Blended Learning: Definitions, Models, and Ideas

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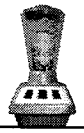
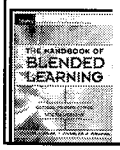


This the talk will cover:

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 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

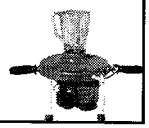
- "Blended learning means the combination of a wide range of learning media (instructor led, web based courseware, simulations, job aids, webinars, documents) into a total training program designed to solve a specific business problem." (Bersin & Associates, 2003, p. 3)

2. Blending Instructional Methods

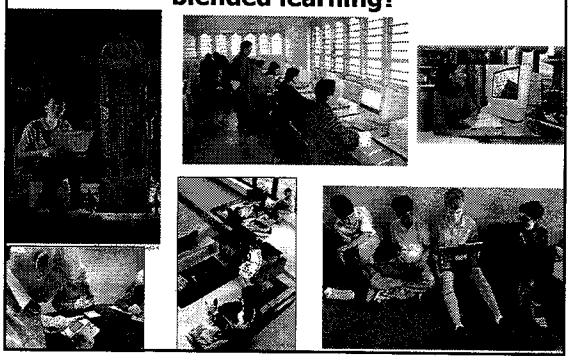
- "Blended learning: to combine various pedagogical approaches (e.g., constructivism, behaviorism, cognitivism) to produce an optimal learning outcome with or without instructional technology." (Driscoll, 2002, p. 54)

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?



Why Blend and Advantages and Disadvantages of BL...

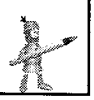
Why Teaching Fully Online or Blended? Three Key Reasons

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



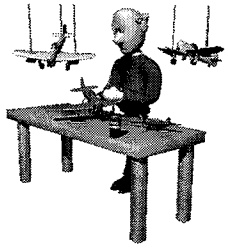
Examples of Blended Learning, Margaret Driscoll, e-Learning, March 2002

- 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

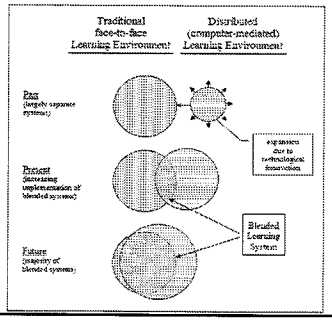
Fully Online and Blended Learning Advantages

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

Frameworks and Models of Blended Learning...



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

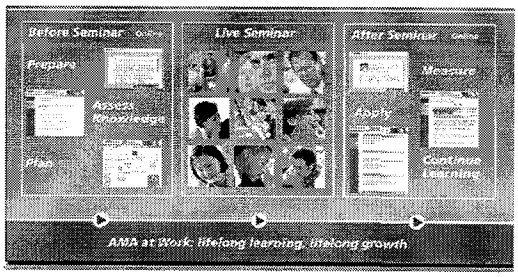


AMA Special Report, Blended Learning Opportunities

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**

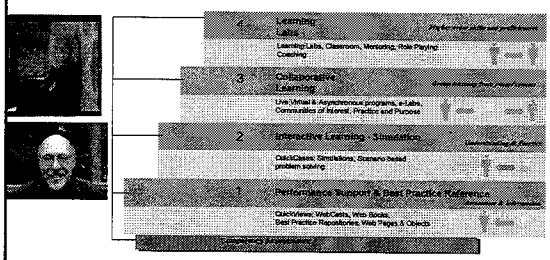
AMA Special Report, Effectively Implementing a Blended Learning Approach (Steven Shaw & Nicholas Igneri, 2006)



Source: American Management Association, AMA at Work

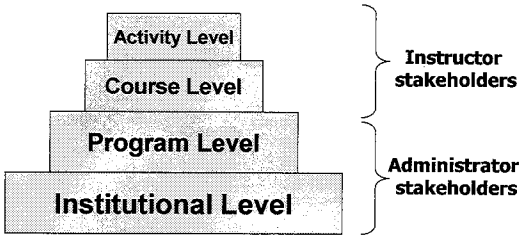
The IBM Four Tier Learning Model (2006)

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



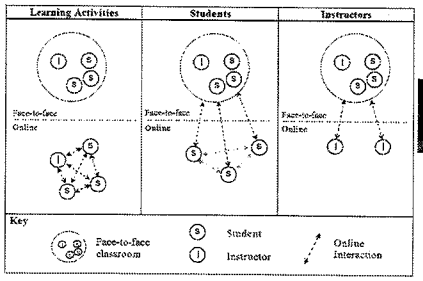
Models of Blending

Blending occurs at the following four levels:



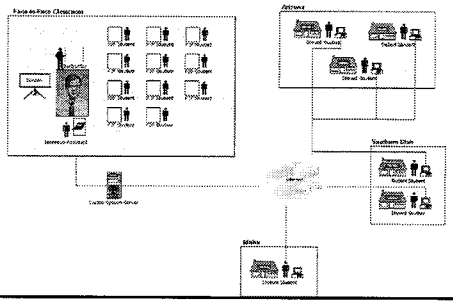
1. Activity- and Course-Level Blends

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

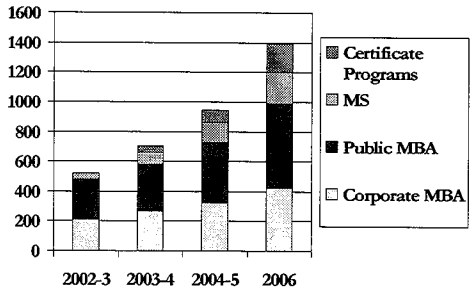


2. Course-Level Blend: Using CMS to blend distance and F2F learners

(Rogers, Graham, et al., 2003)

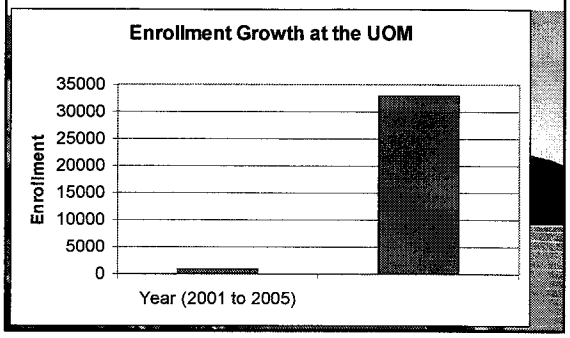


3. Program-level blending



4. Institutional-level Blending

(Abtar Kaur & Ansary Ahmed, 2006, Open U Malaysia)



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)**

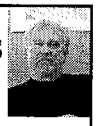
Categories of Blends

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 Blend 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

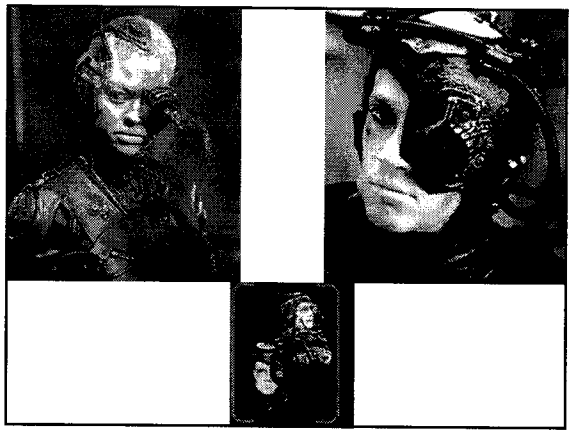
B. Enhancing Blends



(Univ of Waikato, New Zealand, 2006)

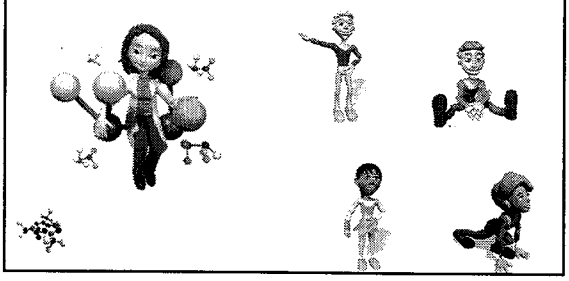
University of Waikato, New Zealand

- **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



End of Part 1: Resistance to Blended Learning is Futile!

Best BL Model 99 Second Stretch Break!!!



Blended Learning Part II: 13 Blended Learning Problems and 13 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.

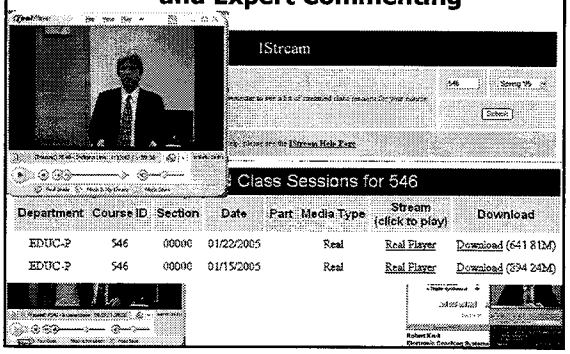
Solution #1+. Sample Activities for Brief Meetings

1. Assign web buddies, email pals, critical friends based on interests, confidence, location, etc.
2. Ice breakers—paired introductions, corners.
3. Test technology in a lab.
4. Have everyone create a blog on the experience.
5. 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.

Divide Online and Class Experiences: English Classes Online

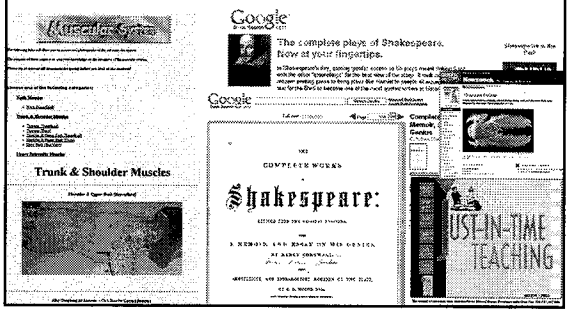
Graham, Ure, & Allen (2003, July). Blended Learning Environments A Literature Review and Proposed Research Agenda

- **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.**

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



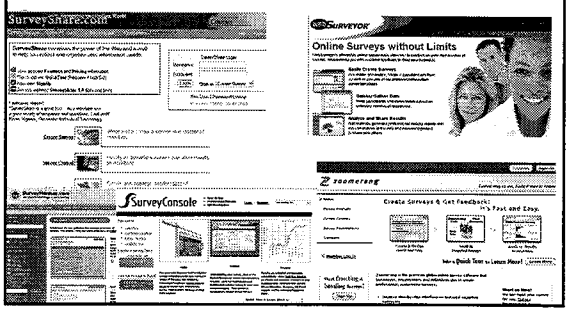
Problem Situation #5: Student Learning Control

- **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 #5.

Survey Research and Market Analysis

(e.g., WebSurveyor, Zoomerang, SurveyShare, SurveyKey)

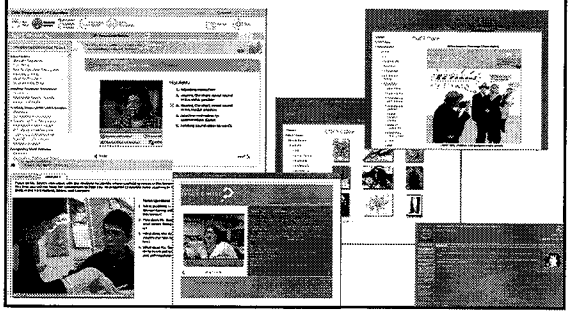


Problem Situation #6: Preparedness for the Profession

- **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 #6. Expert Mentoring Online

(video- and web-based scaffolding from expert instructors) E-Reading First Ohio and the Omnium Project



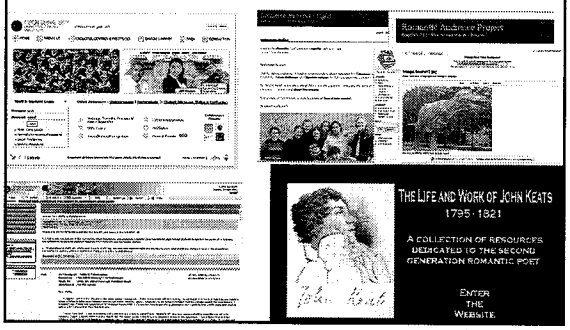
Problem Situation #7: Collaborative Skill Deficit

- 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 #7. Team Projects

(e.g., Cross-Class Collab

(IU & Open U of Malaysia 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 #8. Workplace and Field Reflections

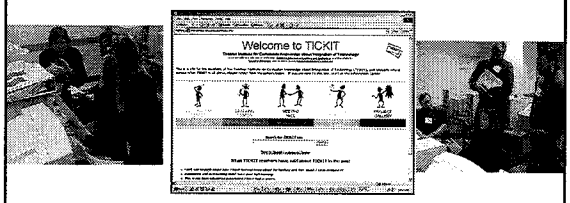
1. Instructor provides reflection or prompt for job related or field observations
2. Reflect on job setting or observe in field
3. Record notes on Web and reflect on concepts from chapter
4. Respond to peers
5. Instructor summarizes posts

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 #9: Teacher Professional Development in Technology Integration (the TICKIT Program)

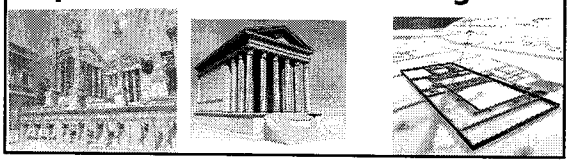
(Bonk, Ehman, & Yamagata-Lynch, in press, AACE Journal)
http://www.iub.edu/~tickit



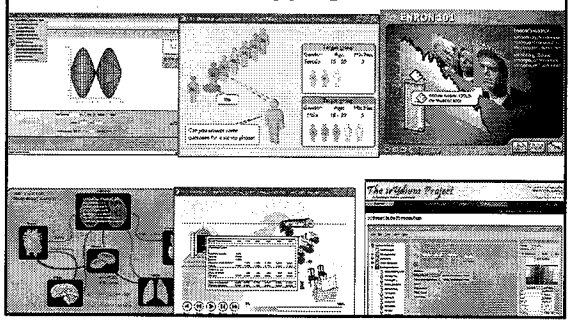
TICKIT: Teacher Institute for Curriculum Knowledge about Integration of Technology

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 #10. 3-D Visualization & Concept Mapping Software

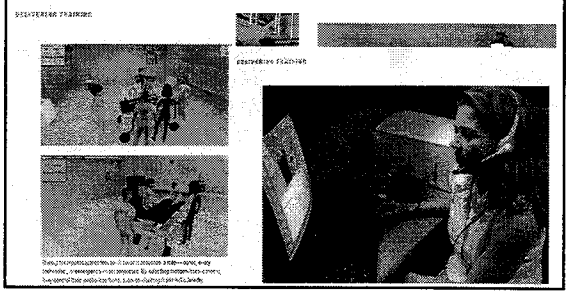


Problem Situation #11: Need for Hands-On Learning

- 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 #11. Educational Simulations

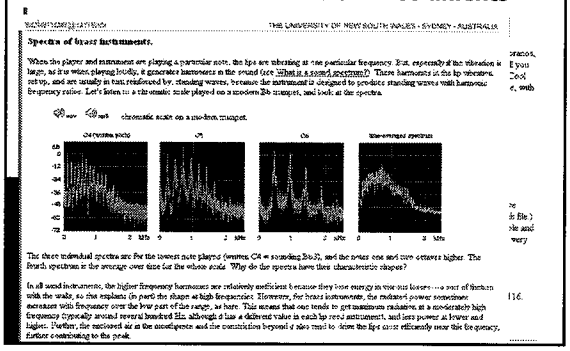
(HEALING GAMES: Computer simulations don't have to be violent -- they can give peace a chance, Scott Duke Harris May 21, 2006, San Fran Chronicle; and Medical Traumas from TD Magazine, August 2006)



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 #12.
Basic Acoustics of Musical Instruments



Spectra of brass instruments.

When the player and instrument are playing a particular note, the lips are vibrating at one particular frequency. But, especially if the vibration is large, as it is when playing loudly, it generates harmonics in the sound (see What is a sound spectrum?). These harmonics in the lip vibration set up, and are usually in turn reinforced by, standing waves, because the instrument is designed to produce standing waves with harmonic frequency ratios. Let's listen to a chromatic scale played on a modern Bb trumpet, and look at the spectra.

chromatic scale on a medium trumpet.

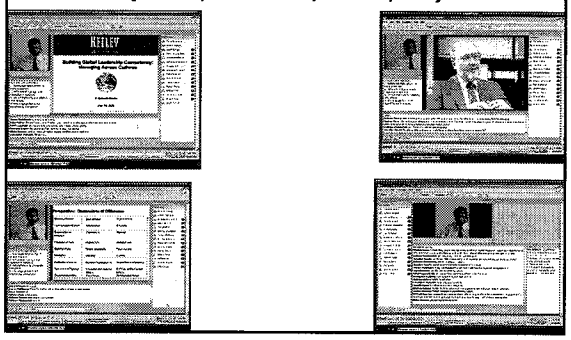
The three individual spectra are for the lowest note played (written C4 = sounding Bb3), and the notes one and two octaves higher. The fourth spectrum is the average over time for the whole scale. Why do the spectra have this characteristic shape?

In all wind instruments, the higher frequency harmonics are relatively inefficient because they lose energy in vibrational losses — a part of the horn with the walls, so this explains (in part) the shape at high frequencies. However, for brass instruments, the reduced power sometimes resonates with frequency over the low part of the range, as here. This means that one tends to get maximum radiation at a moderately high frequency (typically around several hundred Hz, although it has a different value in each lip reed instrument, and less power at lower and higher). Further, the enclosed air in the mouthpiece and the constriction beyond it also tend to drive the lips most efficiently near this frequency, further contributing to the peak.

Problem Situation #13:
Lack of Instructor Presence

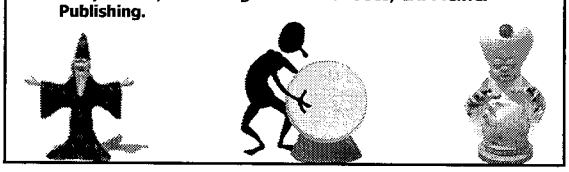
- **Students need to see or hear from the instructor. They need a sense that the instructor is supporting their learning. They prefer face-to-face but are willing to try online.**

Solution #13. Instructor Presentation in Synchronous Sessions
(Breeze, Elluminate, WebEx, etc.)



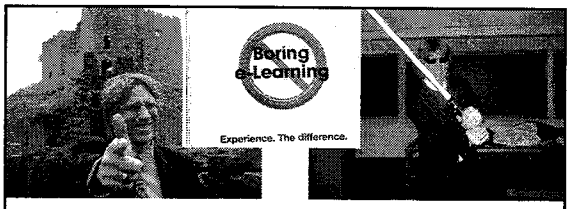
10 Predictions for Blended Learning

- 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.

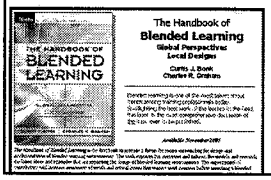


Implications and Challenges for Blended Learning

1. **Faculty and students are more mobile.**
2. **Students more choices.**
3. **Greater self-determined learning.**
4. **Courses increasingly modular.**
5. **Less predefined schedules.**
6. **When teaching less clear; when learning less clear.**



Questions???



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

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