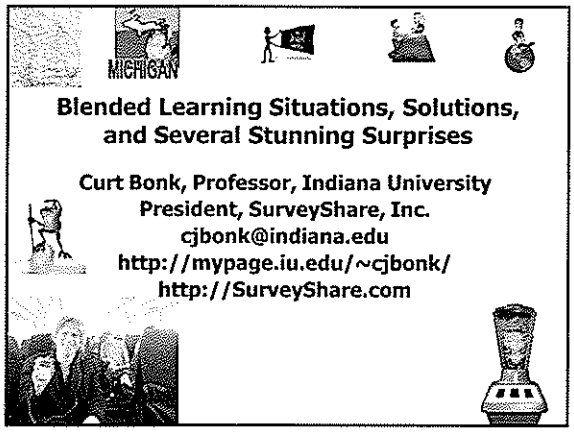
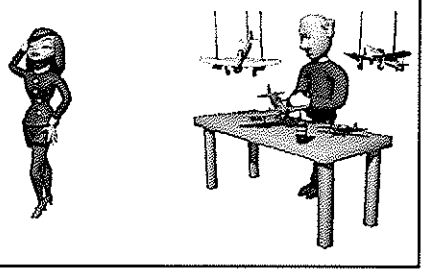


This the talk will cover:

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

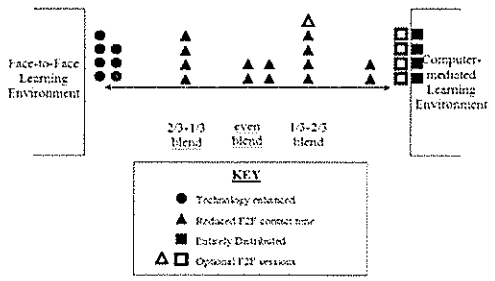
Part 1: Definitions, Frameworks and Models of Blended Learning...



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.

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.

1. Blending Delivery Media

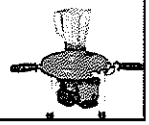
- "Blended learning means the combination of a wide range of learning media (instructor led, web based courseware, simulations, job aids, webinars, documents) into a total training program designed to solve a specific business problem." (Bersin & Associates, 2003, p. 3)

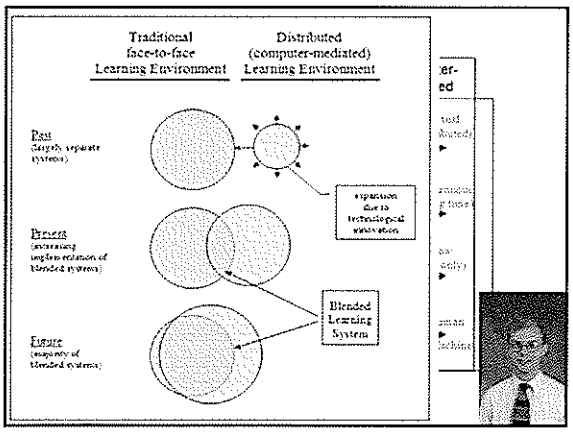
2. Blending Instructional Methods

- "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)

Definition #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)





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

Fully Online and Blended Learning Advantages

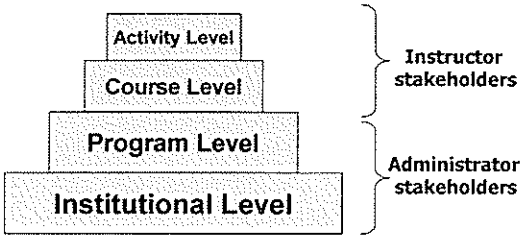
1. Increased Learning (better papers, higher scores)
2. More effective pedagogy and interaction
3. Course access at one's convenience and flexible completion (e.g., multiple ways to meet course objectives)
4. Reduction in physical class or space needs, commuting, parking
5. Increased opportunities for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

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

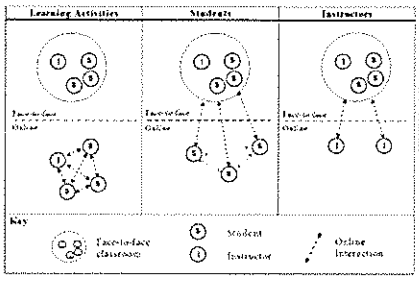
Models of Blending

Blending occurs at the following four levels:



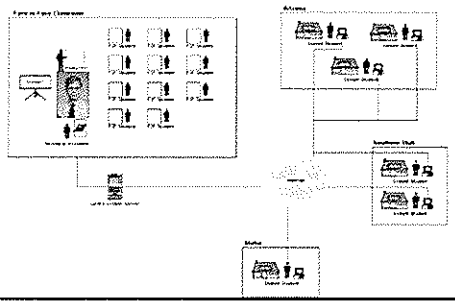
Activity- and Course-Level Blends

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



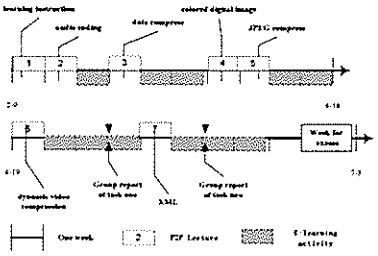
Course-Level Blend: Using CMS to blend distance and F2F learners

(Rogers, Graham, et al., 2003)



Course-level blends: Beijing Normal University (2006)

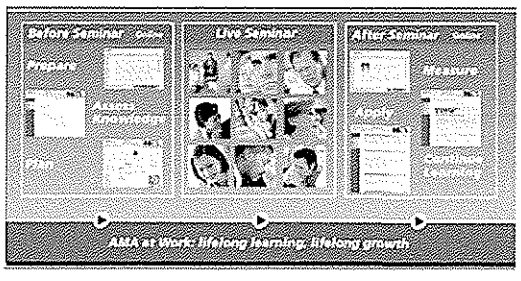
Alternating F2F and e-learning activities in a multimedia technology course in China.



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.

AMA Special Report, Effectively Implementing a Blended Learning Approach

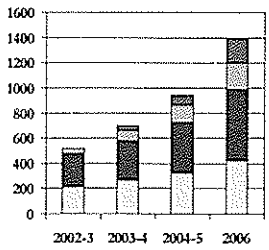
(Steven Shaw & Nicholas Igneri, 2006)



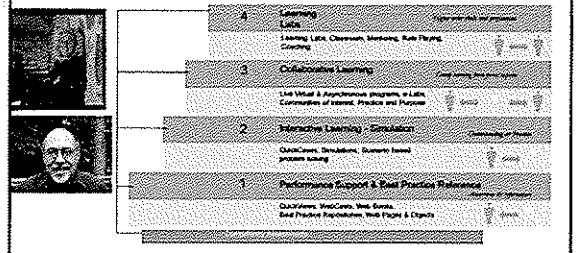
Source: American Management Association, AMA at Work

Program-level blending (blend same for all participants)

Kelley Direct Online MBA (IU)



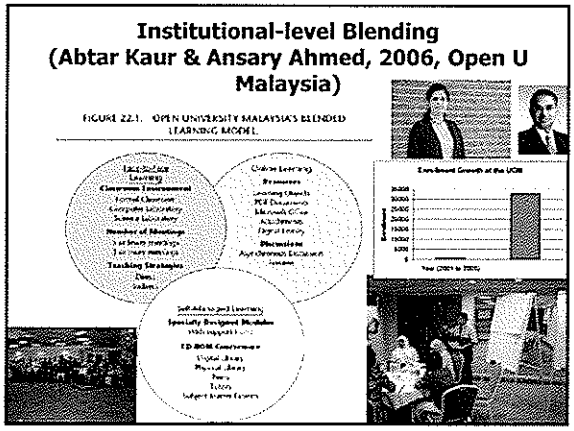
The IBM Four Tier Learning Model (2006)
Blending Learning for Business Impact – IBM's case for learning success, *2006 Handbook of Blended Learning, Nancy Lewis, VP, & Peter Orton, IBM*



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)**

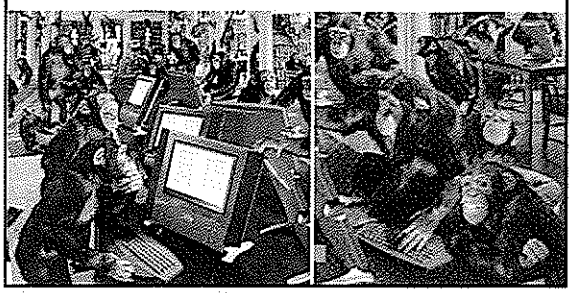
Institutional-level Blending
(Abtar Kaur & Ansary Ahmed, 2006, Open U Malaysia)



Blending Live Field & Online Class
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**

Part II: 13 Fully Online and Blended Learning Problems and 24 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.**

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

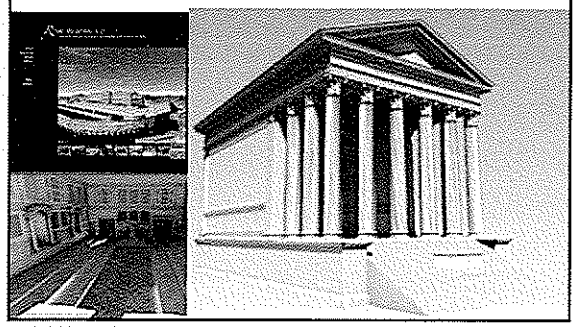
Graham, Ure, & Allen (2003, July). Blended Learning Environ A Literature Review and Proposed Research Agenda

- 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).

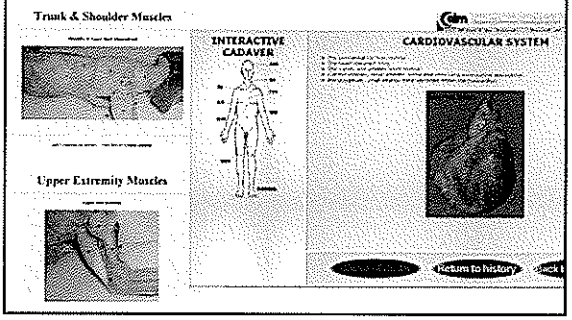
Problem Situation #4: Web Supplemental Activities

- 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.

Blended Solution #4. Online Portals & Resources (Civil Rights Digital Library and Amistad, history, science, literature, etc.)



Blended Solution #5. Online Self-Testing (e.g., self study in anatomy or chemistry, virtual autopsy, dissection, etc.)



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.

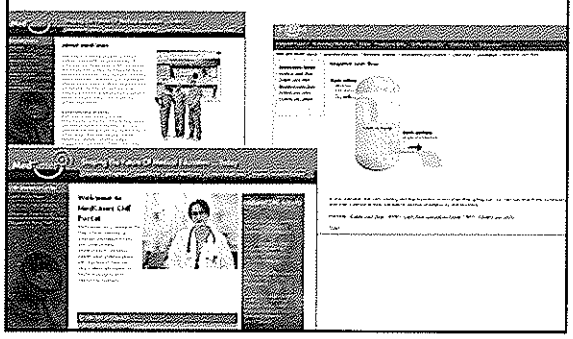
Blended Solution #7: Student Podcast (in schools—kids have power!)

"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)

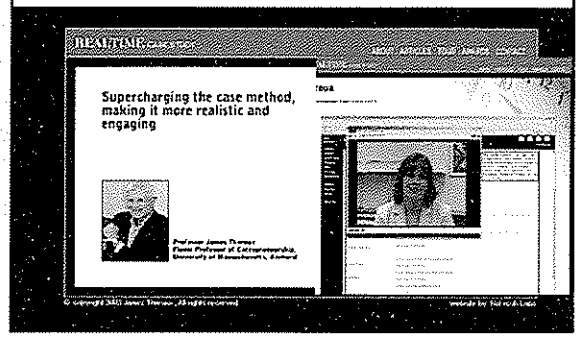
Problem Situation #6: Preparedness for the Profession

- 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 #8. Community of Learners: Medical and Business Cases Online (problems, solutions, etc.)

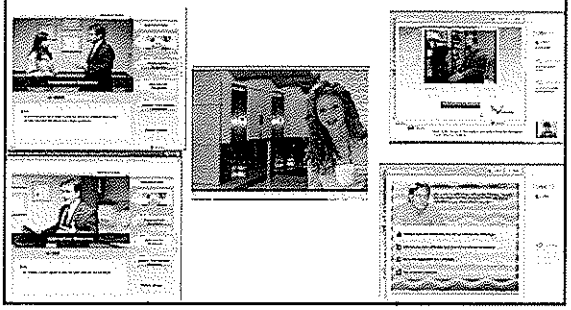


Blended Solution #9. Real World Problems (PBL online): Real-time Cases



Blended Solution #10. Video Scenario Learning

(Option 6, Bloomington, IN)

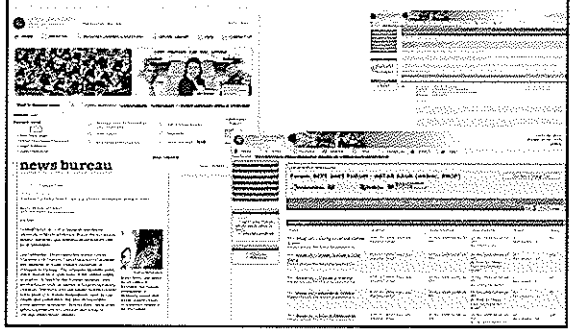


Problem Situation #7: Collaborative Skill Deficit

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

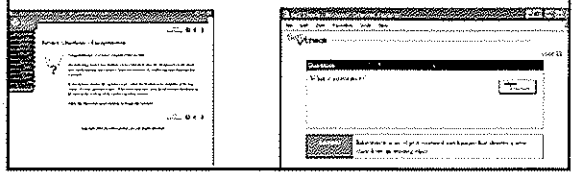
Blended Solution #11. Cross-Class Collab

(Indiana University and Open U of Malaysia; Univ of Illinois Tourism class)

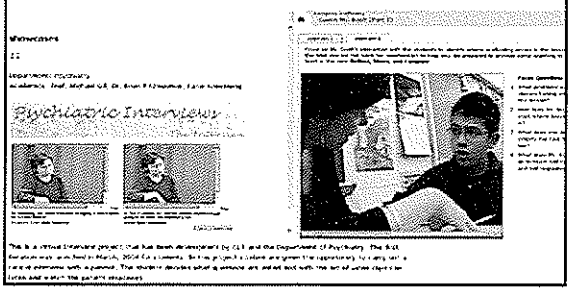


Problem Situation #8: Student Reflections and Connections

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



Blended Solution #12. Expert Video Reflections and Scaffolds online (E-Reading First Ohio; reflect, share, and compare)



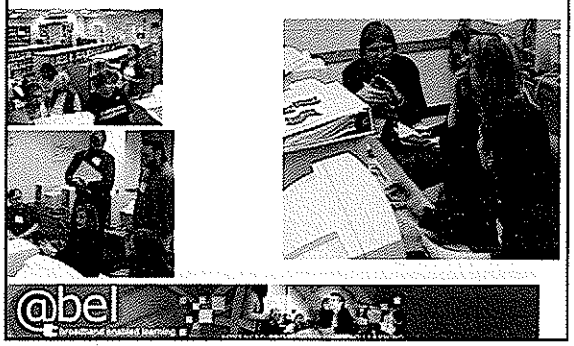
Blended Solution #13.
Workplace and Field Reflections

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

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.

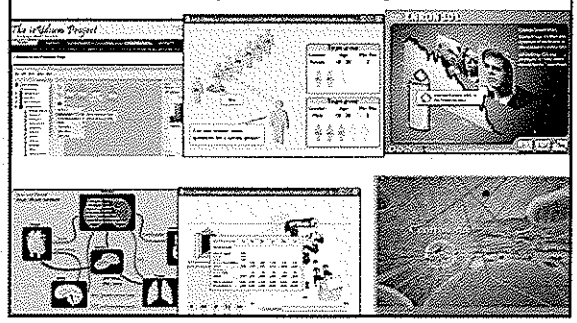
Blended Solution #14. Combining Live and Online Experiences in Teacher Training



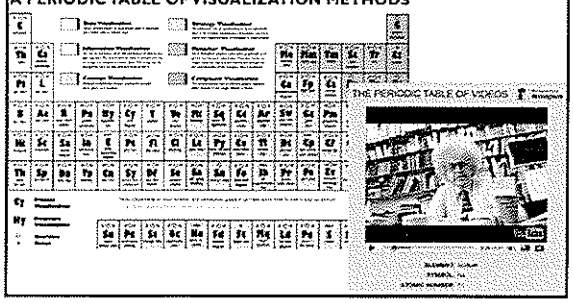
Problem Situation #10: Need to Visualize Content

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

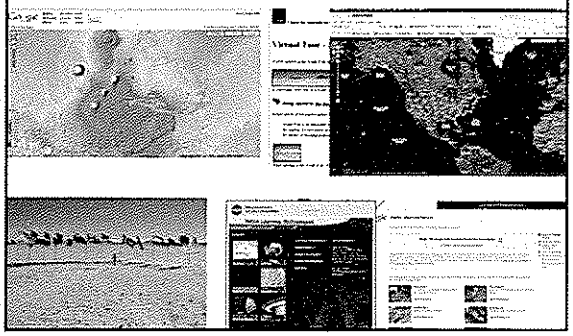
Blended Solution #20. Flash, 3-D Visualization, & Laboratory Software



Blended Solution #17. Visual Resources (e.g., Periodic Table of Visualization; Visual Thesaurus http://www.visualthesaurus.com/; http://www.visual-literacy.org/periodic_table/periodic_table.html)

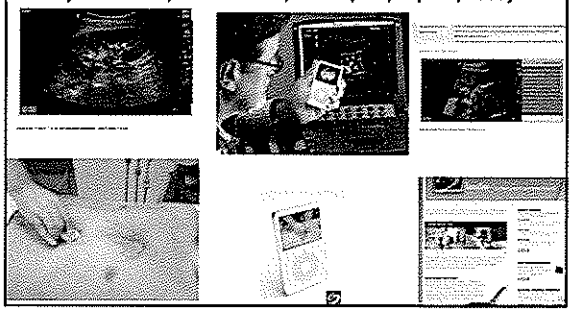


Blended Solution #21. Electronic Cameras and Maps (e.g., Google Earth/Maps)

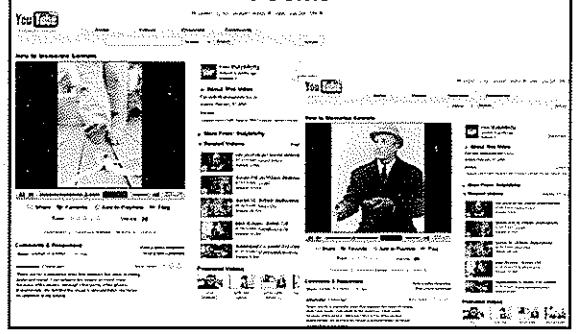


Blended Solution #19. Vodcast for Medical Training

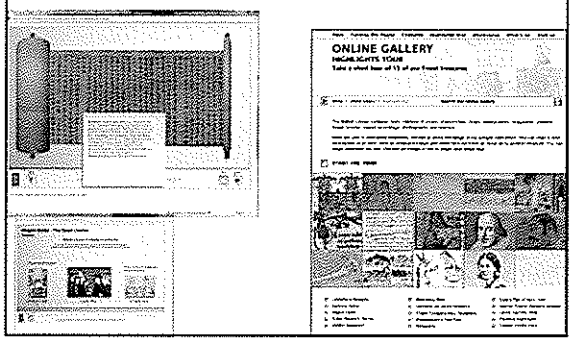
(e.g., "SonoSite on the small screen: The Bothell-based company uses podcasts for its ultrasound scanner training," *By Eric Fetters, Herald Writer*, Everett, WA, Sept 25, 2006)



Blended Solution #18. Using Online Video (e.g., YouTube) to Memorize Sonnets and Poems



Blended Solution #16. (e.g., Turning The Pages, British Library)

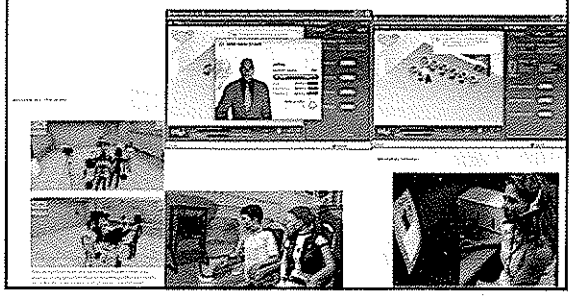


Problem Situation #11: Need for Hands-On Learning

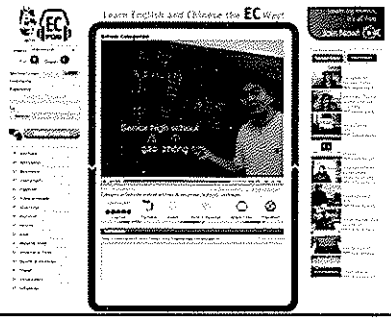
- To learn the material requires that students try it out in a lab or real-world situation. Or students prefer hands-on learning activities.

Blended Solution #22. Educational Simulations

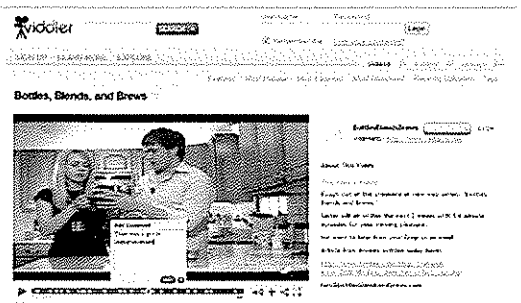
(Medical Traumas from TD Magazine, August 2006)



Blended Solution #23. Video Supported Language Learning (e.g., ECPod)



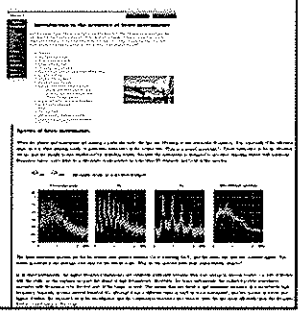
Blended Solution #24. Demonstration Videos with Commenting (e.g., Viddler)



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.

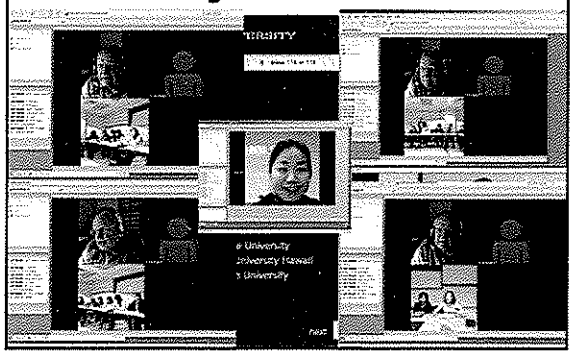
Blended Solution #25.
Basic Acoustics of Musical Instruments
2005 MERLOT Classics Award



Problem Situation #13: Lack of Instructor Presence

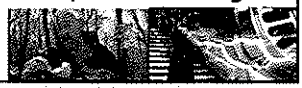
- Students need to see or hear from the instructor. They need a sense that the instructor is supporting their learning. They prefer face-to-face but are willing to try online.

Blended Solution #27. Breeze in Higher Education



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.



Questions and Comments

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