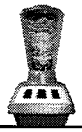
Blended Learning Situations, Solutions, and Several Stunning Surprises

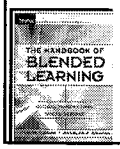
Curt Bonk, Professor, Indiana University
President, SurveyShare, Inc.
cjbonk@indiana.edu
http://mypage.iu.edu/~cjbonk/
http://SurveyShare.com





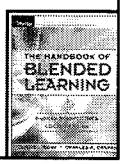
This the talk will cover:

1. Definitions of blended learning
2. Advantages and disadvantages
3. Models of blended learning
4. Examples of blended learning
5. Implications for blended learning




Part 1. Handbook of Blended Learning (HOBLe)

- University of Phoenix, Capella University, JIU, National University
- Microsoft, IBM, Sun, Cisco, Macromedia, Oracle, WebCT
- The World Bank, the DOD in USA
- In Canada: York University and the University of Calgary
- Other universities in Japan, Korea, Malaysia, Singapore, China, NZ, South Africa, Israel, Mexico, Australia, Wales, England, USA



Poll #1. Have you taught, taken, or designed a blended learning course?

A = yes

B = no

C = not sure, I am here to find out what blended means

Poll #2: Burning Blended Learning Q's

(Pick any that interest you)

A. What does blended learning mean?
B. What is typically being blended?
C. How much to blend?
D. Why blend (advantages and disadvantages)?
E. Where is this all headed?

Chris Dede, Campus Technology, June 2006: Changing the Gold Standard for Instruction

- "There is a widespread misconception that, for everyone, face-to-face is the "gold standard" in education, and that any kind of mediated interaction is second best. But we know from research, that's not true."

Blended Learning Rationale

- BL link to nontraditional and distance learning.
  - Make learning available to learners in a variety of delivery formats (Bonk & Graham, 2006).
  - Make learning adaptable to myriad styles or preferences (Bonk & Zhang, 2006).
  - Opportunities for authentic and self-directed learning avenues that have been espoused by nontraditional and distance learning experts for decades (Knowles, 1984; Wedemeyer, 1981).
  - Emerging technologies offer the options and opportunities that adult learners need (Capella, 2006).

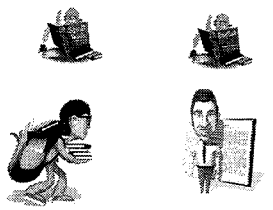
Why Blended?

- Fully e-learning has limitations (e.g., lack social interaction).
- Millions of learners around the planet are actually learning in this fashion of blended learning each day (Bonk & Graham, 2006).
- BL a top ten emerging trend in industry (ASTD, 2003).
- Conceivable that 80-90 percent of college and corporate training classes will be blended (Kim, Bonk, & Zeng, 2005).

Why not blended?

- Time to develop materials, deliver instructions, and enhance interactions.
- Instructors/trainers unwilling to change--skeptical of the effectiveness, fear of using the technology, peers can see them, and fear of lack of control.
- The barriers of institutional culture.
- Insufficient support from management.
- Learners need more self discipline and motivation.
- No one universal model of BL.

Blended Learning Defined and Explained



The Sloan Consortium

(2003). Sizing the Opportunity: The Quality and Extent of Online Education in the U.S., 2002 and 2003

http://www.sloan-c.org/resources/sizing_opportunity.pdf

Proportion of content delivered online	Type of Course	Typical Description
0%	Traditional	Course with no online technology used - content is delivered in writing or orally.
1 to 29%	Web facilitated	Course which uses web-based technology to facilitate what is essentially a face-to-face course. Might use Blackboard or WebCT to post the syllabus and assignments, for example.
30 to 79%	Blended/Hybrid	Course that is a blend of the online and face-to-face course. Substantial proportion of the content is delivered online, typically uses online discussions, typically has some face-to-face meetings
80+%	Online	A course where the vast bulk of the content is delivered online. Typically has no face-to-face meetings.

1. Blending Delivery Media

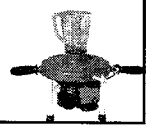
- "Blended learning means the combination of a wide range of learning media (instructor led, web based courseware, simulations, job aids, webinars, documents) into a total training program designed to solve a specific business problem." (Bersin & Associates, 2003, p. 3)

2. Blending Instructional Methods

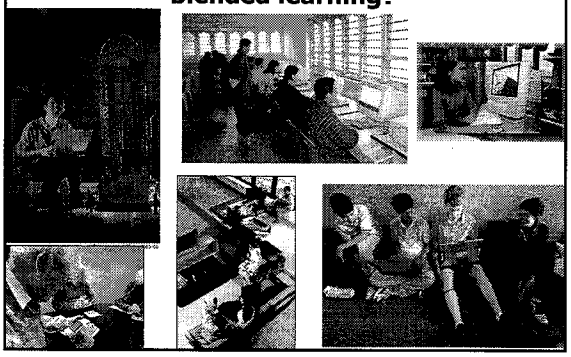
- "Blended learning: to combine various pedagogical approaches (e.g., constructivism, behaviorism, cognitivism) to produce an optimal learning outcome with or without instructional technology." (Driscoll, 2002, p. 54)

3. 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)



Who is demanding fully online and blended learning?



More than 70 Million Adults Want to Head Back to School

August 22, 2006, Yahoo News
Report: "Degrees of Opportunity" from Capella University

- Degrees of Opportunity, a new national study of the attitudes of adult Americans toward continuing their education, indicates that more than half of American adults age 25 to 60 would like to pursue additional education -- the equivalent of more than 70 million adult Americans.

Why Blend and Advantages and Disadvantages of BL...

Why Teaching Fully Online or Blended? Three Key Reasons

1. Improved Pedagogy
   - Interactive vs. Transmissive environments
   - Authenticity integration into work
2. Increased Access/Flexibility
   - Reduced seat time courses – UCF M courses
3. Increased Cost Effectiveness
   - Corporate: ROI – IBM 47:1, Avaya, Microsoft
   - Higher Ed: PEW Grants

Where is Blended Beneficial?

http://www.center.rpi.edu/PewGrant/ProjDesc.html

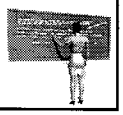
- **Large Classes** (spanish, intro psych, algebra, elementary statistics, biology)
- **Classes with working students**
- **Students spread over a distance**
- **Classes with certification**
- **Classes with need for standardization**
- **New requirements for a profession**
- **Writing intensive classes**
- **Theory classes**

Examples of Blended Learning, Margaret Driscoll, e-Learning, March 2002

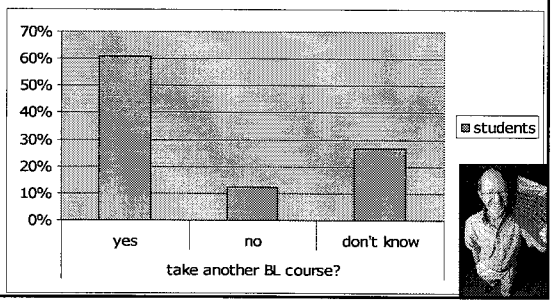
- **Put assessments/reviews online**
- **Follow-up in community of practice**
- **Put reference materials on Web**
- **Deliver pre-work online**
- **Provide office hours online**
- **Use mentoring/coaching tool**
- **Access experts live online**
- **Use e-mail and instant messaging**

Fully Online and Blended Learning Advantages

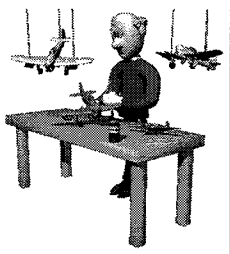
1. **Increased Learning (better papers, higher scores)**
2. **More effective pedagogy and interaction**
3. **Course access at one's convenience and flexible completion (e.g., multiple ways to meet course objectives)**
4. **Reduction in physical class or space needs, commuting, parking**
5. **Increased opportunities for human interaction, communication, & contact among students**
6. **Introverts participate more**



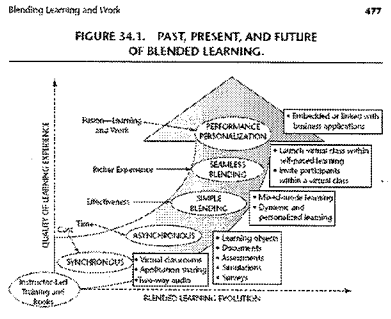
Student Satisfaction in Canada for Blended Learning (Owston, Garrison, & Cook 2006)



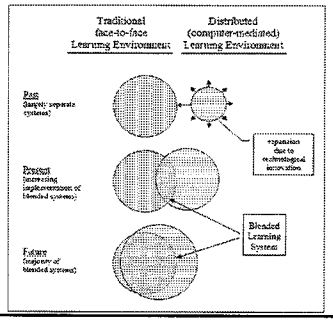
Frameworks and Models of Blended Learning...

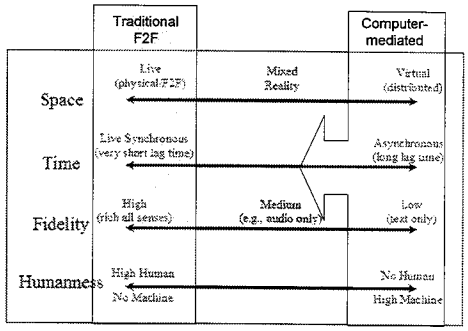


Harvey Singh (2006)



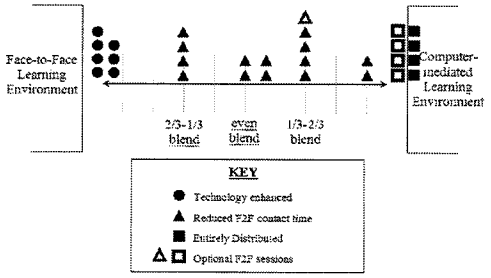
Historical Emergence of Fully Online and Blended (Graham, 2006)





(Graham, 2006)

Range of Blends in Pew Cases



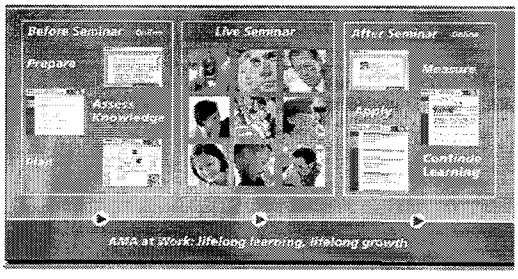
Source: Graham, C. R., & Allen, S. (2005). Blended learning: An emerging trend in education. In C. Howard & J. V. Boettecher & L. Justice & K. D. Schenk & P. L. Rogers & G. A. Berg (Eds.), *Encyclopedia of Distance Learning* (pp. 172-179). Hershey, PA: Idea Group Inc.

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**

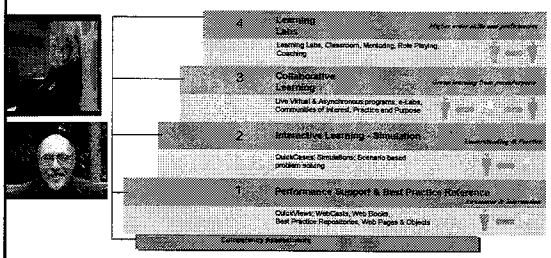
AMA Special Report, Effectively Implementing a Blended Learning Approach (Steven Shaw & Nicholas Igneri, 2006)



Source: American Management Association, AMA at Work

The IBM Four Tier Learning Model (2006)

Blending Learning for Business Impact – IBM's case for learning success, *2006 Handbook of Blended Learning, Nancy Lewis, VP, & Peter Orton, IBM*



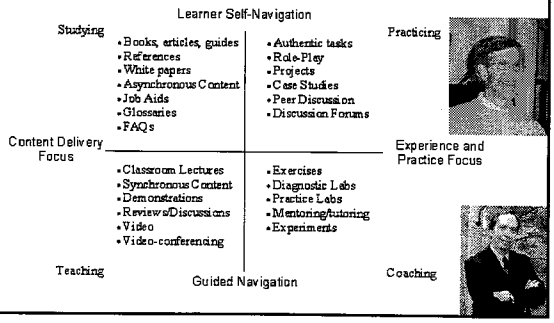
Blended Learning Scenario

(copyright Microsoft, Ziob & Mosher, 2006; Handbook of Blended Learning Environments)

Pre Class	Day 1	Day 2	Day 3	Day 4	Day 5	Post Class
Self-study prep	In classroom	Virtual class	e-Learning	Virtual class	In classroom	Community newsgroups

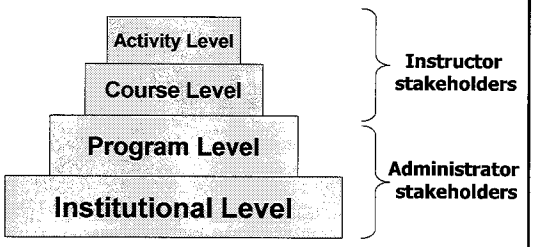
4. Specific Learning Elements

An Learning Ecology from Sun Microsystems (Wenger & Ferguson, 2006)



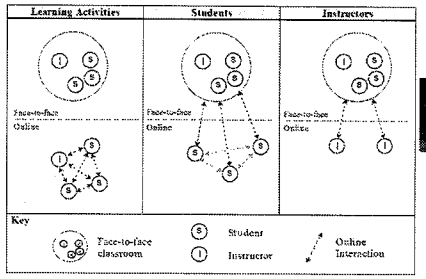
Models of Blending

Blending occurs at the following four levels:



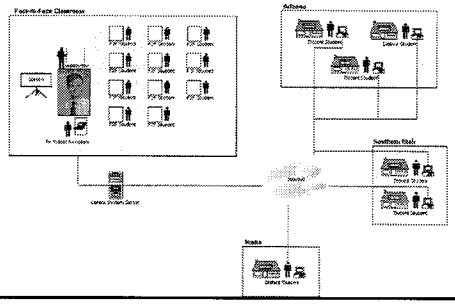
1. Activity- and Course-Level Blends

Blended learning systems: Definitions and directions **(Osguthorpe & Graham, 2003)**



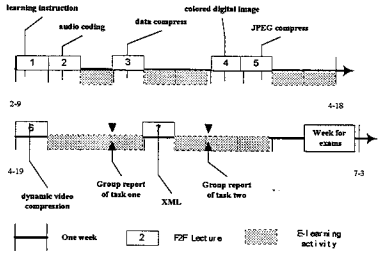
2. Course-Level Blend: Using CMS to blend distance and F2F learners

(Rogers, Graham, et al., 2003)



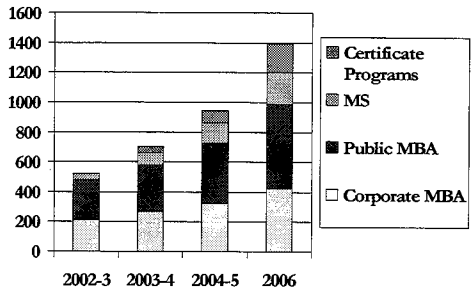
2. Course-level blends: Beijing Normal University (2006)

Alternating F2F and e-learning activities in a multimedia technology course in China.



See: Huang Ronghuai, H. & Yueliang Z. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham (Eds.), *Handbook of blended learning: Global perspectives, local designs.* San Fransisco, CA: Pfeiffer Publishing.

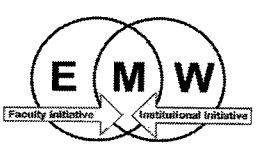
3. Program-level blending



4. Institutional-level Blending

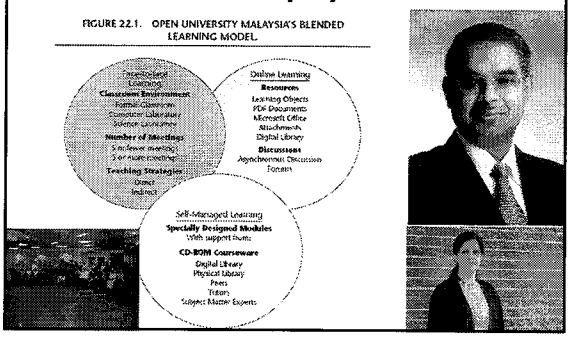
Example 1: University of Central Florida

- **E courses are technology enhanced courses**
- **M courses are blended courses with reduced seat time**
- **W courses are web courses (completely online)**



See: Dziuban, C., Hartman, J, Juge, F., Moskal, P., & Sorg, S. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham (Eds.), *Handbook of blended learning: Global perspectives, local designs.* San Fransisco, CA: Pfeiffer Publishing.

4. Institutional-level Blending (Abtar Kaur & Ansary Ahmed, 2006, Open U Malaysia)



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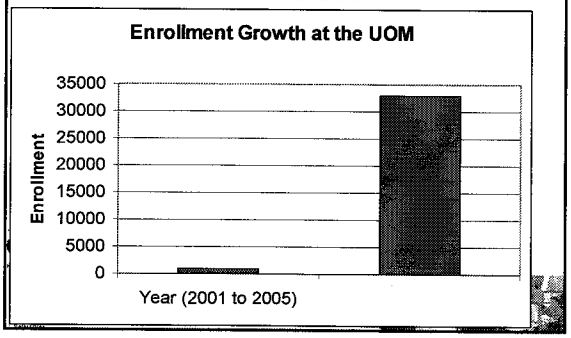


4. Institutional-level Blending (Brian Linquist, 2006)

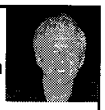
Example 2: University of Phoenix

- **Completely online courses**
- **Residential F2F courses**
- **Blended Courses**
  - ***Local Model*** **= 5 week courses with first and last week F2F**
  - ***Distance Model*** **= 5 week courses with half first and half last week F2F (the last meeting of one course is coordinated to be back-to-back with the first meeting of the next 5 week course)**

Categories of Blends

A. Enabling Blends	**Enabling blends primarily focus on addressing issues of access and convenience; provide similar learning experiences.**
B. Enhancing Blends	**Enhancing blends allow for incremental changes to the pedagogy; additional or supplementary online resources.**
C. Transforming Blends	**Transforming blends are blends that allow for a radical transformation of the pedagogy and learner construction of knowledge.**

A. Enabling Blends
National University
Department of Teacher Education
(Reynolds & Greiner, 2006)



- **12,000 Enrolled Students**
- **Since 2004 More than 50% of Candidates Enrolling as Online rather than On-site**
  - **They will take a majority of classes online**
- **Each Candidate Takes 7 Credential Classes**
- **Each Class Contains 2 Field-based Exp.**
- **500 Classes/Yr. & 20 Students/Class =**
- **20,000 Field-based Experiences/Year**

B. Enhancing Blends

(Univ of Waikato, New Zealand, 2006)

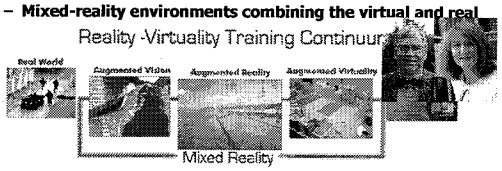
University of Waikato, New Zealand

- **Model for enhancing F2F courses includes:**
  - **Fully online** - students can complete qualifications without coming onto the campus
  - **Mostly online** - there is a mix of online and some on-campus work in the qualification
  - **Somewhat online** - there is an online component for on-campus students
  - **Supported online** - courses are taught in the traditional lecture/tutorial mode, supported by material provided through the online learning or relevant university schools' document management systems

C. Transforming Blends

(Kirkley & Kirkley; Oliver, Herrington, & Reeves, HOBLe, 2006)

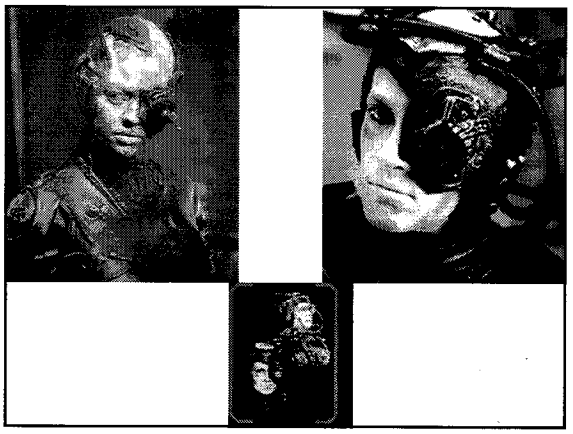
- **Corporate/Military Training**
  - **Workplace learning (integrating learning into workflow)**
  - **Performance support and knowledge management using mobile technologies**
  - **Mixed-reality environments combining the virtual and real**



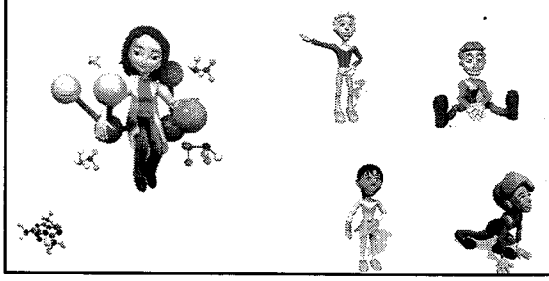
Example of levels of mixed reality that allow a blending of the real and virtual worlds.

What can we say about blended learning then???

- **It is everywhere!!!!!!!!**
- **Resistance is futile!!!!!!!**



Best BL Model 99 Second Stretch Break!!!



Part II: 13 Fully Online and Blended Learning Problems and 40 Solutions

Problem Situation #1: Brief FTF Experiences

- Face-to-face (FTF) experiences are brief, one-week journeys. Need to need to build self-confidence, create social supports, teams, camaraderie, etc.

Ok, Million Dollar Question: What can you do in 1 week?

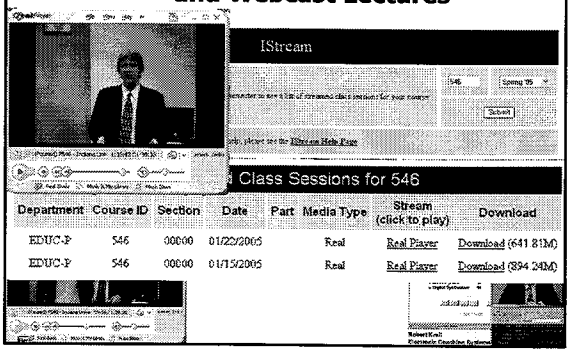
Blended Solution #1+. Sample Activities for Brief Meetings

1. Assign web buddies, email pals, critical friends based on interests, confidence, location, etc.
2. Ice breakers—paired introductions, corners.
3. Solve case in team competitions with awards.
4. Test technology in a lab.
5. Assign teams and exchange info for small teams using text messaging.
6. Library (digital and physical) scavenger hunt.
7. Do a podcast documenting the meeting.
8. Have everyone create a blog on the experience.
9. Open an e-portfolio for each student
10. Brainstorm how might use technology in program.

Problem Situation #2: Student Absenteeism

- Students miss class to attend a conference or event or a personal problem arises. Or students asks to watch the class a second time.

Blended Solution #2. Video Streamed and Webcast Lectures



Problem Situation #3: Facilities and Time

- Limited facilities or rooms for teaching. Or students cannot make it to class every week or are working full time.

Blended Solution #3.

Divide Online and Class Experiences: English Classes Online

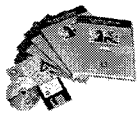
Graham, Ure, & Allen (2003, July). Blended Learning Environn A Literature Review and Proposed Research Agenda

- Freshman English at BYU: Students are required to meet F2F once a week instead of three times a week. Online modules provide writing instruction and teaching assistants use online and F2F contact to provide feedback and guidance on writing (Waddoups et al., 2003).

Blended Solution #4.

CPA Exam Review (June 14, 2003) and Web Videos in Accounting (July, 2003)

- Texas A&M University–Corpus Christi combines CPA courseware with bi-monthly class meetings to prep for CPA Exam. (study text, proficiency questions, electronic flashcards and practice exams, scheduled assignments, goals, online grading, progress reports, tailored discussion groups, and personalized assistance from leading professors at the nation's top accounting schools.)



Problem Situation #4: Web Supplemental Activities

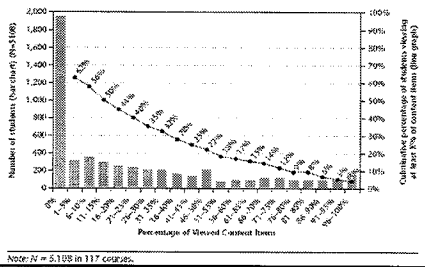
- Fail to finish class discussion or other activity in time. Or desire to integrate the Web more in your face-to-face instruction or outside of class. Want to provide course resources and activities for students to explore.

Content Use (Tel Aviv University)

Nachmias, Ram, & Mioduser, 2006

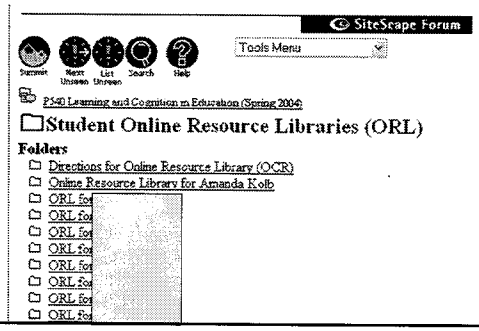
Virtual TAU 381

FIGURE 27.2. DISTRIBUTION OF PERCENTAGE OF CONTENT ITEMS VIEWED BY STUDENTS.

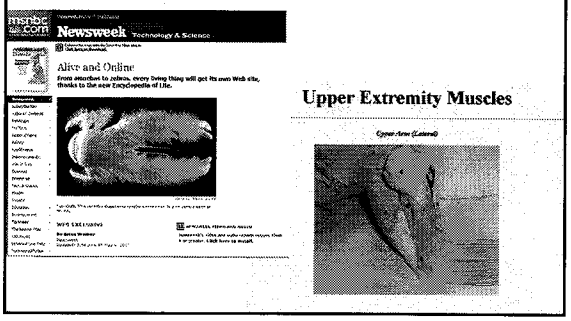


Note: N = 5,198 in 117 courses.

Blended Solution #5. Online Resource Libraries

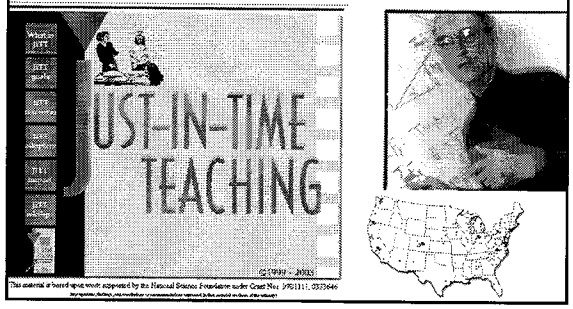


Blended Solution #6. Course Portal: e.g., self study in anatomy



Blended Solution #7: Warm-ups Online Just-In-Time-Teaching (JiTT)

http://webphysics.iupui.edu/jitt/jitt.html

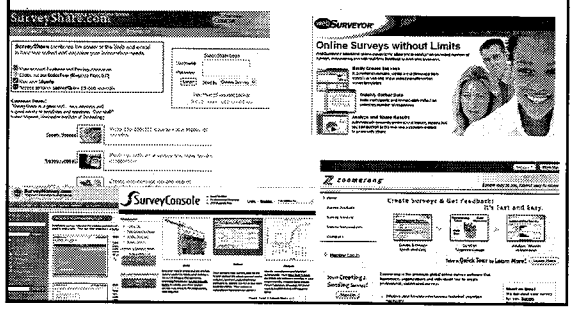


Problem Situation #5: Student Learning Control

- Want to give students more control and ownership over their own learning. Want to foster student generative learning or being authors of their own knowledge.

Blended Solution #8.

Survey Research and Market Analysis
(e.g., WebSurveyor, Zoomerang, SurveyShare, SurveyKey)



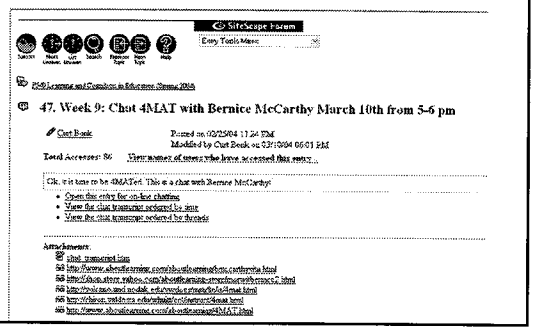
Problem Situation #6: Preparedness for the Profession

- Students are not prepared for their professions when they graduate. Or want to better apprentice students into their chosen profession. What to provide opportunities to work with practitioners, experts, mentors, and coaches in authentic learning environment.

Blended Solution # 9. Expert Mentoring Online

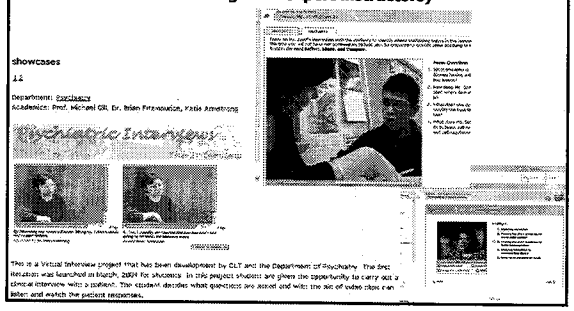
(in Art and Design; COFA Online, Omnium Project, Creative Waves—online graphics and photomedia project)

Blended Solution #10. Reuse Blogs, Forums, & Chat Transcripts



Blended Solution #11.

Video Observations (e.g., Virtual Psychiatric Interview, Trinity College, Dublin and E-Reading First Ohio; video-based scaffolding from expert instructors)

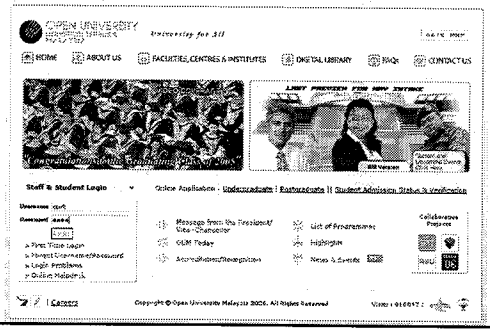


Problem Situation #7: Collaborative Skill Deficit

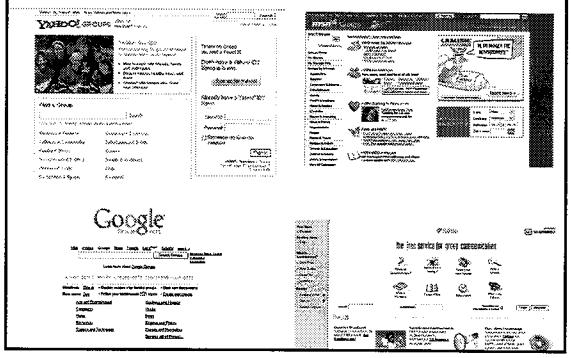
- **Students need collaboration and teamwork skills. Want to build virtual teaming skills in class activities or work with learners in other locales or situations.**

Blended Solution #12. Cross-Class Collab

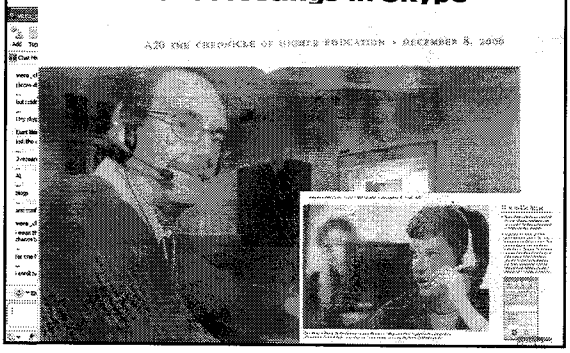
(Indiana Univ and Open U of Malaysia)



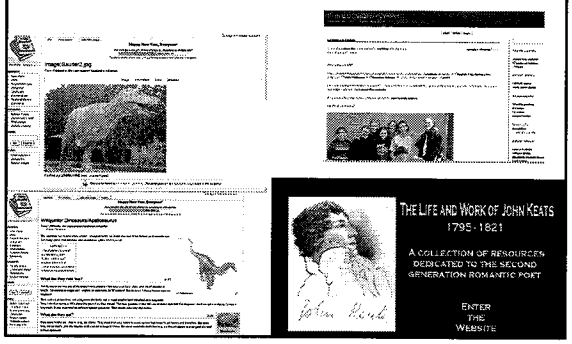
Blended Solution #13. Online Groups...



Blended Solution #14. Team Meetings in Skype



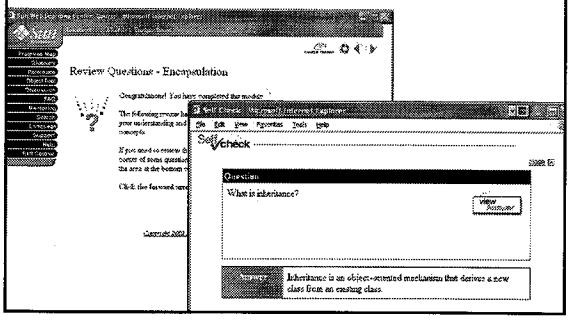
Blended Solution #15. Team Wik Projects
(e.g., wikibooks and the Romantic Poetry Project)



Problem Situation #8:
Student Reflections and Connections

- Students are not connecting content. They are just turning pages and going through the motions. Minimal student reflection is seen.

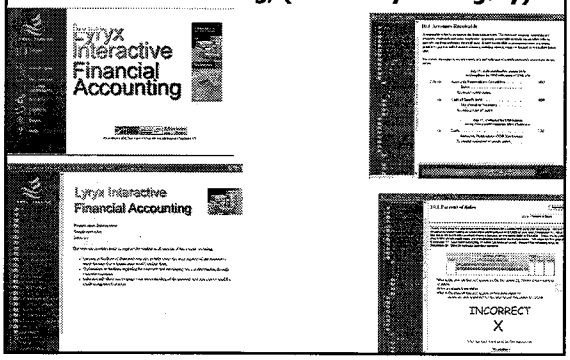
Blended Solution #16.
Learner-Self Interactions and Reflections



Blended Solution #17.
Workplace and Field Reflections

1. Instructor provides reflection or prompt for job related or field observations
2. Reflect on job setting or observe in field
3. Record notes on Web and reflect on concepts from chapter
4. Respond to peers
5. Instructor summarizes posts

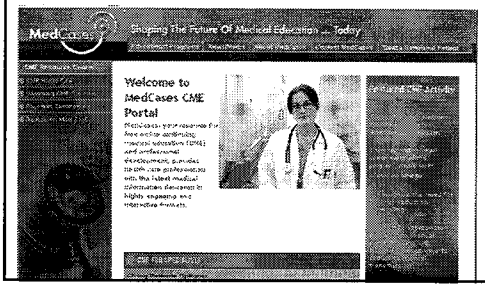
Blended Solution #18. Online Simulation: Financial Accounting; (University of Calgary)



Problem Situation #9:
Learning Community

- There is a preference for creating an online learning community in order to increase student learning and retention in the program. Such a community might be in a single class or across a series of classes.

Blended Solution #19. Community of Learners: Medical and Business Cases Online (cases community)
http://optionstraining.org/login



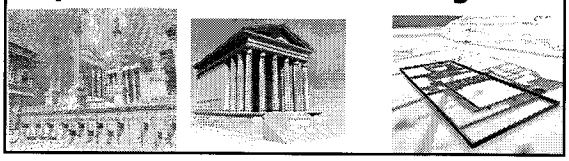
Blended Solution #20: Teacher Professional Development in Technology Integration (the TICKIT Program)

(Bonk, Ehman, & Yamagata-Lynch, in press, AACE Journal)
http://www.iub.edu/~tickit

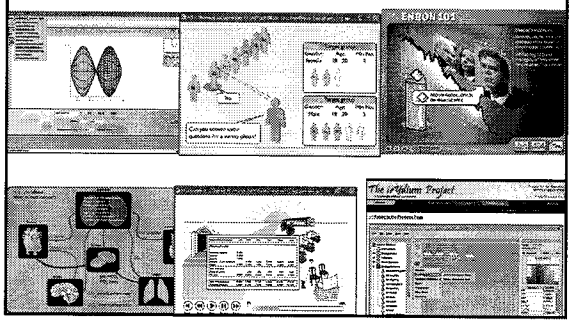
TICKIT: Teacher Institute for Curriculum Knowledge about Integration of Technology

Problem Situation #10: Need to Visualize Content

- **Content is highly visual in nature and difficult to simply discuss in class. Or students have a preference for visual learning.**



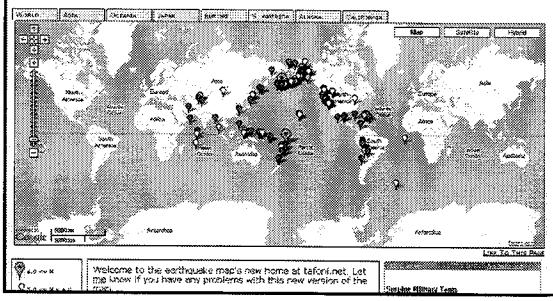
Blended Solution #21. 3-D Visualization & Laboratory Software



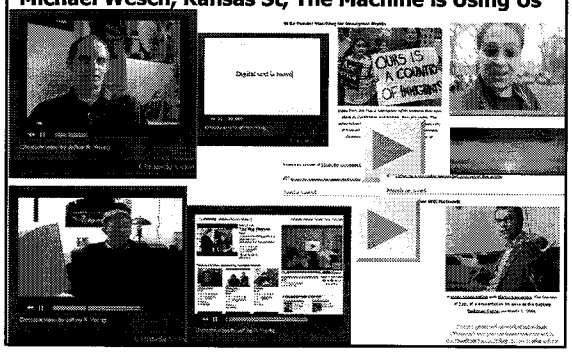
Blended Solution #22. Anchored Instruction: News Content Videos (CTGV, 1990?)

Blended Solution #23. Use Google Maps Mashups in K-12 Education
By Jeffrey Branzburg, May 15, 2006
http://www.techlearning.com/story/showArticle.jhtml?articleID=187002846

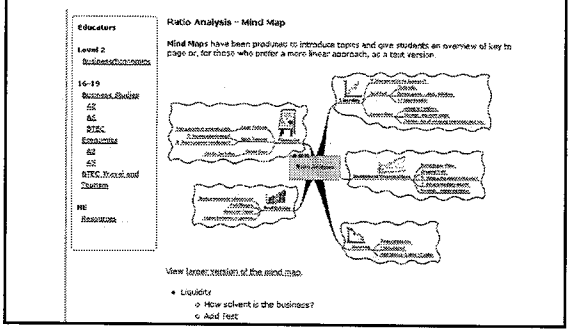
Maps: Earthquakes in the last week



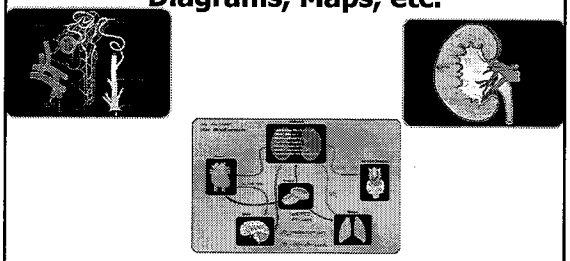
Blended Solution #24. Vlogging (Video Blogs) e.g., Andy Calvin's Waste of Bandwidth Michael Wesch, Kansas St, The Machine is Using Us



Blended Solution #25. Concept Mapping Tools

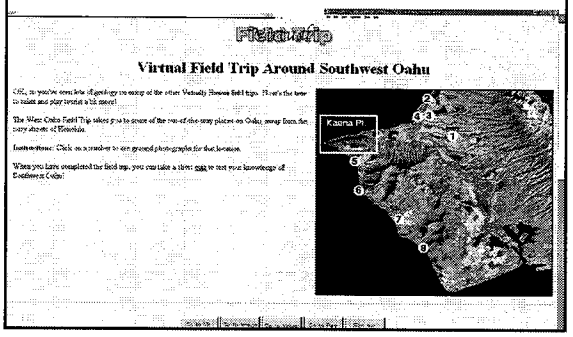


Blended Solution #26. Flowcharts, Diagrams, Maps, etc.

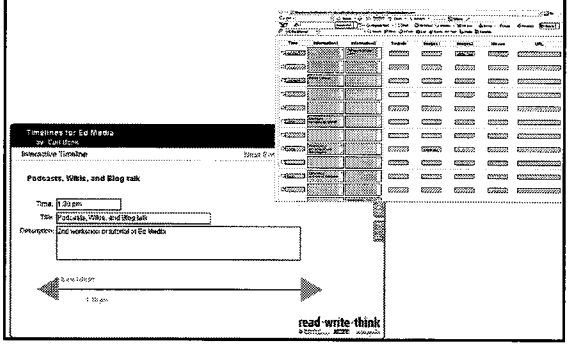


Elements in the system for control of oxygenation in the human body (e.g., the Kidney): From: Next-Generation Educational Software Why We Need It and a Research Agenda for Getting It. Van Dam, Becker, & Simpson, *Educause Review*, March/April 2005

Blended Solution #27. Exploration and Demonstration: Virtual Fieldtrip and Tours



Blended Solution #28. Virtual Timelines



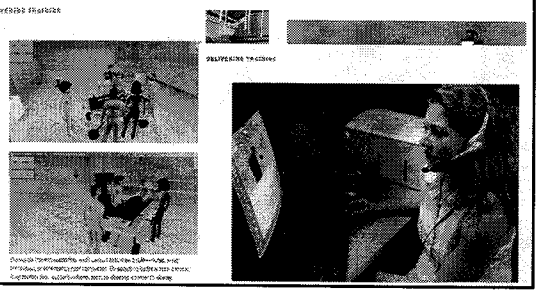
Blended Solution #29. Virtual Worlds/Virtual Reality/MMOG (e.g., Second Life)

Problem Situation #11: Need for Hands-On Learning

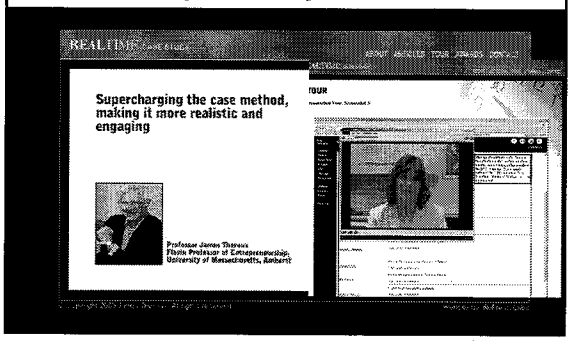
- To learn the material requires that students try it out in a lab or real-world situation. Or students prefer hands-on learning activities.

Blended Solution #30. Educational Simulations

(HEALING GAMES: Computer simulations don't have to be violent -- they can give peace a chance, Scott Duke Harris May 21, 2006, San Fran Chronicle; and Medical Traumas from TD Magazine, August 2006)

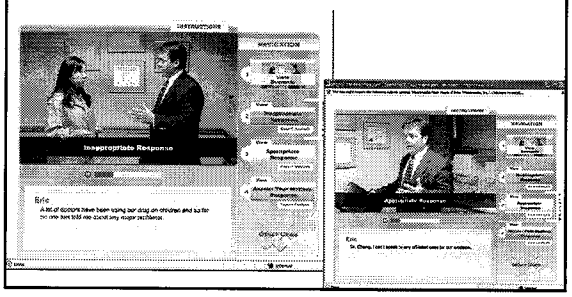


Blended Solution #31. Real World Problems (PBL online): Real-time Cases



Blended Solution #32. Video Scenario Learning

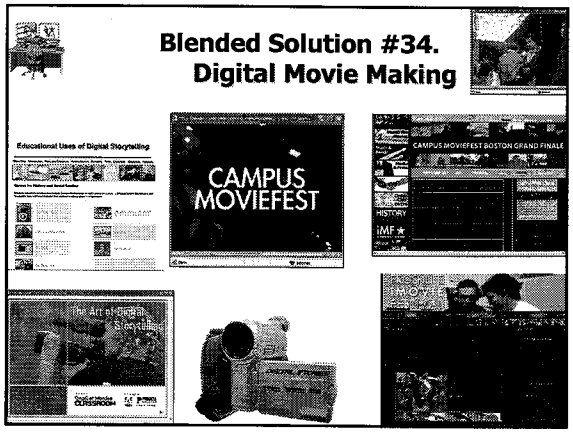
(Option 6, Arjuna Multimedia, Bloomington, IN)



Blended Solution #33. Videoconferencing with Hearing Impaired Students Online

- College students tutoring high schools on their homework
- Instructors observing how teacher education students are doing in field placements (practice presentation and communication skills)
- Interpret speaker via Web cam

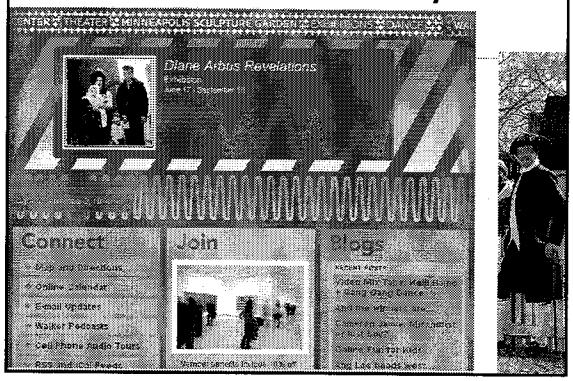
Blended Solution #34. Digital Movie Making



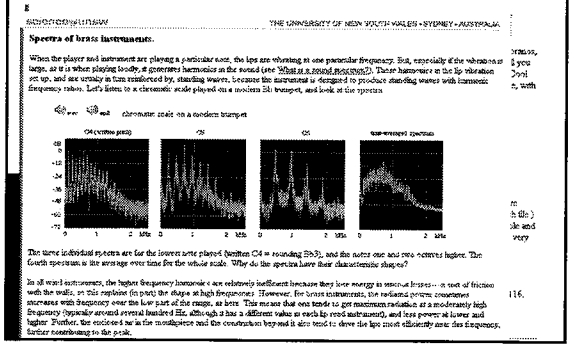
Problem Situation #12: Preference for Auditory Learning

- **The content is heavily verbal or words. Or students have a preference to listen to a lecture or hear an instructor deliver a lecture.**

Blended Solution #35. Art and History Exhibits



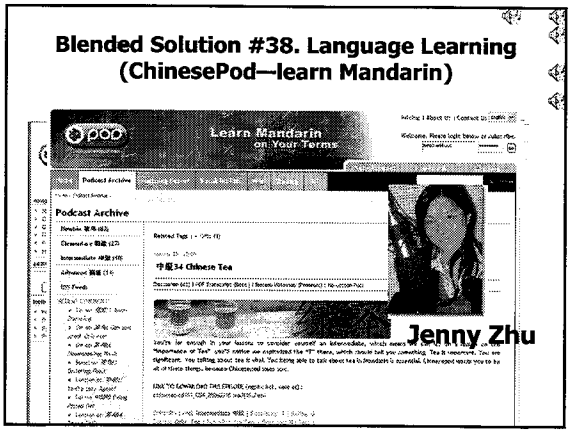
Blended Solution #36. Basic Acoustics of Musical Instruments



Blended Solution #37. Student Podcast (in schools—kids have power!)

"Just the word 'podcast' scares a lot of teachers away," Ms. Schrock said. "There are a lot of misconceptions."
"All you need is a computer, access to the Internet and a microphone that you can buy at Toys 'R' Us," Mr. Warlick said. "I listen to podcasts on my computer." (NY Times, Jan 25, 2006)

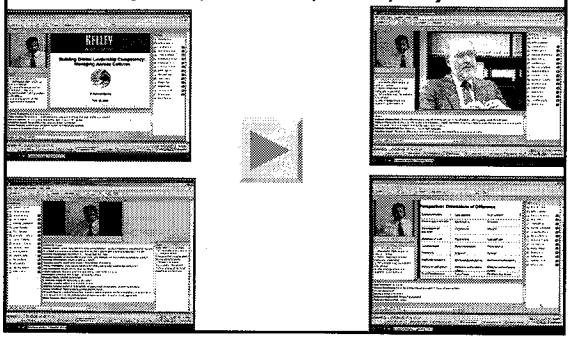
Blended Solution #38. Language Learning (ChinesePod—learn Mandarin)



Problem Situation #13: Lack of Instructor Presence

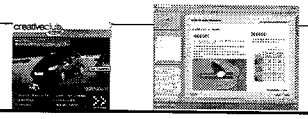
- **Students need to see or hear from the instructor. They need a sense that the instructor is supporting their learning. They prefer face-to-face but are willing to try online.**

Blended Solution #39. Instructor Presentation in Synchronous Sessions
(Breeze, Elluminate, WebEx, etc.)



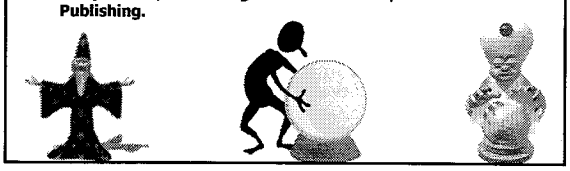
Blended Solution #40. Peer Critique in Breeze
(Table of Benefits of Peer Critique; Park & Bonk, in review)

- Providing immediate feedback
- Increasing interactions among participants
- Encouraging to exchange multiple perspectives
- Enhancing dynamic interactions
- Promoting passive to become active
- Strengthening social presence allowing to exchange of emotional supports
- Apply skills just learned
- Exchange constructive feedback on each other's projects



Predictions for Blended Learning

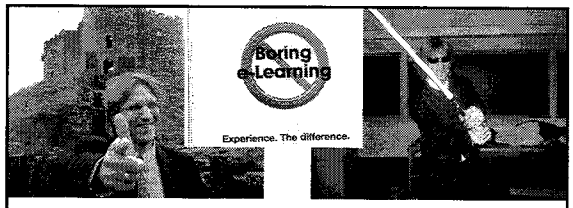
- From: Bonk, C. J., & Kim, K. J. (in press). **Future directions of blended learning in higher education and workplace learning settings.** To appear in C. J. Bonk & C. R. Graham (Eds.). *Handbook of blended learning: Global Perspectives, local designs.* San Francisco, CA: Pfeiffer Publishing.



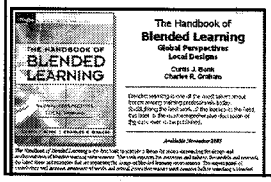
Implications and Challenges for Blended Learning

1. Faculty and students are more mobile.
2. Students more choices.
3. Student expectations rise.
4. Greater self-determined learning.
5. More corporate university partnerships.
6. Courses increasingly modular.
7. Less predefined schedules.
8. When teaching less clear; when learning less clear.

The End...Remember



Questions???



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http://www.trainingshare.com/