learning Live instructor-led Self-paced learning communities •Traditional ■Instructor-led -Chat classroom via e-mail instant Onsite engagement Online or computermessaging (IM) =Virtual online based training (CBT) Newsgroups and classroom Self-study guides, ·Live video via forums satellite or manuals, texts Collaboration videoconferencing Online resources Online coaching/ and databases mentoring

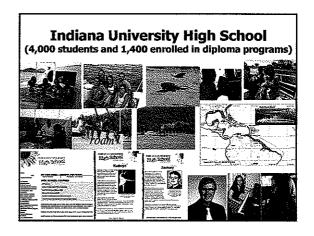


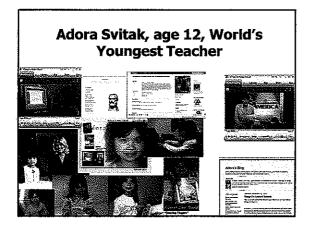


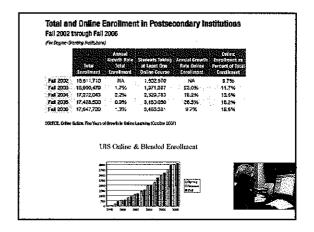


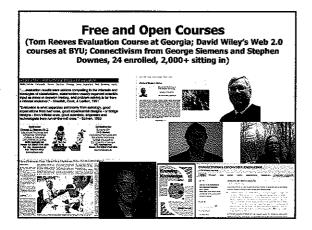


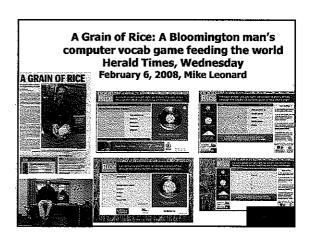


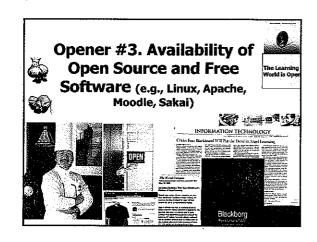


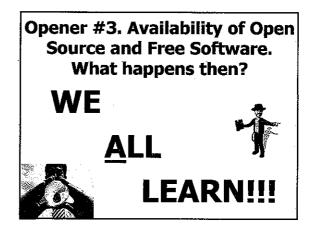


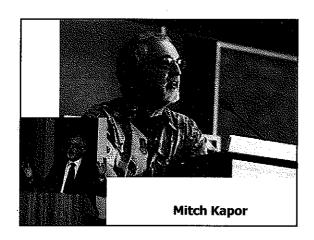


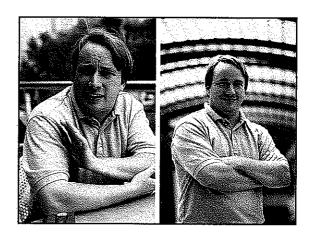


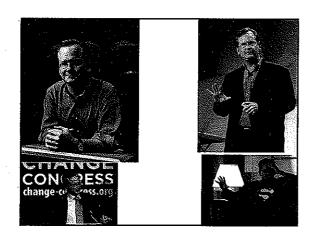




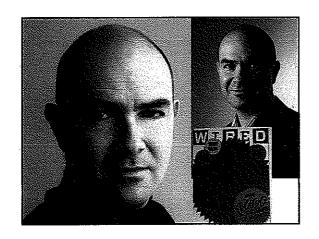


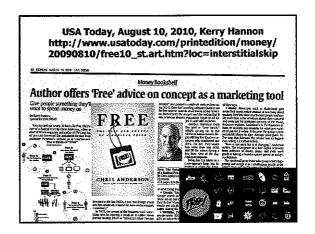






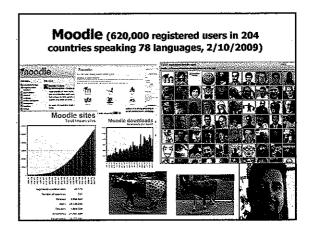


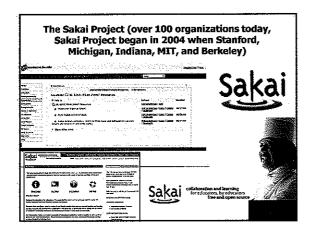


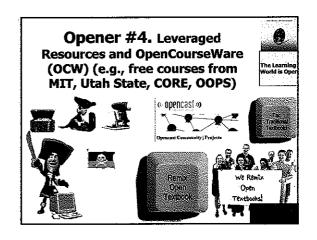


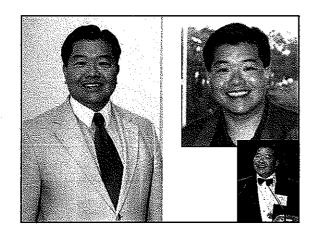
### Poll #4: Which of these have you heard or or used?

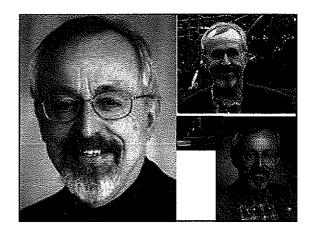
- 1. Angel
- 2. Blackboard
- 3. Desire2Learn
- 4. eCollege
- 5. Moodle
- 6. Sakai
- 7. WebCT
- 8. Other
- 9. None

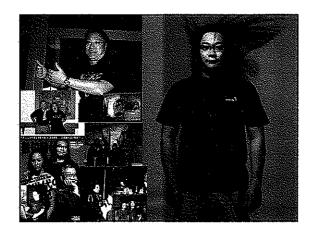


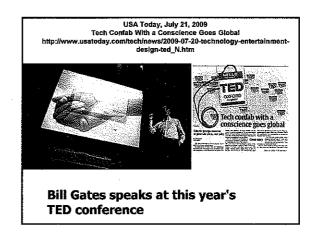




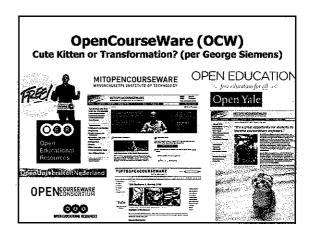


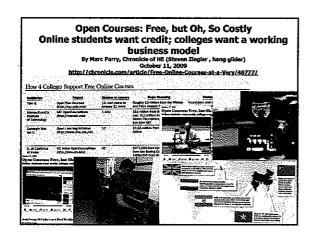


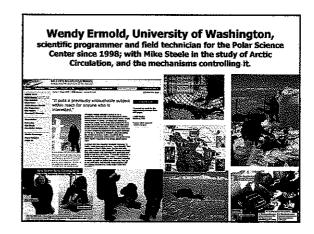


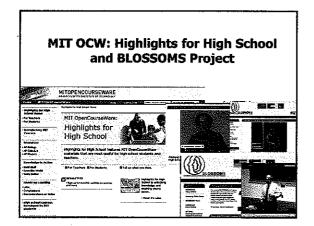




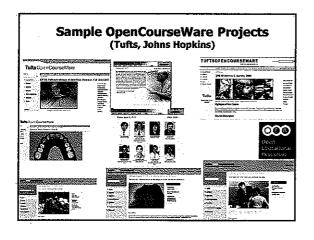


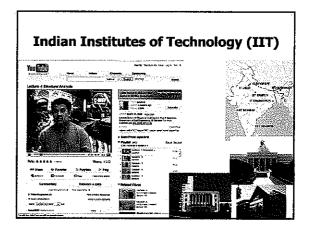




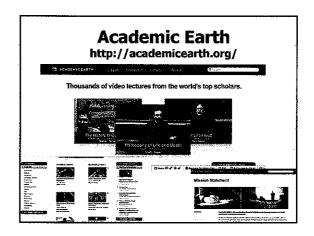


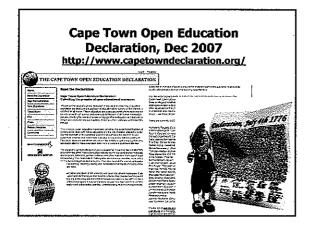


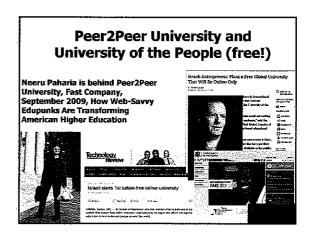


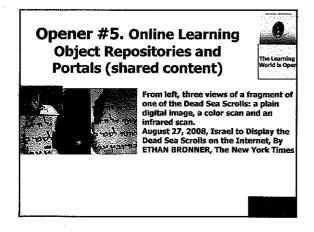






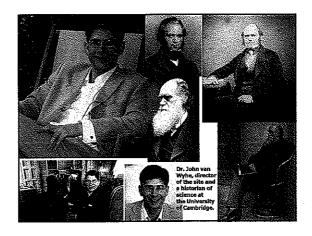




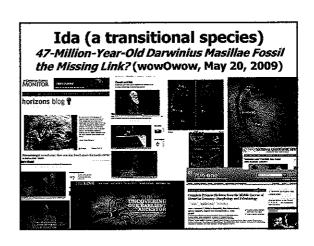


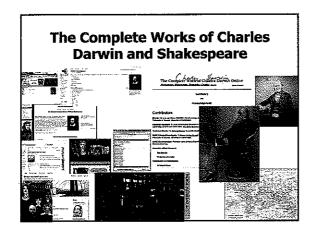


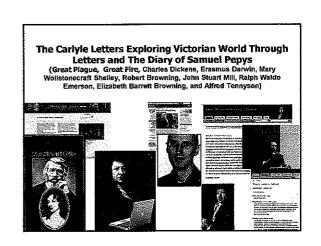


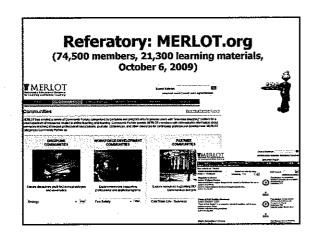


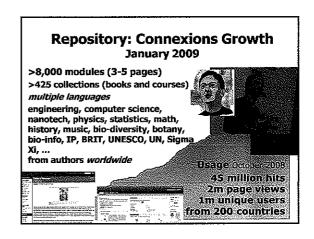


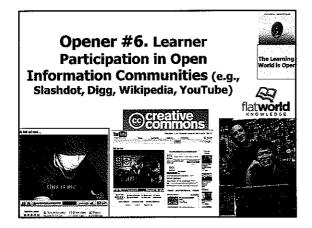


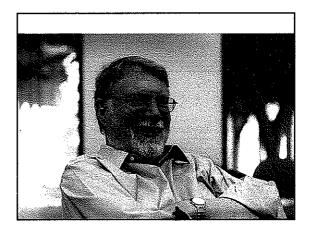


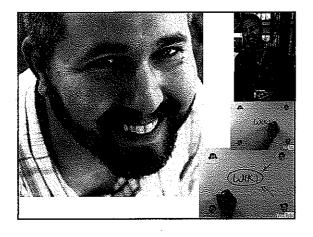


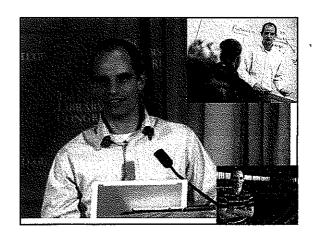


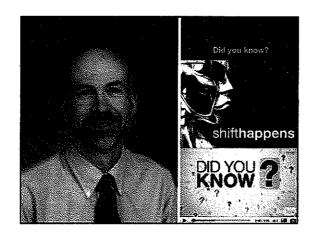


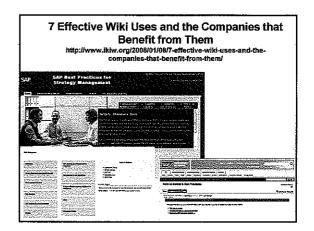








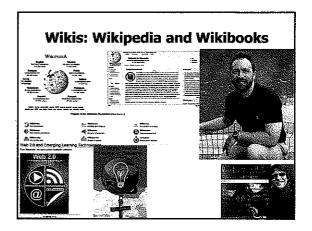




#### 7 Effective Wiki Uses and the Companies that Benefit from Them

http://www.ikiw.org/2008/01/08/7-effective-wikiuses-and-the-companies-that-benefit-from-them/

SAP: On the <u>SAP Developer Network Wiki</u> the, "main criteria for choosing to put content in the wiki is its volatility and dynamics, extendability and/or collaborative character. Ask yourself the question, if you want others to be able to change, extend, regroup, add, etc. your contribution." That's an excellent question to ask, especially for content that's going on a public wiki.



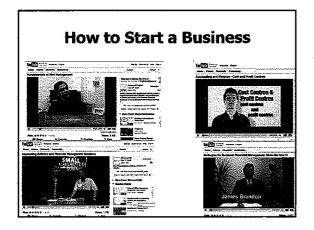
# Poll #5: Which of the following resources from the Wikimedia Foundation have you used (check all that apply)

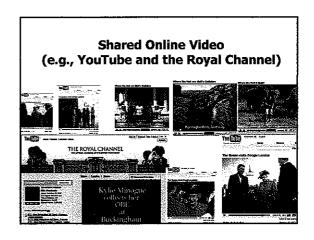
- 1. Wikibooks
- 2. Wikicommons
- 3. Wikinews
- 4. Wikipedia
- 5. Wikiquote
- 6. Wikisource
- 7. Wikispecies
- 8. Wikiversity
- 9. Wiktionary

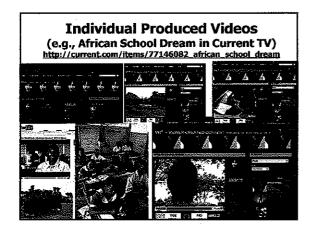


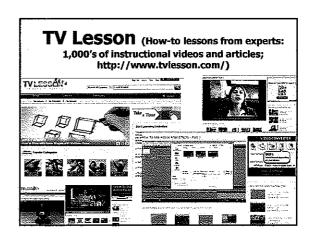


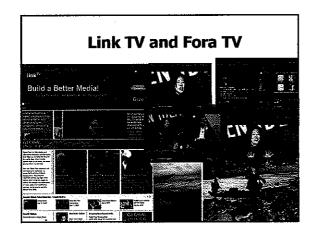






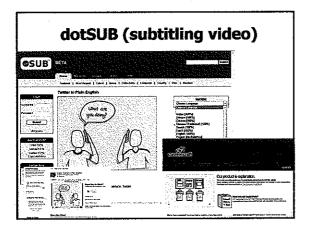


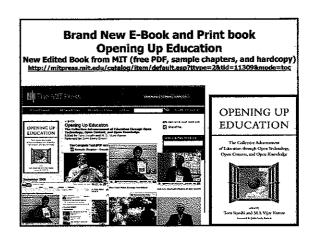


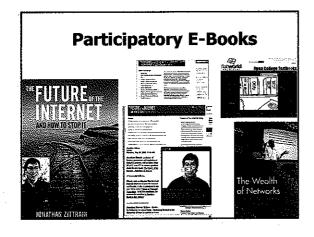


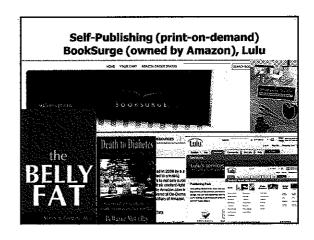
#### Poll #6: Which shared online video resources have you used or seen used in teaching? (check all that apply)

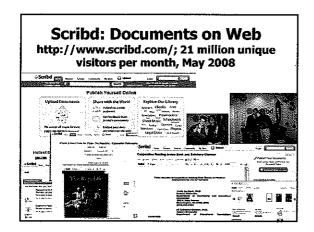
- BBC News Video and Audio
- CNN.com Video
- **Current TV**
- Fora TV
- Google Video
- Link TV MIT World
- MSNBC.com
- NASA TV
- 10. TeacherTube
- 11. YouTube
- 12. YouTube Edu

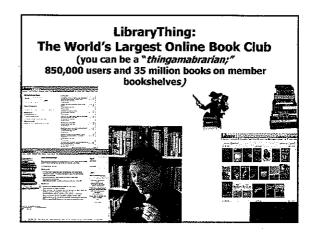


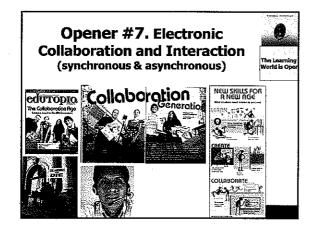


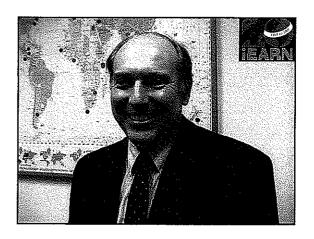


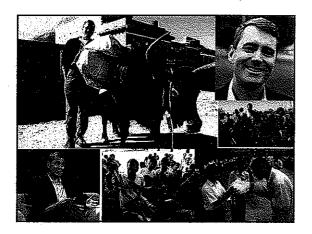








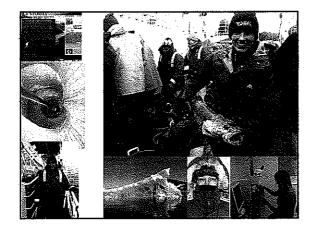




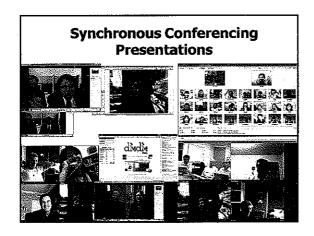


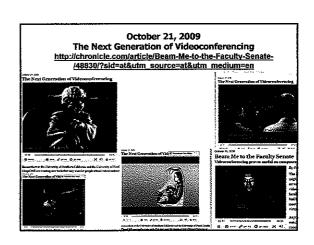


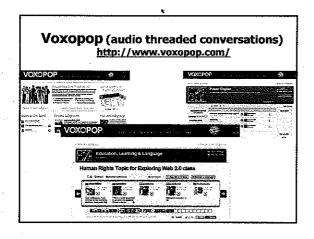


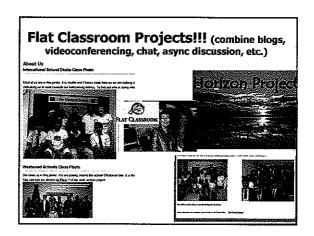


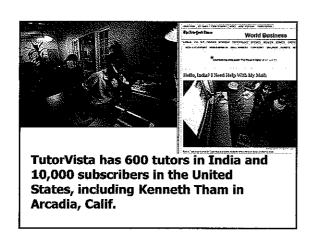


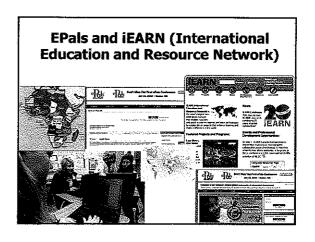


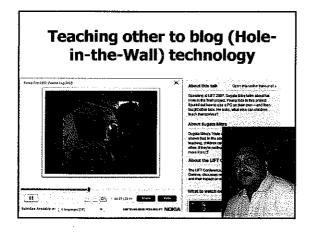


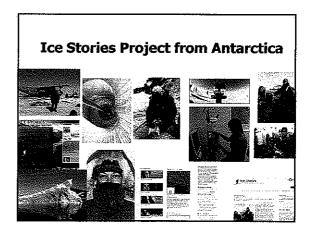




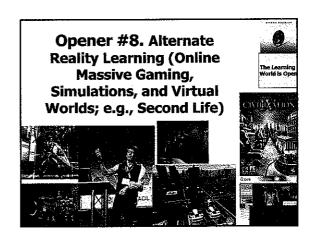


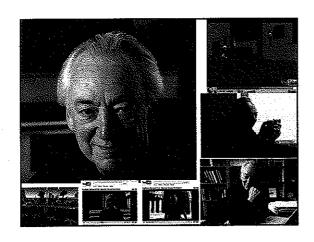




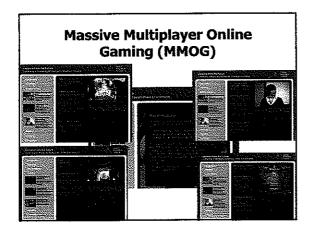


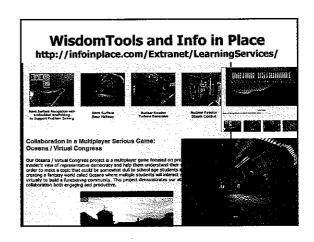




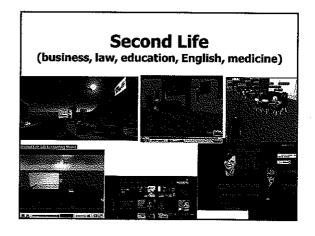


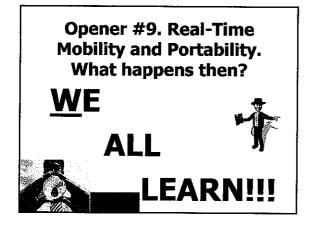








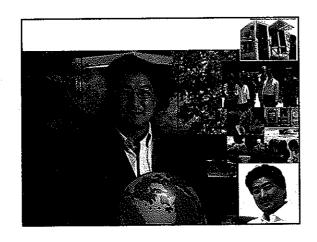


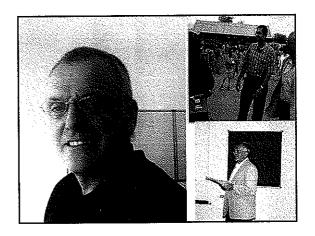


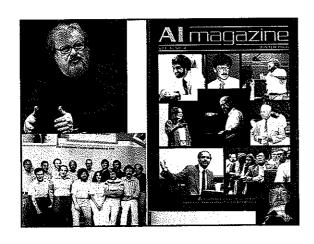


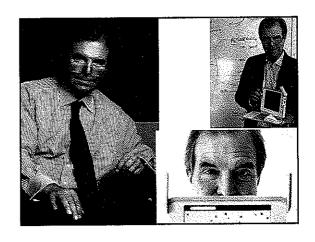


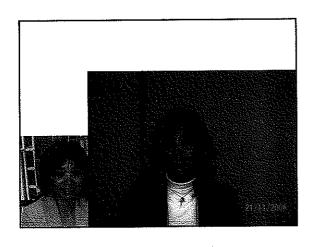


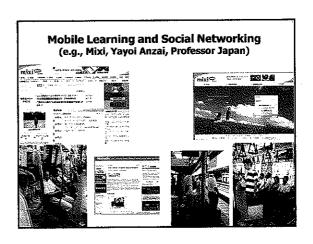


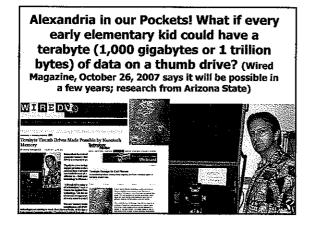


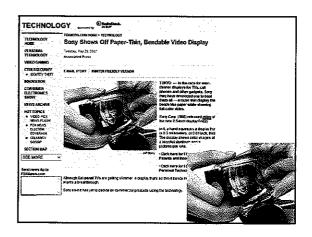


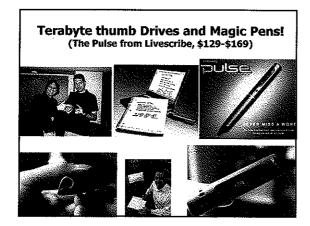






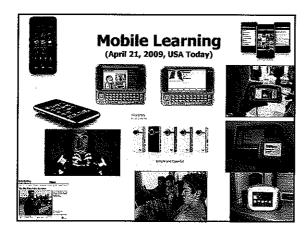






# Poll #7: Would you buy a Pulse pen?

- 1. Yes
- 2. Maybe
- 3. No, too expensive
- 4. No, too technical
- 5. No, waiting for advancements in the technology
- 6. No, no need
- 7. Not interested



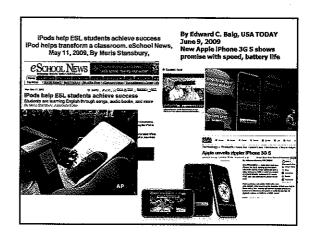
Ocarina, Leaf Trombone lead big parade of iPhone apps, April 21, 2009, USA Today Jefferson Graham

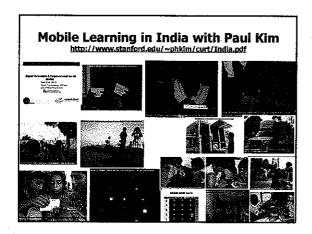
http://www.usatoday.com/tech/wireless/phone s/2009-04-21-apple-iphone-ocarina\_N.htm

- Their Ocarina, a 99-cent application that turns the iPhone into a virtual flute, has become one of the iPhone's best-selling apps — to the tune of nearly \$800,000. Now out is the sequel, the Leaf Trombone World Stage.
- "We believe in the potential of interactive sound; we believe that everyone is inherently creative; and we want to unlock that creativity in everyone," says Wang, 31. "We want to find new types of ways to connect people, using the technology we have before us."

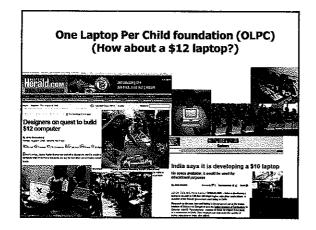


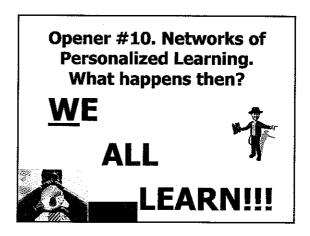


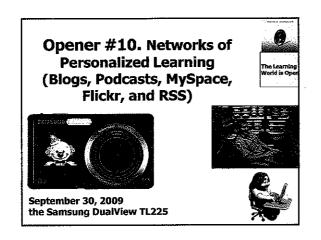


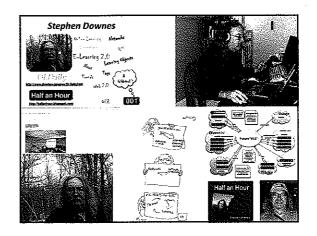
















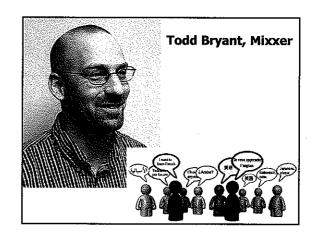


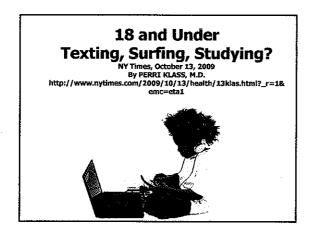


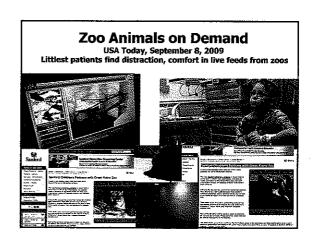






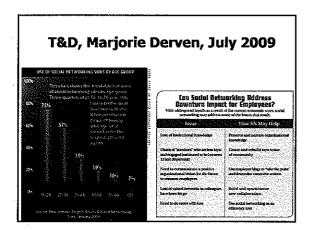


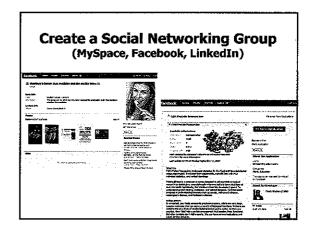


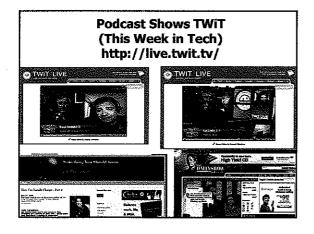


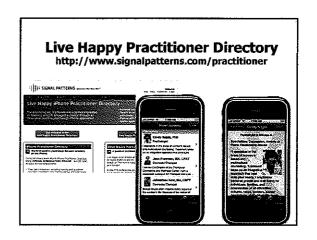


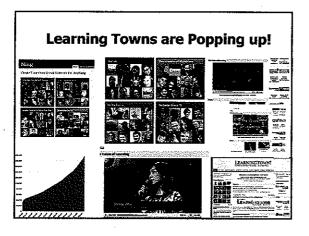




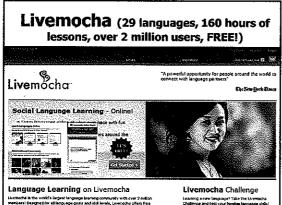














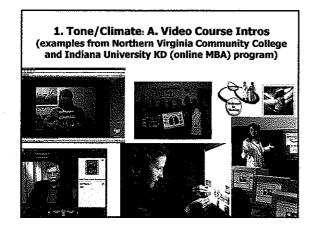
# **Some Online Motivational Ideas**

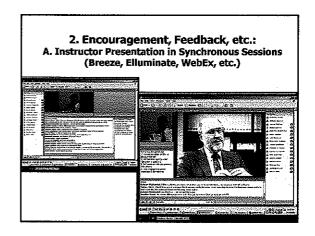
#### Poll #7: If you had one language to learn online which would it be?

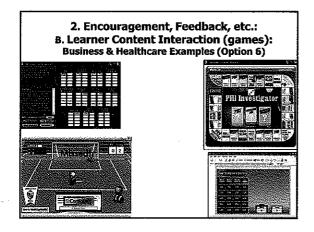
- 1. Arabiç
- Chinese
- English
- French
- German
- Hindi
- Japane Korean
- 10. Spanish
- 11. Italian
- 12. Other

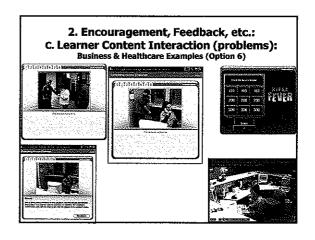
#### **TEC-VARIETY Model for Online Motivation and Retention**

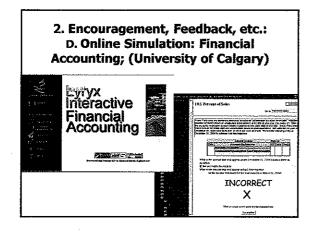
- 1. Tone/Climate: Psych Safety, Comfort, Belonging
- **Encouragement, Feedback: Responsive, Supports**
- Curiosity: Fun, Fantasy, Control
- 4. Variety: Novelty, Intrigue, Unknowns
- 5. Autonomy: Choice: Flexibility, Opportunities
- 6. Relevance: Meaningful, Authentic, Interesting
- Interactive: Collaborative,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

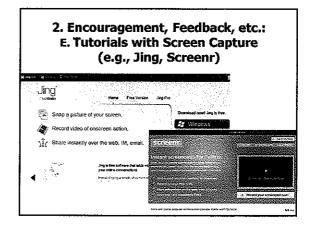


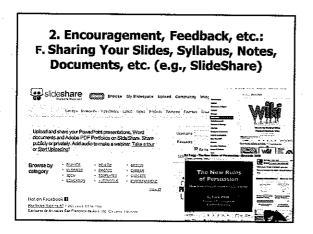


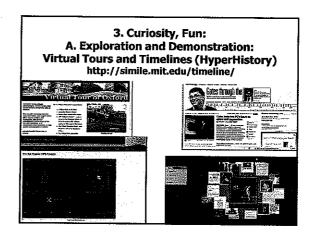


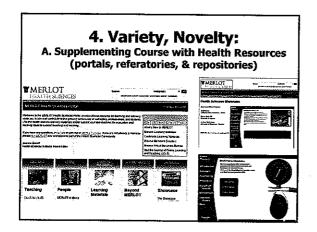


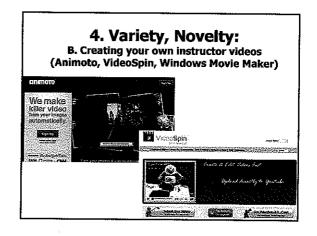


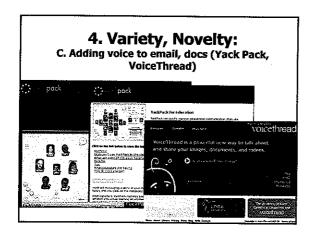


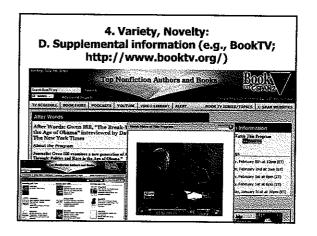


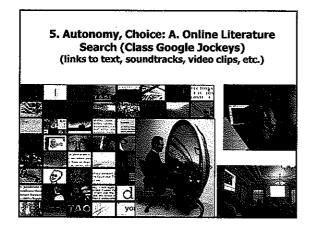


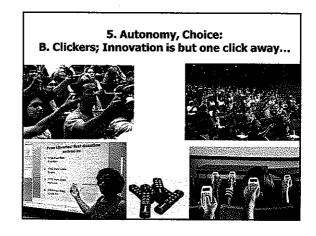


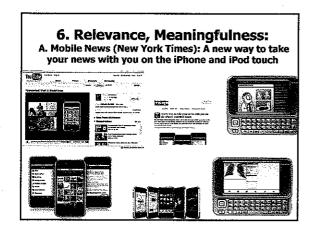


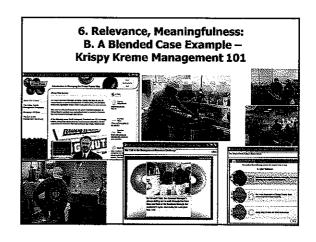


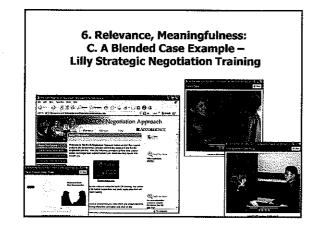


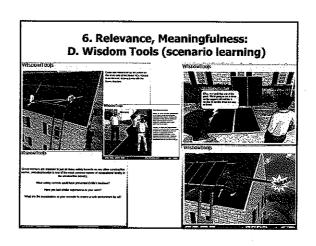


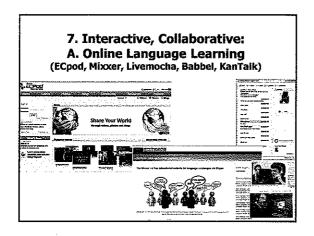


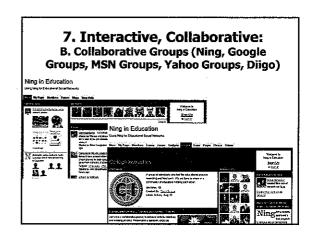


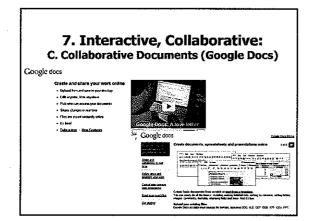


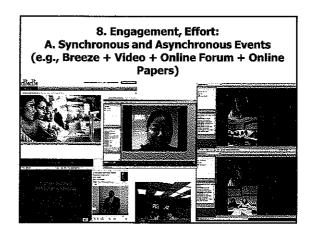


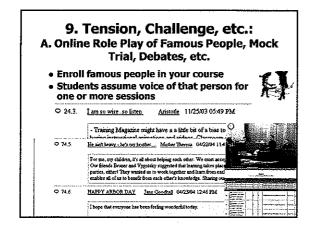


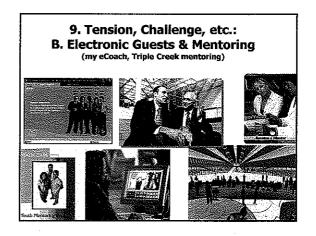


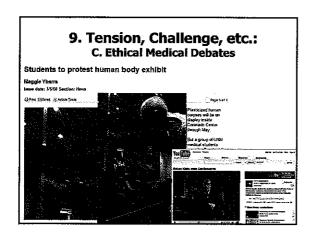
















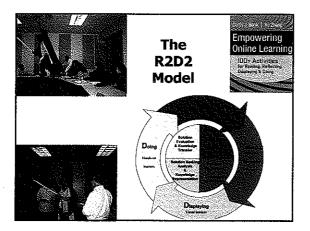
- 1. 0 if I am lucky.
- 2. Just 1.
- 3. 2, yes, 2...just 2!
- 4. Do I hear 3? 3!!!!
- 5. **4-5**.
- 6. 5-10.
- 7. More than 10.

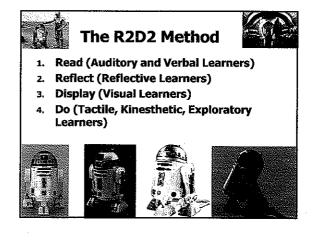


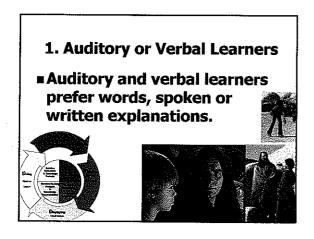


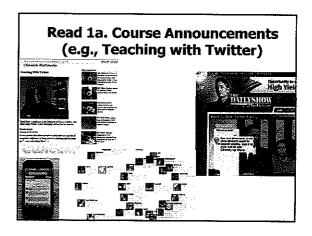


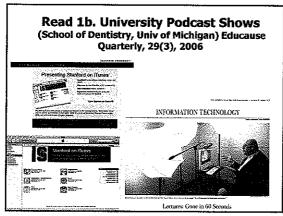




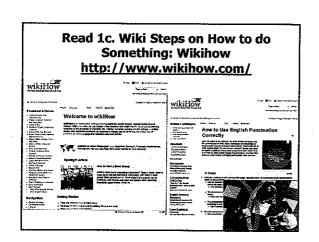


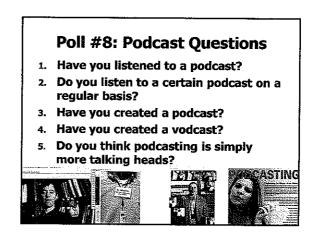












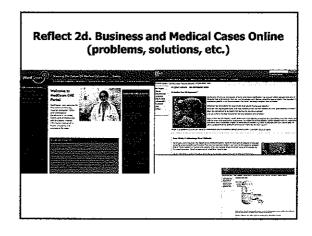
### 2. Reflective and Observational Learners Reflective and observational learners prefer to reflect, observe, view, and watch learning; they make careful judgments and view things from different perspectives

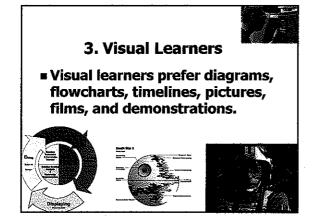
#### Reflect 2a. Blogs Uses

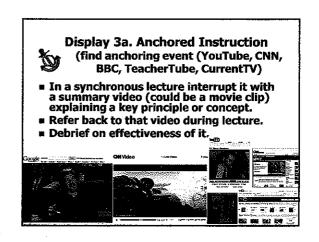
- Instructor or Tutor blog: resources, information, space to chat
- 2. Learner blog: reflections, sharing links and pics, fosters ownership of learning
- Partner blog: work on team projects or activities
- Class blog: international exchanges, projects, PBL
- Revision: review and explode sentences from previous posts, add details
- 6. Nutshell: sumarize themes or comments across blogs
- 7. Blog on blog: reflections on feelings, confusions, and experiences with blogs

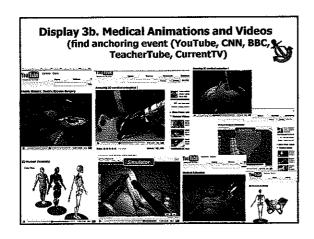
# Reflect 2b. Expert and Domain Specific Blogs (Health and Business Blogs) Light Specific States and Business Blogs) Later and Business Blogs Later and Business Blogs Later and Business Blogs Later and Business Business Blogs Later and Business Business Blogs Later and Business Busines

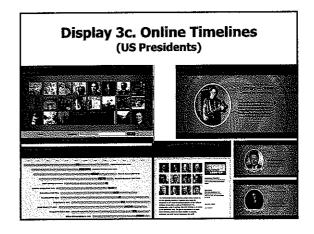
# Reflect 2c. Watch or Listen to Online Conferences Future of Health Part I

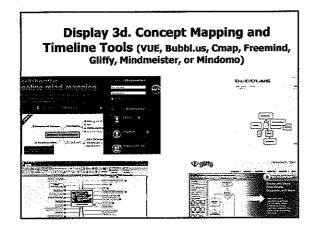


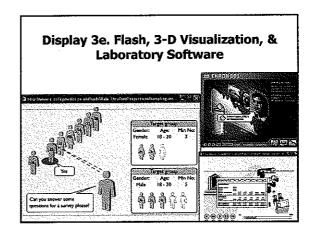


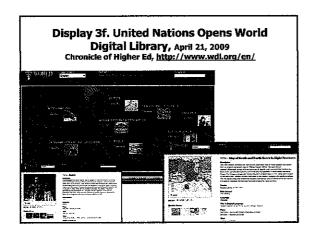


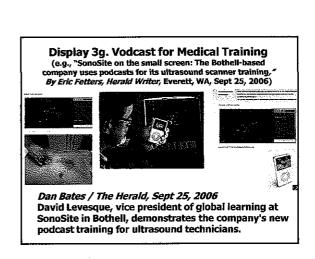


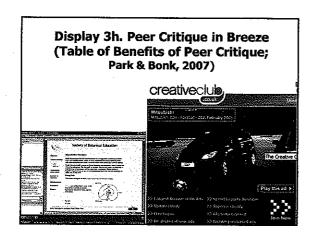


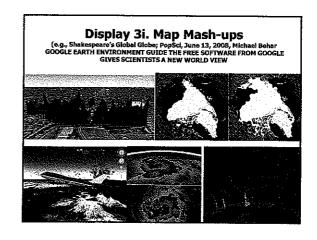


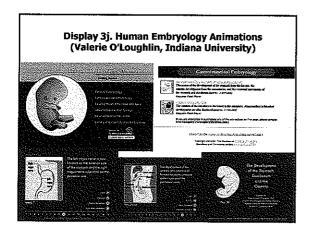


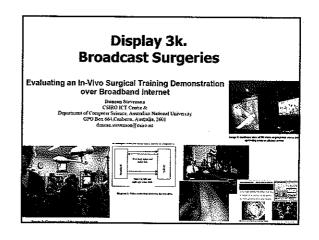


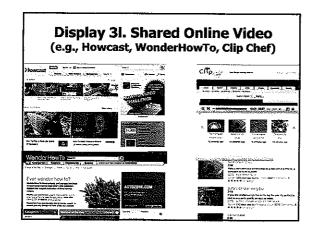


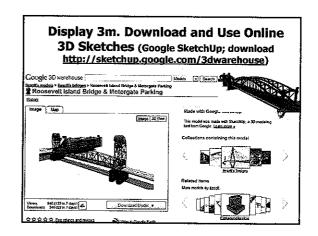












#### 4. Tactile/Kinesthetic Learners

■ 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.





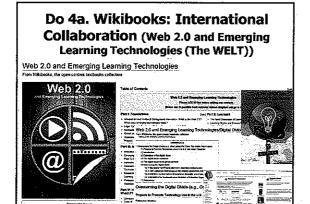


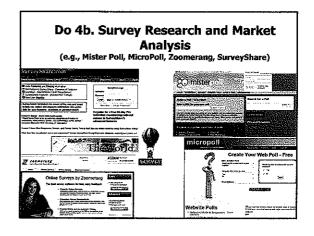
# Poll #9: Wiki Questions (check all that apply)

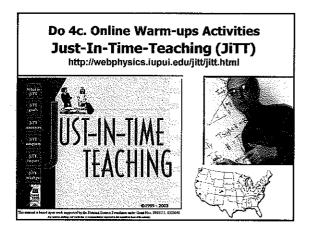
- 1. I regularly read Wikipedia articles just for fun.
- 2. I have read one or more Wikibooks.
- 3. I seek out Wikipedia for content.
- 4. I have edited or written new articles on Wikipedia or Wikibooks.
- 5. I think it is ok for college students to cite from Wikipedia.

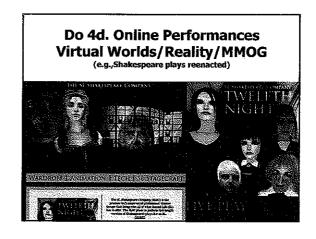


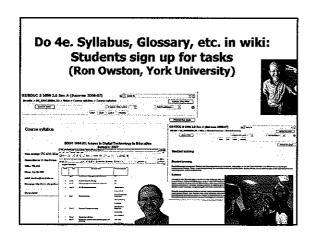


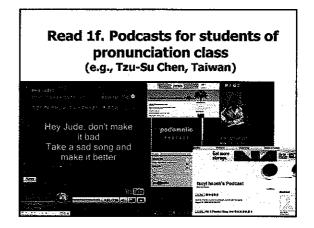


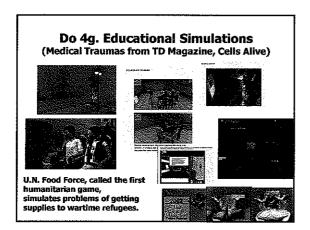


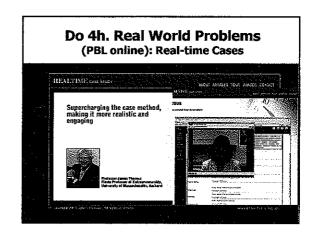


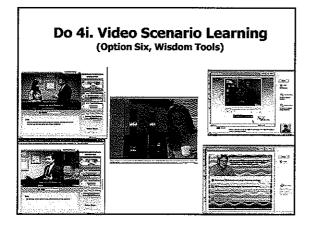












Poll #10: How many ideas did you get from the second part of this talk?

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

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

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



