Blended Learning Situations, Solutions, and Several Stunning Surprises

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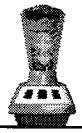
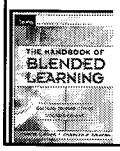


This the talk will cover:

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

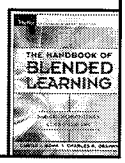



Blended Learning: Two Parts

1. Models and Frameworks
2. Problems and Solutions (i.e., examples)

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. What are you???

A. Tutor, professor, trainer, instructor, lecturer, adjunct, visiting scholar
B. Director or staff in a learning center, instructional designer, etc.
C. Policy maker, government official
D. Administrator, Dean, President, etc.
E. Graduate student, informal learner
G. Other

Poll #3: 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?

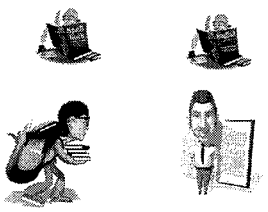
D. Why blend (advantages and disadvantages)?

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 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

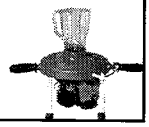
- "Blended learning means the combination of a wide range of learning media (instructor led, web based courseware, simulations, job aids, webinars, documents) into a total training program designed to solve a specific business problem." (Bersin & Associates, 2003, p. 3)

2. Blending Instructional Methods

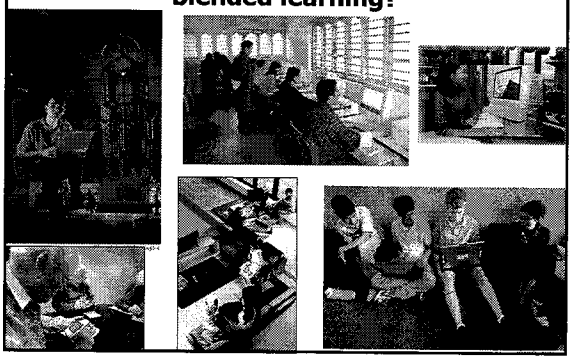
- "Blended learning: to combine various pedagogical approaches (e.g., constructivism, behaviorism, cognitivism) to produce an optimal learning outcome with or without instructional technology." (Driscoll, 2002, p. 54)

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?



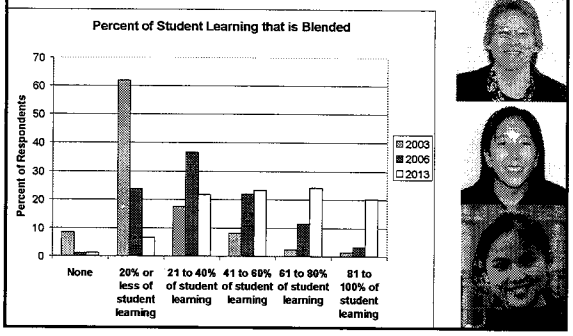
Learning TRENDS by Elliott Masie - September 5, 2006.
#399.5 - Updates on Learning, Business & Technology.
52,716 Readers - http://www.masie.com - The MASIE Center

Average Percentage of Learning Delivery Methods (240 organizations in learning Masie consortium):
- 46% Classroom.
- 27% e-Learning.
- 19% Blended.
- 10% Other Methods.

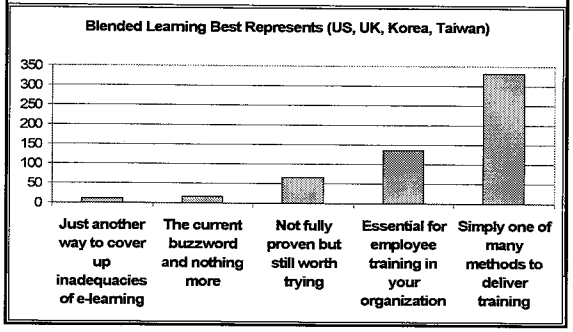
Classroom Delivery is used for Leadership/Supervision; Sales/Customer Service; Orientation/OnBoarding.

E-Learning Delivery is used for HR Compliance; Safety; IT Systems/Software.

Future Directions of Blended Learning
(Bonk, Kim, & Zeng, 2006, Chapter 39)



Blended Learning Survey: China, Taiwan, UK, US, and Korea
(Bonk et al., 2006).



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

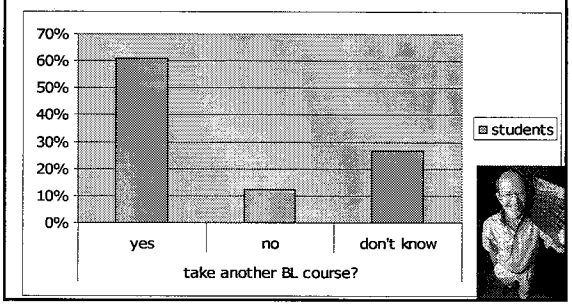
Examples of Blended Learning, Margaret Driscoll, e-Learning, March 2002

- 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

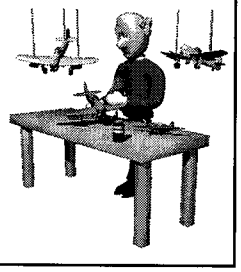
Student Satisfaction in Canada for Blended Learning (Owston, Garrison, & Cook 2006)



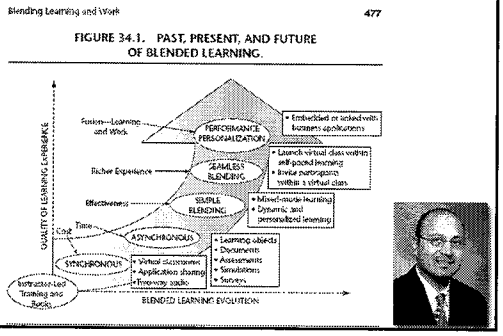
Fully Online and Blended Learning Disadvantages

1. Procrastination (trouble managing time and requirements)
2. Problems with technology at the beginning (instructor tries too much)
3. Can be overwhelming or too novel
4. Poor integration or planning
5. Resistance to change
6. Faculty skepticism, increase workload, and reduced productivity

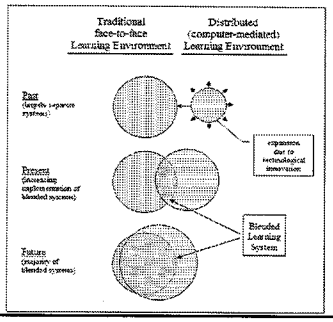
Frameworks and Models of Blended Learning...

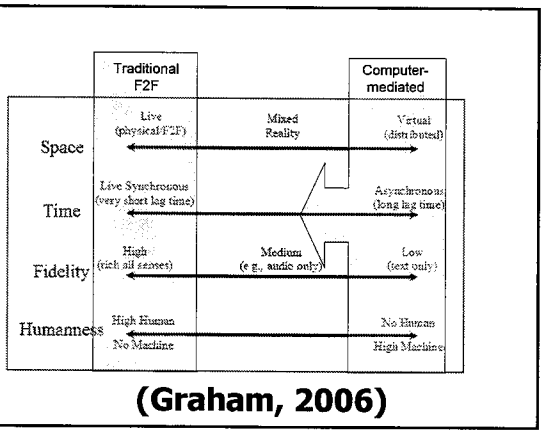


Harvey Singh (2006)



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





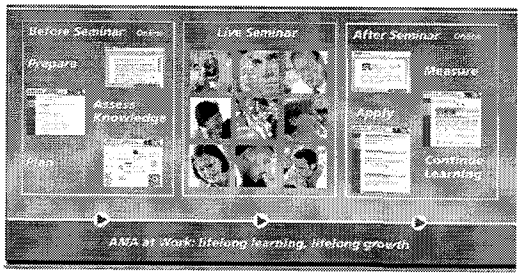
(Graham, 2006)

AMA Special Report, Blended Learning Opportunities

Alison Rossett (2006)

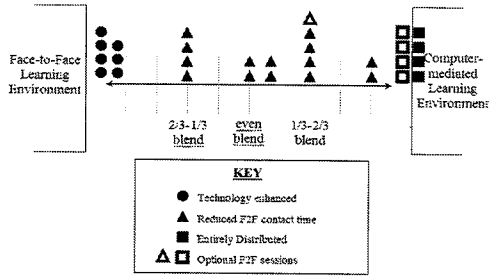
1. Anchor Blend: Start FTF, then online
2. Bookend Blend: Three part: e.g., online preassessments, then FTF, and then online post assessments
3. Field Blend: Assets, resources, and choices including perhaps FTF

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



Source: American Management Association, AMA at Work

Range of Blends in Pew Cases



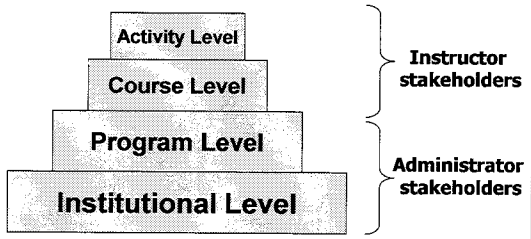
Source: Graham, C. R., & Allen, S. (2005). Blended learning: An emerging trend in education. In C. Howard & J. V. Boettecher & L. Justice & K. D. Schenk & P. L. Rogers & G. A. Berg (Eds.), *Encyclopedia of Distance Learning* (pp. 172-179). Hershey, PA: Idea Group Inc.

Insung Jung & Katsuaki Suzuki, Blended Learning in Japan, 2006

- **Open Interaction: create small group debate, assign online facilitators & wrappers**
- **Knowledge Creation: inviting external experts, combine async and sync**
- **Information Distribution: posting materials to review or read**
- **Efficient Management: allow electronic submission; list of standard feedback**

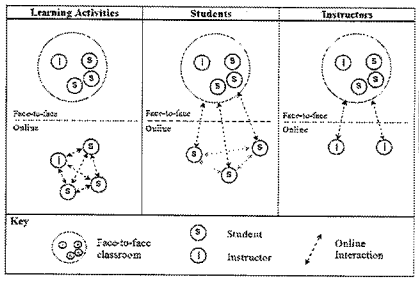
Models of Blending

Blending occurs at the following four levels:

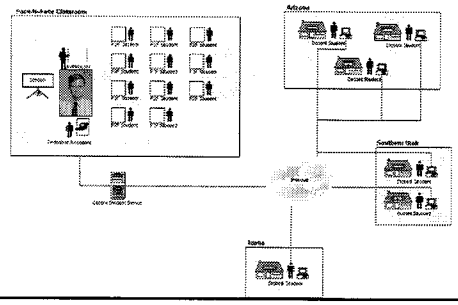


1. Activity- and Course-Level Blends

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

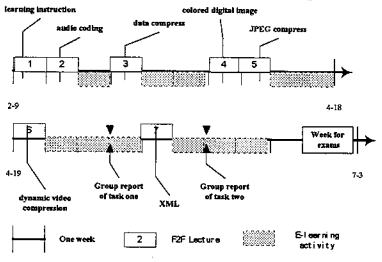


2. Course-Level Blend: Using CMS to blend distance and F2F learners
(Rogers, Graham, et al., 2003)



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

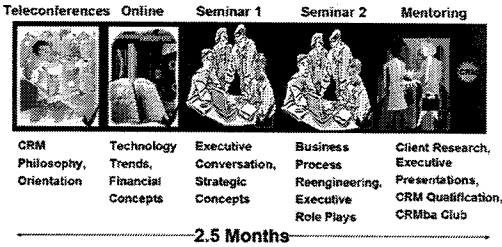
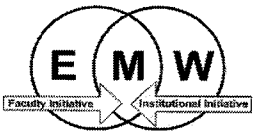


Figure 1: Avaya's ESSBa program schedule

4. Institutional-level Blending

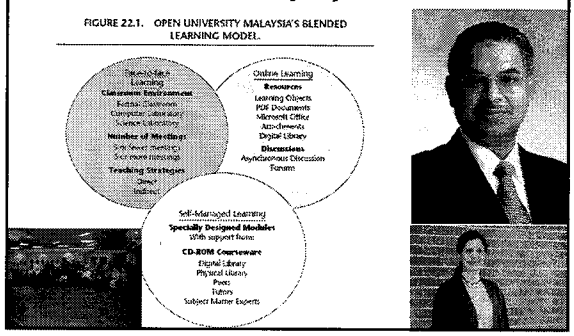
Example 1: University of Central Florida

- **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)



The OUM (Abtar Kaur, 2005, Ed Media)

- **Started August 2001 : approx. 800 students**
- **Total students (2005): approx. 33,000**
- **Total full-time academic staff : 60**
- **Total part-time academic staff (tutors) : approx 3,000**
- **33 Learning Centres (7 Regional Centres)**
- **Pedagogical approach : Blended Learning**

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)**

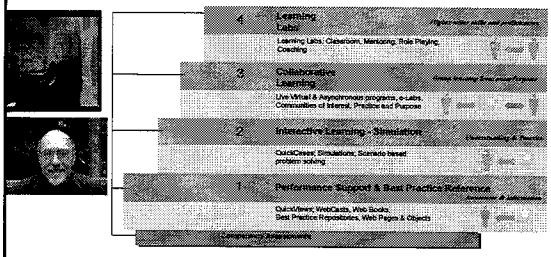
4. Blended Learning Form Factors

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

Live instructor-led	Self-paced learning	Tools for learning communities
▪Traditional classroom ▪Onsite engagement ▪Virtual online classroom ▪Live video via satellite or videoconferencing ▪Online coaching/ mentoring	▪Instructor-led classroom via e-mail ▪Online or computer-based training (CBT) ▪Self-study guides, manuals, texts ▪Online resources and databases	▪Chat ▪Instant messaging (IM) ▪Newsgroups and forums ▪Collaboration

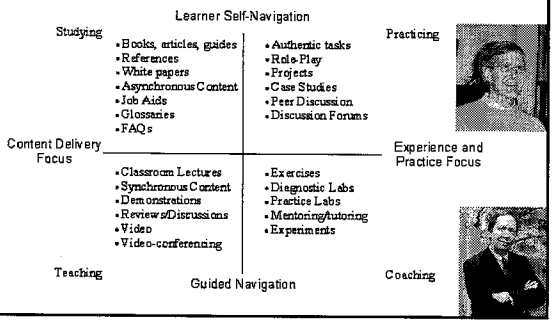
4. The IBM Four Tier Learning Model (2006)

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



4. Specific Learning Elements

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



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

- Many of the for-profit institutions like **Capella, Jones International University**, and **University of Phoenix** have models that focus on making educational opportunities available to those who don't have access due to time and location constraints.
- **National University** has a teacher preparation program geared towards access and flexibility.
- Many international education and training programs are also focused on providing access (e.g., **World Bank, Mexico's Red Escolar program**, etc.)

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

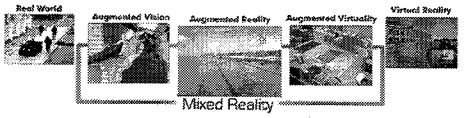
- **Model for enhancing F2F courses includes:**
  - **Fully online** - students can complete qualifications without coming onto the campus
  - **Mostly online** - there is a mix of online and some on-campus work in the qualification
  - **Somewhat online** - there is an online component for on-campus 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**

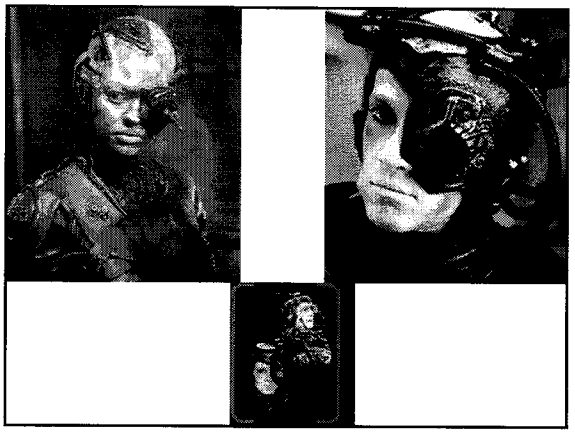
Reality -Virtuality Training Continuum



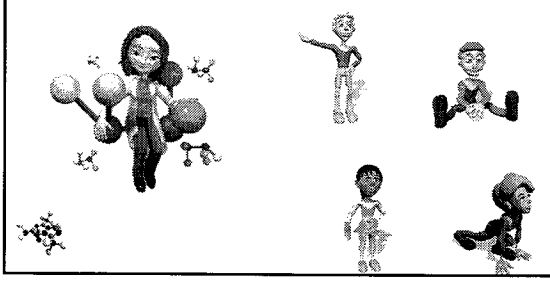
Example of levels of mixed reality that allow a blending of the real and virtual worlds.

What can we say about blended learning then???

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



Best BL Model Presentations and a Stretch Break!!!



Part II: 13 Fully Online and Blended Learning Problems and 33 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?

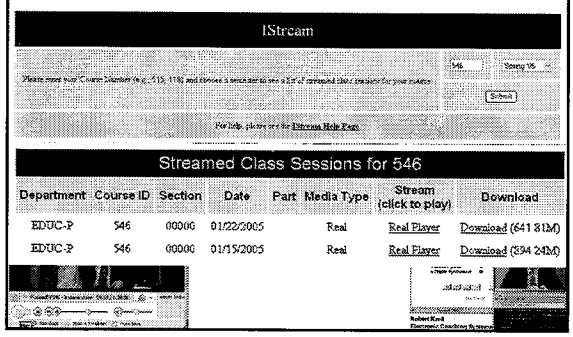
Solution #1+. Sample Activities for Brief Meetings

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.

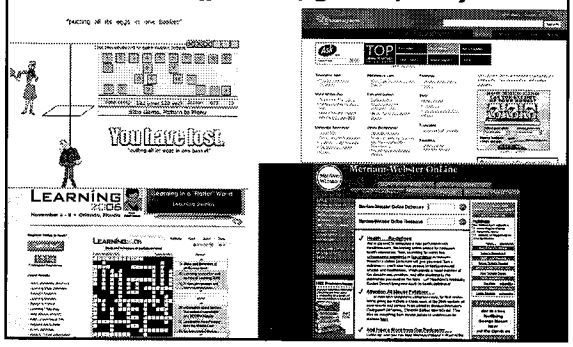
Solution #2. Video Streamed Lectures and Expert Commenting



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.

Solution #3. Terminology Exercises Online (puzzles, games, etc.)



Problem Situation #4: Web Supplemental Activities

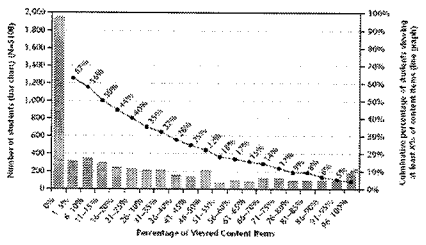
- Fail to finish class discussion or other activity in time. Or desire to integrate the Web more in your face-to-face instruction or outside of class. Want to provide course resources and activities for students to explore.

Content Use (Tel Aviv University)

Nachmias, Ram, & Mioduser, 2006

Virtual TAU 381

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

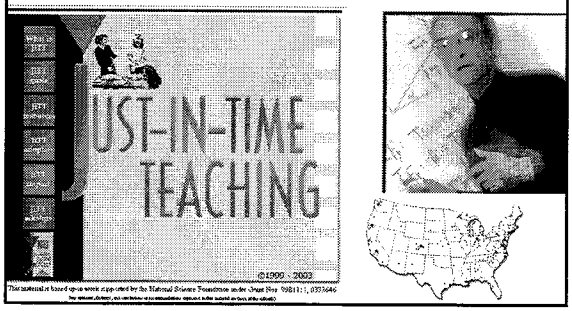


Note. N = 5,108 in 117 courses.

Solution #4. Instructor Portal: e.g., self study in anatomy

Solution #5: Warm-ups Online Just-In-Time-Teaching (JiTT)

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

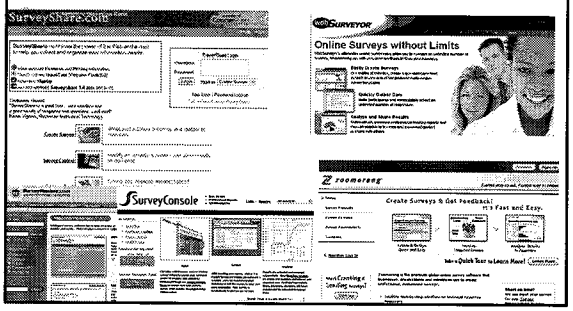


Problem Situation #5: Student Learning Control

- 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.

Solution #6.

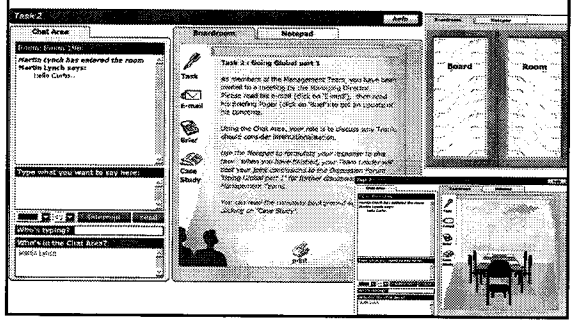
Survey Research and Market Analysis
(e.g., WebSurveyor, Zoomerang, SurveyShare, SurveyKey)



Problem Situation #6: Preparedness for the Profession

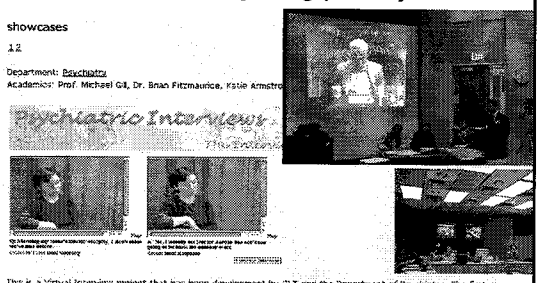
- **Students are not prepared for their professions when they graduate. Or want to better apprentice students into their chosen profession. What to provide opportunities to work with practitioners, experts, mentors, and coaches in authentic learning environment.**

Solution #7. Online Synchronous Cases and Teams; Simulated Boardroom Chat; College Wales, Univ. of Glamorgan



Solution #8.

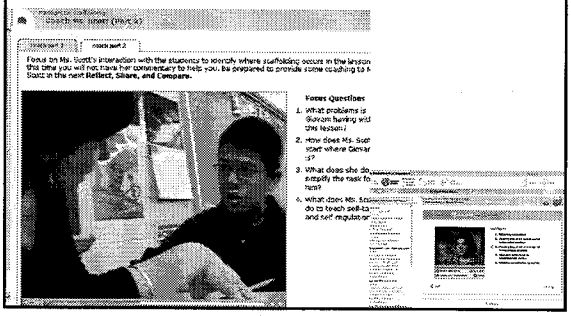
Video Observations (e.g., Virtual Psychiatric Interview, Trinity College, Dublin)



This is a Virtual Interview project that has been development by iLT and the Department of Psychiatry. The first iteration was launched in March, 2004 for students. In this project student are given the opportunity to carry out a clinical interview with a patient. The student decides what questions are asked and with the aid of video clips can listen and watch the patient responses.

Solution #9.

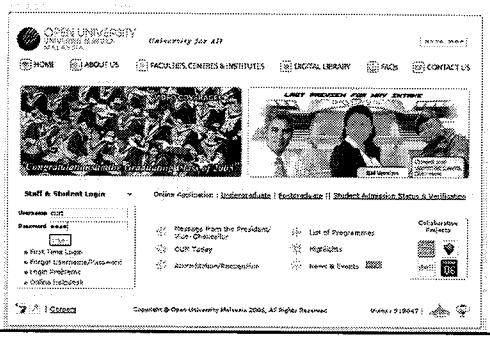
E-Reading First Ohio (video-based scaffolding from expert instructors)



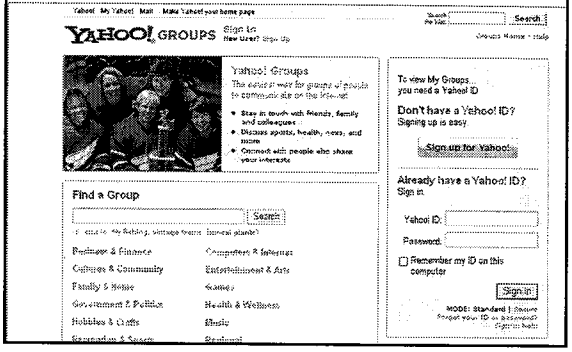
Problem Situation #7: Collaborative Skill Deficit

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

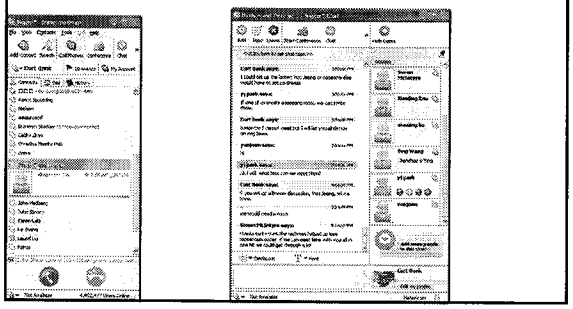
Solution #10. Cross-Class Collab (Indiana Univ and Open U of Malaysia)



Solution #11. Online Groups...



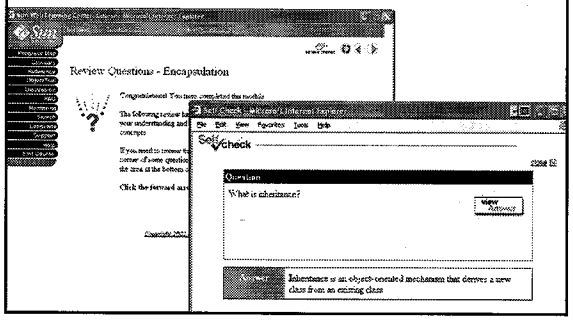
Solution #12. Team Meetings in Skype



Problem Situation #8: Student Reflections and Connections

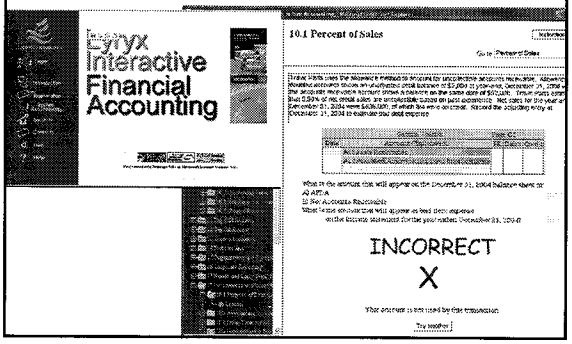
- **Students are not connecting content. They are just turning pages and going through the motions. Minimal student reflection is seen.**

Solution #13. Learner-Self Interactions and Reflections



Solution #14. Apprenticeship: Electronic Guests & Mentoring

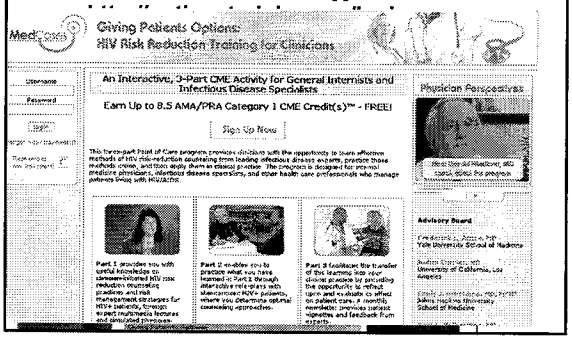
Solution #15. Online Simulation: Financial Accounting; (University of Calgary)



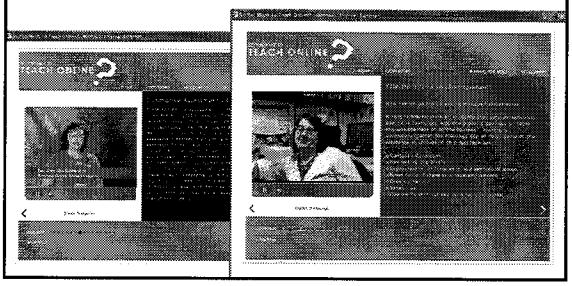
Problem Situation #9: Learning Community

- 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.

Solution #16. Community of Learners: Medical and Business Cases Online (cases community)

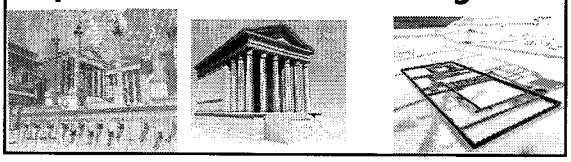


Solution #17. Community of Practice: Online Professional Development

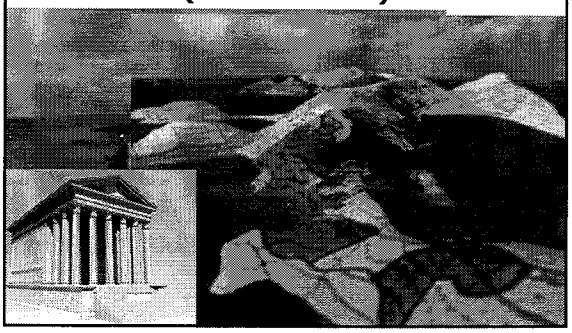


Problem Situation #10: Need to Visualize Content

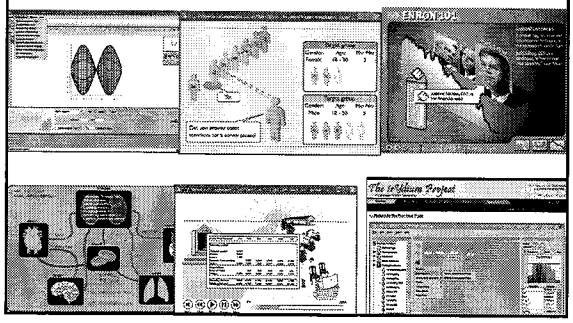
- Content is highly visual in nature and difficult to simply discuss in class. Or students have a preference for visual learning.



Blended Solution #18. Explore Virtual Worlds and Online Representations (UCLAs CVRLab)

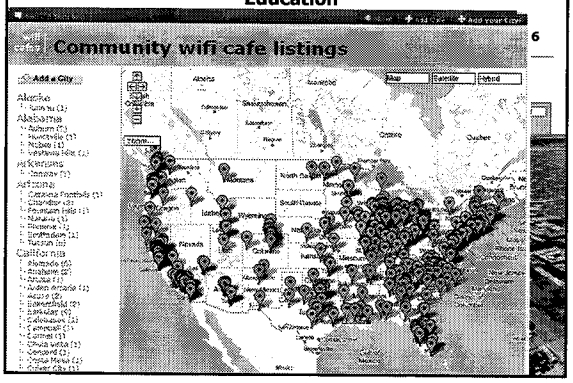


Blended Solution #19. 3-D Visualization & Laboratory Software

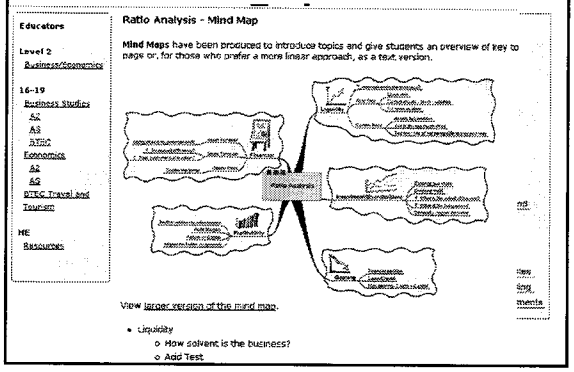


Solution #20. Anchored Instruction: News Content Videos (CTGV, 1990?)

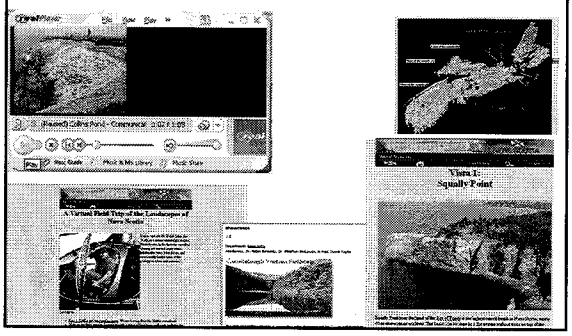
Solution #21. Use Google Maps Mashups in K-12 Education



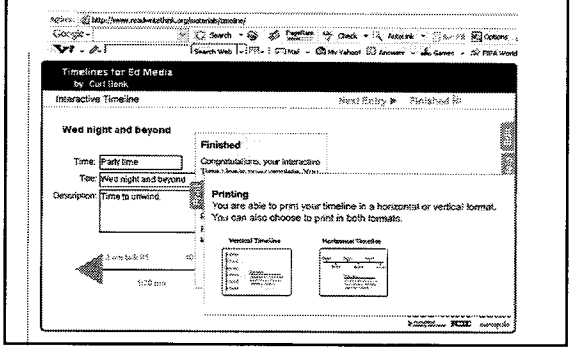
Solution #22. Concept Mapping



Solution #23. Exploration and Demonstration: Virtual Fieldtrip and Tours



Solution #24. Virtual Timelines



Solution #25. Virtual Reality/Worlds

First Course in a Virtual World (Second Life)
Wednesday, August 30, 2006
Harvard Law School (Charles & Rebecca Nesson)
Chronicle of Higher Ed (open to the public)

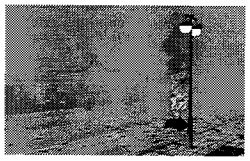
Problem Situation #11: Need for Hands-On Learning

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

Solution #26. Educational Simulations

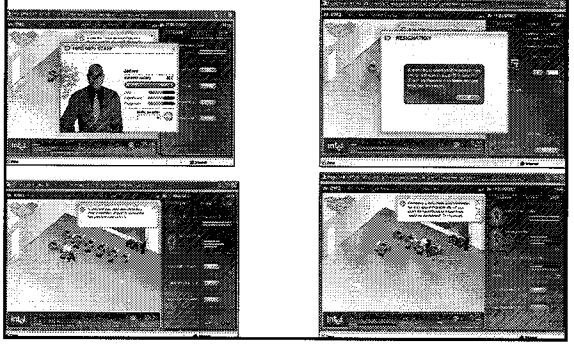
(HEALING GAMES: Computer simulations don't have to be violent -- they can give peace a chance, Scott Duke Harris May 21, 2006, San Fran Chronicle; and Medical Traumas from TD Magazine, August 2006)

U.N. Food Force, called the first humanitarian game, simulates problems of getting supplies to wartime refugees.

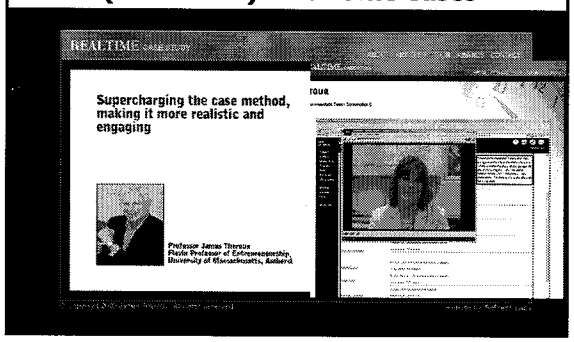


Terrorist Bus Bombing is a virtual-reality tool to help psychotherapists treat survivors of actual terrorist attacks.

Solution #27. Educational Simulations, Scenarios, and Manipulations

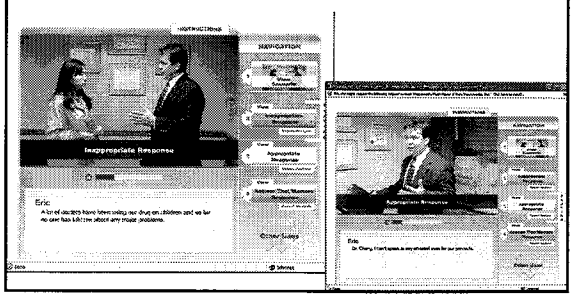


Solution #28. Real World Problems (PBL online): Real-time Cases



Solution #29. Video Scenario Learning

(Option 6, Arjuna Multimedia, Bloomington, IN)

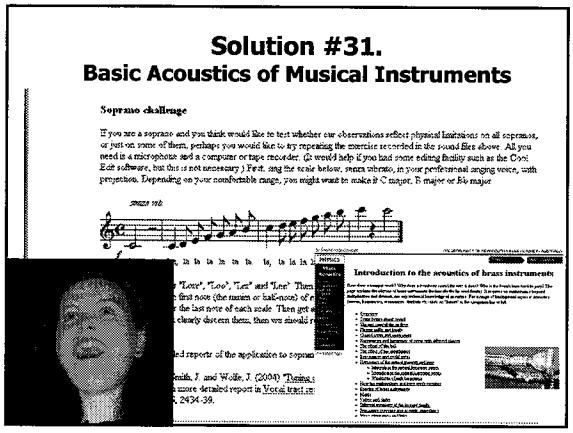


Problem Situation #12: Preference for Auditory Learning

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

Solution #30. Art and History Exhibits

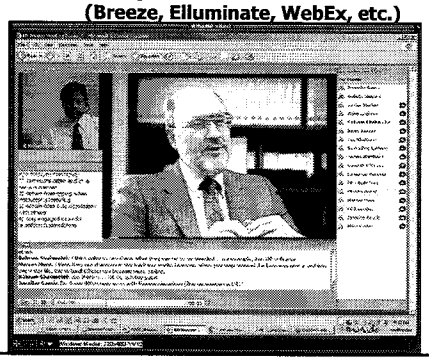
Solution #31. Basic Acoustics of Musical Instruments



Problem Situation #13: Lack of Instructor Presence

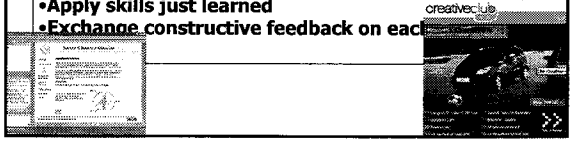
- Students need to see or hear from the instructor. They need a sense that the instructor is supporting their learning. They prefer face-to-face but are willing to try online.

Solution #32. Instructor Presence in Synchronous Sessions (Breeze, Elluminate, WebEx, etc.)



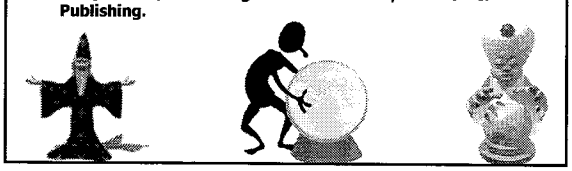
Solution #33. Peer Critique in Breeze (Table of Benefits of Peer Critique; Park & Bonk, in review)

- 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 eac



10 Predictions for Blended Learning

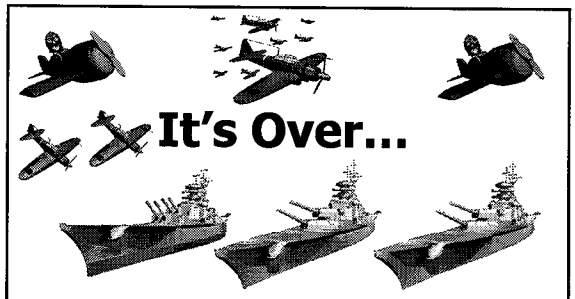
- From: Bonk, C. J., & Kim, K. J. (in press). **Future directions of blended learning in higher education and workplace learning settings.** To appear in C. J. Bonk & C. R. Graham (Eds.). *Handbook of blended learning: Global Perspectives, local designs.* San Francisco, CA: Pfeiffer Publishing.



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



It's Over...

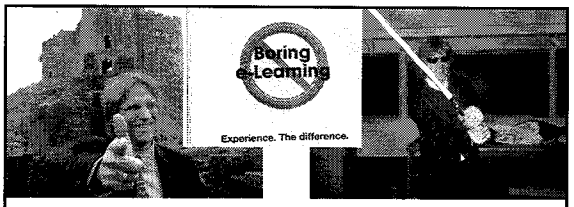
Poll: Ok, then, who wants more???

A.Yes

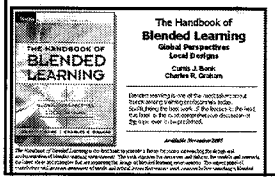
B. No

C. Not sure

Sorry...it really is the end!!!



Time for a BL Competition???



Sample HOBLe chapters at:
http://www.publicationshare.com/

Archived talks at:
http://www.trainingshare.com/