

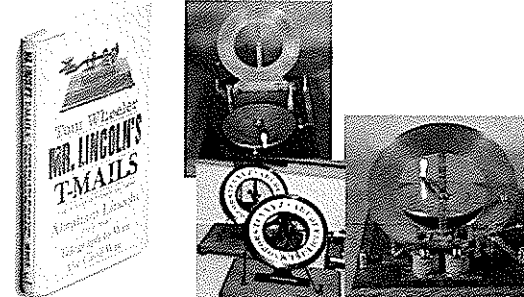
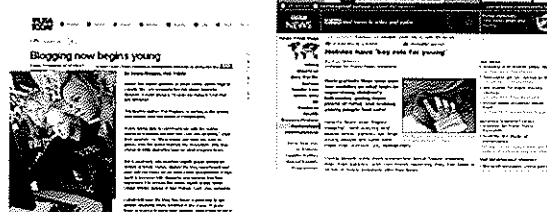


**Active Learning with Technology:
Myths, Magic, and Mucho Motivation**

Dr. Curtis J. Bonk
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President, SurveyShare, Inc.
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**Telegraph:
Flattening the world in 1860**

Blogging now begins young

Eighth-grade students Taylor Bernholtz, left, Amy Lostroh and Kelsey Cardiff check out a weblog discussion related to the Civil War historical-fiction book 'Guerrilla Season' At South Valley Junior High School in Liberty, Mo. (Blogging now begins young USA Today, By Ashley Bleimes, USA TODAY, November 15, 2006, 12D). http://www.usatoday.com/life/2006-11-14-blogs-education_x.htm

Schools of the 1880s



Excitement in Learning

**NEW... LOW COST
Audio Visual Method
WITH DISCUSSIONAL CONTROL**



Dramatic NEW Teaching Aid...

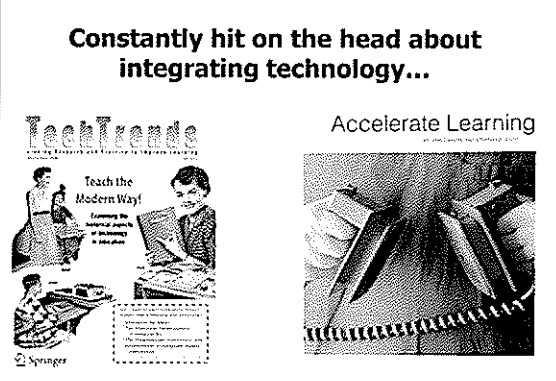


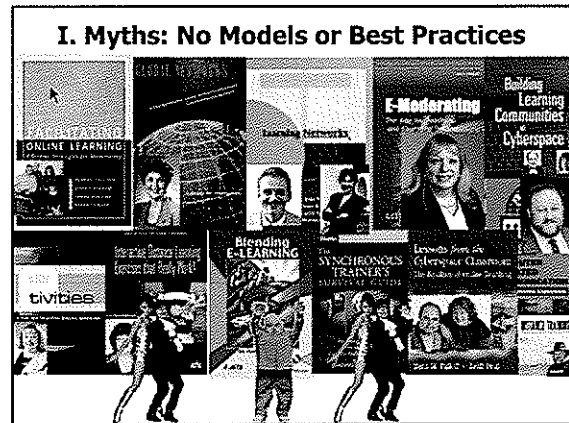
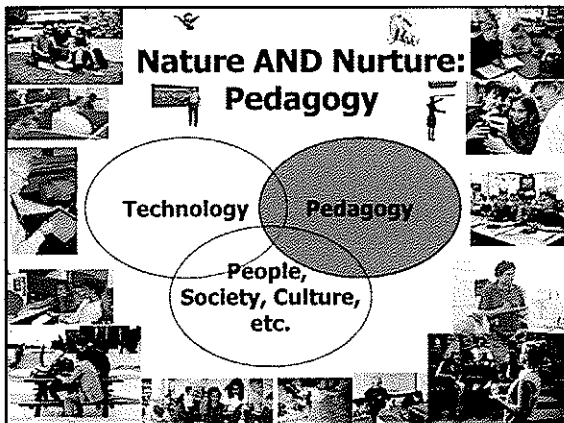
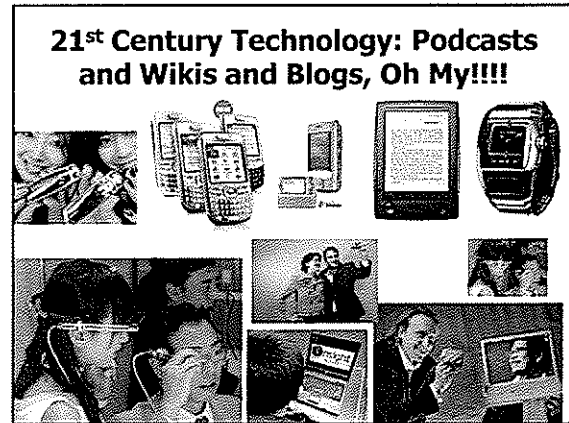
**AMERICAN OPTICAL
OPAQUE PROJECTOR**

DuKANE CORPORATION

**Constantly hit on the head about
integrating technology...**

Accelerate Learning





I. Student Technology Myths

1. They all are Web 2.0 savvy and equipped.
2. Some will dominate and intimidate others.
3. Will be too off task and social online.
4. Online cheating is the key reason not to teach with tech.
5. Online students are located far away.

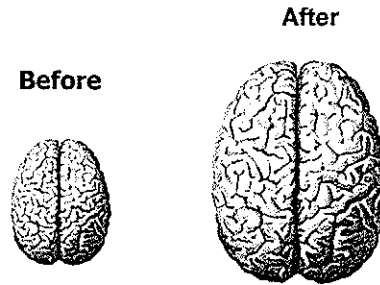
Simulation: Xer

- "The skill to be valued in the twenty-first century is not the length of attention span, but the ability to multitask - to do many things well at once.... [and] the ability to process visual information very rapidly."
(Rushkoff, 1996:50)

Learner Control: Xer

- Xers expect a range of options, in terms of what they learn and how they learn it. They require autonomy and flexibility for their own learning. They demand a variety of instructional methods from which they can choose to learn, e.g., videotapes, self-paced modules, interactive CDs.
 - "Online gives me something to do when I'm bored with the professor."
 - "I respect myself more as a self-teacher."
- Dziuban, Moskal, & Hartman (2005)

Brains Before and After e-Learning



II. Magic....

Podcasting <http://itunes.stanford.edu/>

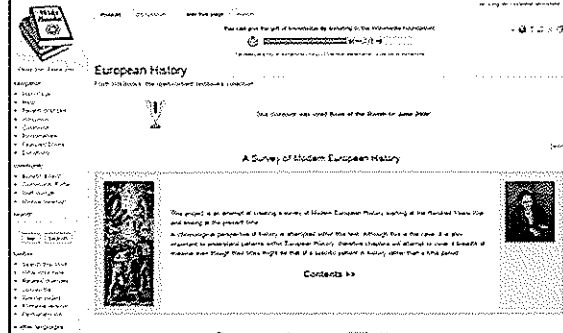


Podcast Questions

1. Who has listened to a podcast?
2. Who listens to a certain podcast on a regular basis?
3. Who has created a podcast?
4. Who has created a vodcast?
5. Who thinks podcasting is simply more talking heads?



Wikis



Open Access Books

Wiki Questions

1. Who regularly reads Wikipedia articles just for fun?
2. Who regularly reads Wikibooks?
3. Who seeks Wikipedia for content?
4. Who has edited or written new articles on Wikipedia or Wikibooks?
5. Who thinks it is ok for college students to cite from Wikipedia?

Growth of Online Learning in Secondary Schools

What if our minds were on fire for learning?

MINDS ON FIRE: OPEN EDUCATION, THE LONG TAIL, AND LEARNING 2.0. JOHN SEELY BROWN AND RICHARD ADLER, EDUCAUSE REVIEW, JANUARY-FEBRUARY, 2008.
<http://connect.educause.edu/Library/EDUCAUSE+Review/MindsonFireOpenEducation/45823>

Dual Coding Theory

Figure 2.4. A model of human information processing and memory. Adapted from: The Basic Science of Learning and Memory. Memory: From Theory to Practice. Ed. by M. G. H. and M. G. H. (2004). The Guilford Press, New York, NY, p. 11.

Next Generation of Students

Tech Creates Bubble for Kids
 Alejandro Gonzalez, USA TODAY, Updated 6/20/2006 10:34 AM ET



Yahoo News
Love me, love my blog," as Netorati couple-surf
BY SARA LEDWITH Thu Aug 3, 8:30 AM ET

- "For my birthday, he upgraded my RAM and I thought it was incredibly romantic," writes Jess.

Bonk's Addiction Q'er

1. Who has 2 or more cell phones with Internet access?
2. Who has 2 or more laptop computers with wireless connections?
3. Who is on email in the morning? At noon? Who does it at night?
4. Who suffers from nervous tension when you cannot get on email?
5. Who is on the Web right now?

Magic Pens! (The Pulse from Livescribe)

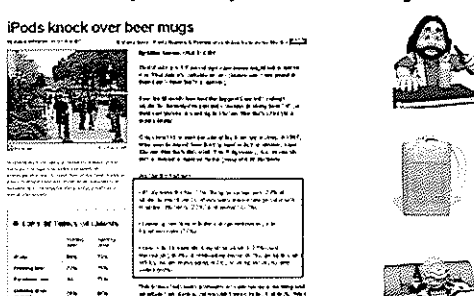
Capella Tower

225 South Sixth Street, Minneapolis
 Formerly, the "Halo"

Adventure Blogging: North Pole Marathon

Top 5 "In" Things on Campus June 7, 2006, USA Today

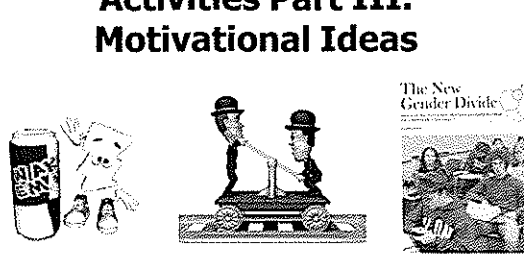
iPods knock over beer mugs



TOP 5 "IN" THINGS ON CAMPUS

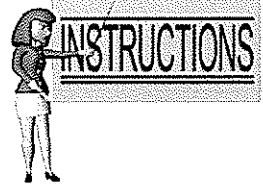
Rank	Item	Percentage
1	iPod	72%
2	Beer mug	68%
3	Person with laptop	65%
4	Person with cell phone	62%
5	Person with MP3 player	58%

Activities Part III. Motivational Ideas




The New Gender Divide

Most ID Models in the 1980s Prescriptive



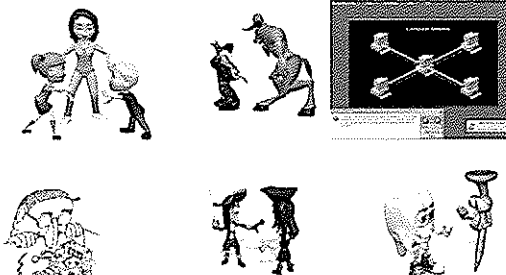
Skinner (1904-1990) Quote.

- I did not direct my life. I didn't design it. I never made decisions. Things always came up and made them for me. That's what life is.



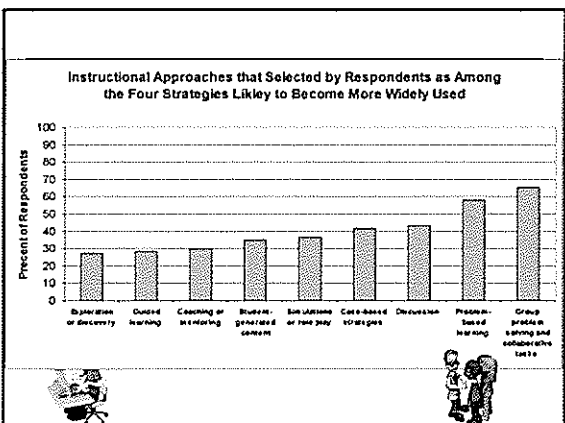
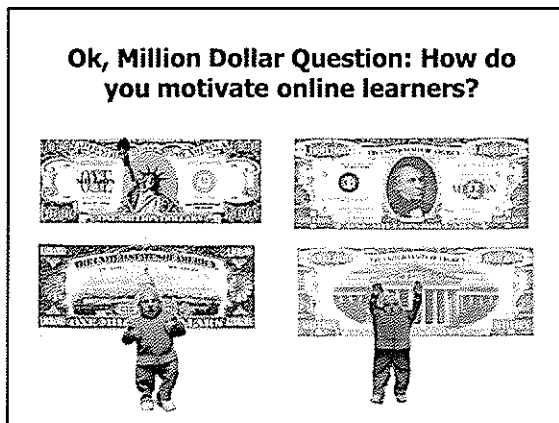
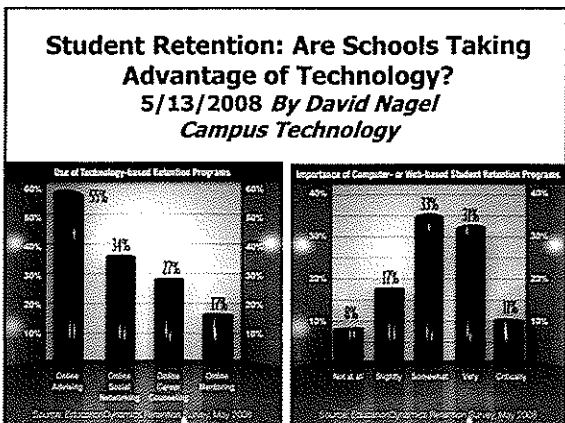
This image is a portrait of B.F. Skinner, a psychologist, and is not for educational purposes, but for entertainment.

Behavioristic Interactivity



Top Reasons for Dropping Out (Deosnews, May 2004; Frankola, 2001)

- Lack of time
- Lack of management oversight
- Lack of motivation
- Lack of student support
- Individual learning preference
- Poorly designed course
- Substandard/Inexperienced instructor



- ### Three Most Vital Skills
- The Online Teacher, TAFE, Guy Kemshal-Bell (April, 2001)
- Ability to engage the learner (30)
 - Ability to motivate online learners (23)
 - Ability to build relationships (19)
 - Technical ability (18)
 - Having a positive attitude (14)
 - Adapt to individual needs (12)
 - Innovation or creativity (11)
-

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.



A Theory of Critical Inquiry in Online Distance Educ
Randy Garrison, Terry Anderson, & Walter Archer
 2003, Handbook of Distance Education, Moore & Anderson (Eds.)
 garrison@ucalgary.ca; terrya@athabascau.ca

1. Sense of Real People (socially and emotionally)
 2. Constructing Meaning (through reflection/discourse)
 3. Facilitation of the other two (through design, organization, etc.)

Factors in Creating any Community (Rick Schwier)

- (1) membership/identity
- (2) influence
- (3) fulfill of indiv needs/rewards
- (4) shared events & emotional connections

(McMillan & Chavis, 1986).
 History, stories, expression, identity, participation, respect, autonomy, celebration, team building, shape group, Rick Schwier, 1999; University of Saskatchewan, richard.schwie@usask.ca

Model of Teaching and Learning Through CMC (Gilly Salmon, 2000)

1. Moderating
 2. Encouraging
 3. Collaborative Learning

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:

A. Coffee House Expectations

1. Have everyone post 2-3 course expectations
2. Instructor summarizes and comments on how they might be met

B. Public Commitments: Have students share how they will fit the coursework into their busy schedules

1. Tone/Climate:

C. Accomplishment Hunt
 (L = Cost, M = Risk, M = Time)

- a. Turn in 2-3 accomplishments (e.g., past summer, during college, during life);
- b. Teacher lists 1-2 of those for each student on a sheet without names.
- c. Participants have to ask "Is this you?" If yes, get a signature.

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

2. Encouragement, Feedback, etc.: A. Critical/Constructive Friends, Email Pals...

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

2. Encouragement, Feedback, etc.: C. Thinking About the Readings (TARS) JIIT; Claude Cookman, IU, Photography Class

3. Curiosity, Fun: A. Games e.g., Online Jeopardy Game Games2Train: The Challenge; Thiagi.com

3. Curiosity, Fun: B. Virtual Field Trips

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

3. Curiosity, Fun:
D. Electronic Seance

- Students read books from famous dead people
- Convene when dark (sync or asynchronous).
- Present present day problem for them to solve
- Participate from within those characters (e.g., read direct quotes from books or articles)
- Invite expert guests from other campuses
- Keep chat open for set time period
- Debrief

4. Variety, Novelty:
A. Video Streamed Lectures & Expert Commenting

4. Variety, Novelty:
B. Brainstorming Chat



- Come up with interesting or topic or problem to solve
- Anonymously brainstorm ideas in a chat discussion
- Encourage spin off ideas
- Post list of ideas generated
- Rank or rate ideas and submit to instructor
- Calculate average ratings and distribute to group

5. Autonomy, Choice: A. Read, Listen, etc. to online books (e.g., "An International Episode" by Henry James)

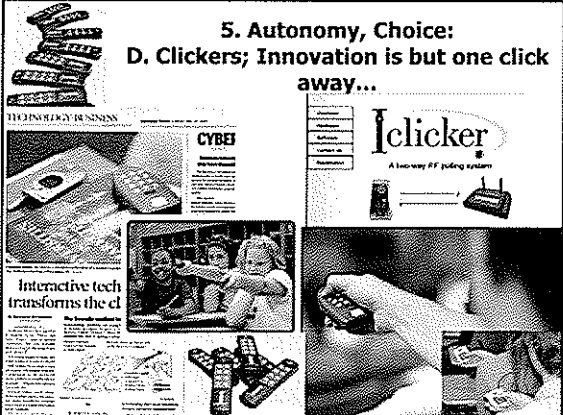
5. Autonomy, Choice: B. Online Literature Search (Class Google Jockeys)
The Electronic Literati, in Search of a Voice, June 1, 2007, Chronicle of Higher Education, Jeffrey Young
 (links to text, soundtracks, video clips, etc.)

5. Autonomy, Choice:
C. Volunteer Technology Demos (Bonk, 1996)

- Take students to a computer lab.
- Have students conduct a technology demonstration that relates to something from the class (replaces an assignment).
- Include handout
- Debrief





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

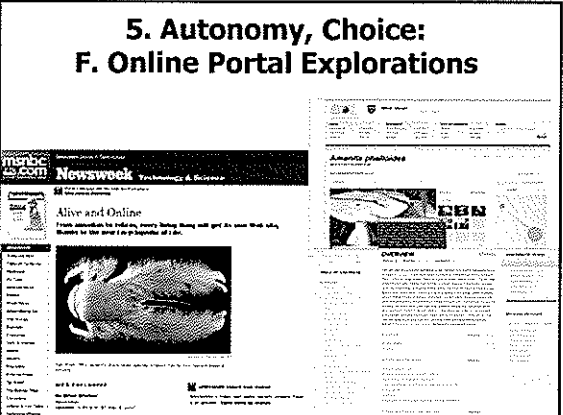


5. Autonomy, Choice:
E. Multiple Topic Forums or Task Options

- Generate multiple discussion prompts and ask students to participate in 2 out of 3
- Provide different discussion "tracks" (much like conference tracks) for students with different interests to choose among
- List possible topics and have students vote (students sign up for lead diff weeks)
- Have students list and vote.


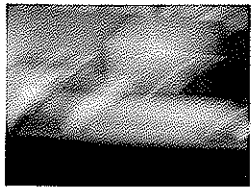


5. Autonomy, Choice:
F. Online Portal Explorations



What have you learned so far?

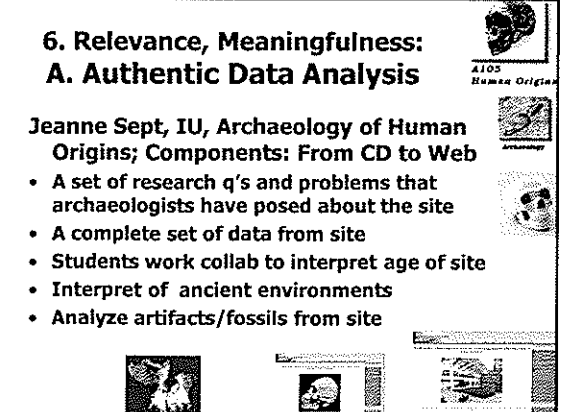
- Solid and Fuzzy in groups of two to four

6. Relevance, Meaningfulness:
A. Authentic Data Analysis

Jeanne Sept, IU, Archaeology of Human Origins; Components: From CD to Web


- A set of research q's and problems that archaeologists have posed about the site
- A complete set of data from site
- Students work collab to interpret age of site
- Interpret of ancient environments
- Analyze artifacts/fossils from site



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

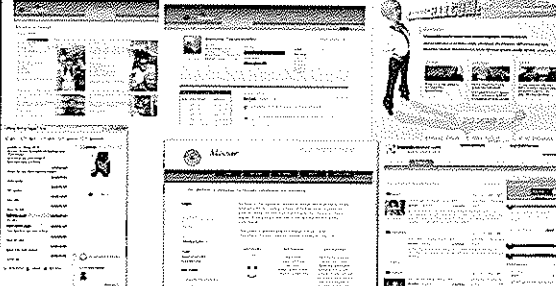



6. Relevance, Meaningfulness:
C. 99 Second Quotes
 (L = Cost, M = Risk, M = Time)




- Everyone brings in a quote that they like from the readings
- You get 99 seconds to share it and explain why you choose it in a sync chat or videoconference
- Options
 - Discussion wrapped around each quote
 - Small group linkages—force small groups to link quotes and present them
 - Debate value of each quote in an online forum

7. Interactive, Collaborative:
A. Online Language Learning
 (Mixer, Livemocha, Friends Abroad)



7. Interactive, Collaborative:




B. Discussion: Starter-Wrapper (Hara, Bonk, & Angeli, 2000)

1. Starter reads ahead and starts discussion and others participate and wrapper summarizes what was discussed.
2. Start-wrapper with roles—same as #1 but include roles for debate (optimist, pessimist, devil's advocate).

C. Alternative: Facilitator-Starter-Wrapper (Alexander, 2001)
 Instead of starting discussion, student acts as moderator or questioner to push student thinking and give feedback

7. Interactive, Collaborative:




D. Panels of Experts: Be an Expert/Ask an Expert: Have each learner choose an area in which to become expert and moderate a forum for the class. Require participation in a certain number of forums (choice)

E. Press Conference: Have a series of press conferences at the end of small group projects; one for each group)


F. Symposia of Experts

G. Structured Controversy




7. Interactive, Collaborative:
G. Mock Trials with Occupational Roles
 (L = Cost, H = Risk, M/H = Time)

- a. Create a scenario (e.g., school reform in the community) and hand out to students to read.
- a. Ask for volunteers for different roles.
- b. Perhaps consider having key person on the pro and con side of issue make a statement.
- c. Discuss issues from in role (instructor is the hired moderator or one to make opening statement; he/she collects ideas on document camera or board).
- d. Come to compromise.




**7. Interactive, Collaborative:
H. Peer Mentoring Sessions**
(Bonk, 1996)

1. Have students sign up for a chapter wherein they feel comfortable and one that they do not.
2. Have a couple of mentoring sessions in class.
3. Debrief on how it went.




**7. Interactive, Collaborative:
I. Human Graph**

- **Class lines up: (1-5)**
1 = Strongly agree,
3 = neutral,
5 = strongly disagree
• e.g., this workshop is great!
- **In a videoconference or synchronous session, have students line up on a scale (e.g., 1 is low and 5 is high) on camera according to how they feel about something (e.g., topic, the book, class).**



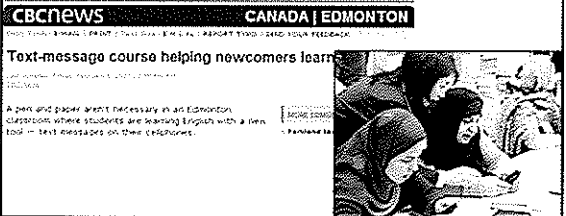
**7. Interactive, Collaborative:
J. Numbered Heads Together**

- a. Assign a task and divide into groups (perhaps 4-6/group).
- b. Perhaps assign group names across class or perhaps some competition between them.
- c. Count off from 1 to 4.
- d. Discuss problem or issue assigned.
- e. Instructor calls on groups & numbers.
 - a. e.g., in a research methods class, one person reads intro, another the method, another the findings, discussion, implications, etc.



**8. Engagement, Effort:
A. Text Messaging**

Students at the Mennonite Centre for Newcomers are testing mobile learning - downloading an English grammar lesson, then answering a series of multiple choice, or true or false questions. (Edmonton) Friday, February 9, 2007, CBC News




**8. Engagement, Effort:
B. Just-In-Time Syllabus**

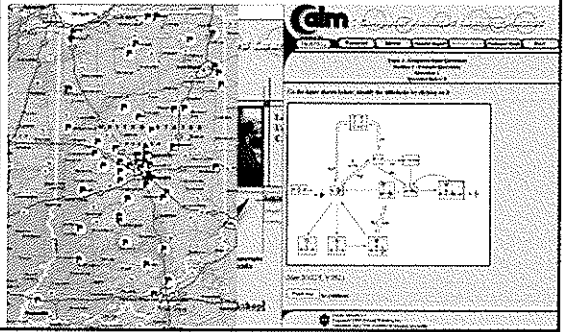
(Raman, Shackelford, & Soein) <http://ecodweb.unomaha.edu/jits.htm>
<http://ecodweb.unomaha.edu/jits.htm>

Syllabus is created as a "shell" which is thematically organized and contains print, video, and web references as well as assignments. (Goals = critical thinking, collab, develop interests)

e.g., To teach or expand the discussion of supply or elasticity, an instructor might add new links in the Just-in-Time Syllabus to breaking news about rising gasoline prices.



**8. Engagement, Effort:
C. Student Self-Testing (e.g., Calm Chemistry)**



**8. Engagement, Effort:
D. Mobile Literacy (e.g., Pocket School)**

9. Tension, Challenge, etc.:
A. Online Role Play of Famous People, Mock Trial, Debates, etc.

- Enroll famous people in your course
- Students assume voice of that person for one or more sessions

743: [Learn to write, to listen](#) [Annotate](#) 11/2/03 05:49 PM
 - Training Magazine might have a little bit of a bias to
 have international connections and reduce / Translation
 745: [Hamlet...believe/teacher...](#) [Mobile/Thesis](#) 04/20/04 11:4
 For me, my children, it's all about helping each other. We must accept
 Our friends Irena and Vignette suggested that learning takes place
 parties, either they want it us to work together and learn from each
 enables all of us to benefit from each other's knowledge. Changing
 746: [HAPPY BIRTHDAY](#) [Last Session](#) 04/20/04 12:46 PM
 I hope that everyone has been finding wonderful today

9. Tension, Challenge, etc.:
B. Electronic Guests & Mentoring
(Simon Fraser University News:
<http://www.sfu.ca/medupr11/news/2001/Sept07highitech.html>)

10. Yields Products, Goals:
A. Produce a Podcast
JapanesePod, Arabic online, etc.

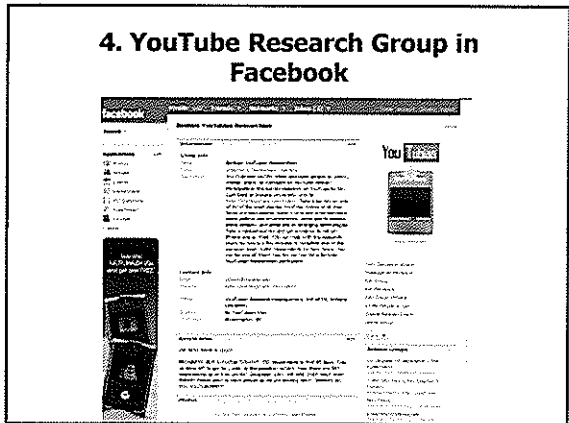
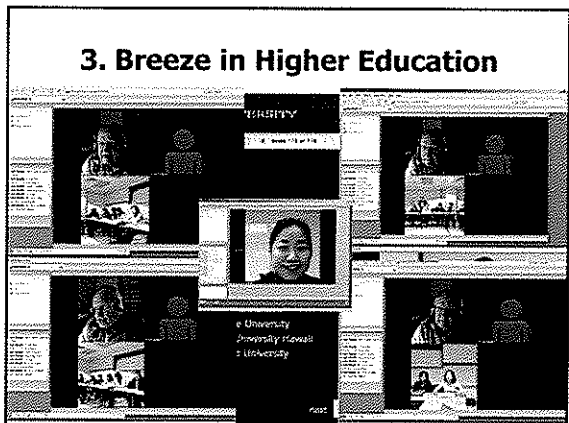
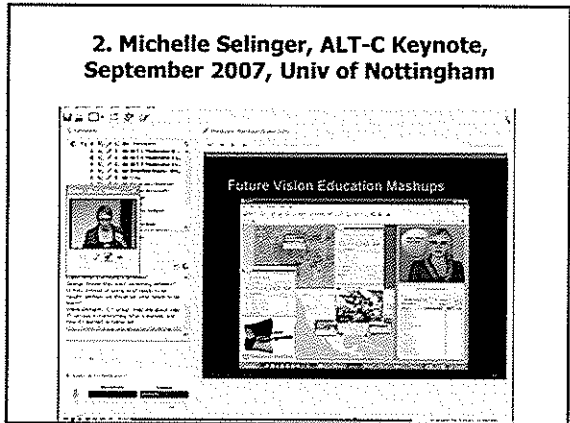
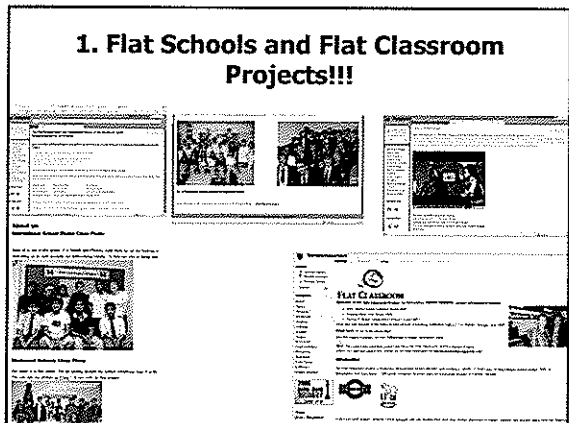
10. Yields Products, Goals:
B. Concept Maps, Video Papers, Virtual Timelines, Digital Movies

99 seconds: What have you learned so far?

- Solid and Fuzzy in groups of two to four

**Time for Convergence!!!
 (activities that do not fit neatly)**

**Combining Web 2.0 and
 Other Online Technology
 Trends
 (Twelve Examples)**



6. Archive Last Lectures
(Randy Pausch, Carnegie Mellon University)

This screenshot shows a website interface for archiving lectures. It features a header with the title, a navigation menu, and several video thumbnails with titles like 'The Last Lecture' and 'The Last Lecture: A Tribute to Randy Pausch'. The layout is clean and organized, typical of a digital archive.

7. Combining The Web 2.0 (e.g., Second Life, Blogging, and Photo Posting)
Stephen Mandelbrot

This collage includes a photo of Stephen Mandelbrot, a screenshot of a blog post, and a virtual world scene from Second Life. The images illustrate the integration of different Web 2.0 technologies.

8. Indexing Sounds in Cities with Google Maps

The screenshot shows a Google Maps interface with a sidebar on the left containing a list of sound recordings. The main map area shows a city street with several red location markers, each accompanied by a small audio player icon, demonstrating how sound data is geotagged.

9. Cluster Maps (who is reading your blog or using your product); Blog of Will Richardson, famous K-12 blogger (left) and Learning Theories Book of Michael Orey, Univ of Georgia (right)

This collage features a world map with clusters of points representing user locations, a screenshot of Will Richardson's blog, and a screenshot of Michael Orey's book 'Learning Theories'. It illustrates data visualization and digital content.

10. Vlogging (Video Blogging)
e.g., Andy Calvin's Waste of Bandwidth
Michael L. Wesch, Kansas State, The Machine is Using Us

The collage contains several screenshots of video blogs. One prominent video shows a man speaking with a 'THIS IS A COUNTY OF WISCONSIN' sign in the background. Other smaller video thumbnails are also visible, showing various vloggers in different settings.

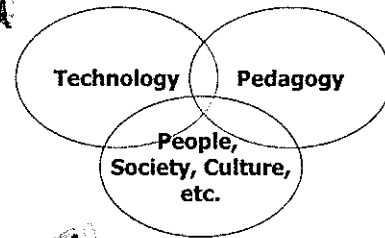
11. Serious Games Blog with video of Wikipedia and Mahalo Founders and Google scanning people in background

This block includes screenshots of the Wikipedia and Mahalo websites, along with a video frame showing a person being scanned by a Google sensor. The images represent serious games, digital education, and privacy concerns.

12. You Ustreamed my Ustream: Now that's a Twitter of an Idea



It is both Nature AND Nurture as well as
PEOPLE!!! Technology is just part of the
Equation



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

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

A collage of images. At the top, there are four small images: a person at a podium, a person in a suit, a person in a suit, and a person in a suit. Below these is the text 'Try the R2D2 Method!!!' and 'Try TEC-VARIETY!!!'. Underneath is the text 'Sample papers at: http://www.publicationshare.com/' and 'Archived talks at: http://www.trainingshare.com/'. At the bottom, there is a large image of a sign that says 'The Future' and 'NEXT EXIT' with an arrow pointing right. The sign is set against a background of a person in a dark suit holding a white object.