


**Blended Learning Situations, Solutions, and Several Stunning Surprises**

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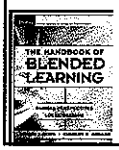
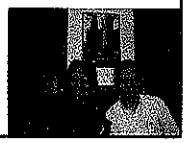
## This the talk will cover:

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



## 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**


## Whose Learning Is It, Anyway?

**Learning & Training Innovations, Clay & Mindrum, July/August, 2003, p.33**

**"E-learning proponents promised just-in-time, just-for-me, anytime, anywhere, 24X7, interactive, streaming, real-time, asynchronous, pervasive, motivational, emotional, collaborative, multimedia, blended, adaptive, personalized, intuitive, rich, engaging, strategic, empowering, scalable, consistent, efficient, and cost-effective learning."**

## Emergence of Blended Learning Systems in a Corporate Context

**The American Society for Training and Development (ASTD) identified BL as one of the top ten trends identified in the knowledge delivery industry**

Cited by Rooney, J. E. (2003). Blending learning opportunities to enhance educational programming and meetings. *Association Managment, 55*(5), 26-32.

## Blended Learning: Two Parts

**1. Models and Frameworks**
**2. Problems and Solutions (i.e., examples)**
**(When do blends make sense?)**

## 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 Defined and Explained

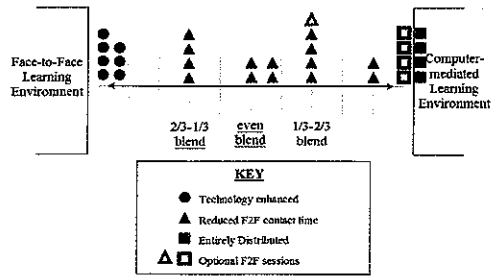
## The Sloan Consortium

**(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. |

## 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.

Allen, I. E., Seaman, J., & Garrett, R. (2007). Blending in: The extent and promise of blended education in the United States. The Sloan Consortium (Sloan-C). Retrieved July 4, 2007, from http://www.eduventures.com/PDF/Blending_In.pdf

*Penetration Rates – Fall 2003*

| | Online | Blended |
|---|---|---|
| Business | 42.7% | 47.9% |
| Computer and Information Sciences | 35.1% | 41.5% |
| Education | 24.9% | 36.5% |
| Health Professions and Related Sciences | 31.4% | 43.5% |
| Liberal Arts and Sciences, General Studies, Humanities | 40.2% | 47.8% |
| Psychology | 23.6% | 27.1% |
| Social Sciences and History | 28.4% | 31.6% |
| All Other Programs | 36.2% | 40.1% |

## 1. Blending Delivery Media

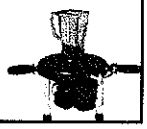
- "Blended learning means the combination of a wide range of learning media (instructor led, web based courseware, simulations, job aids, webinars, documents) into a total training program designed to solve a specific business problem." (Bersin & Associates, 2003, p. 3)

## 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

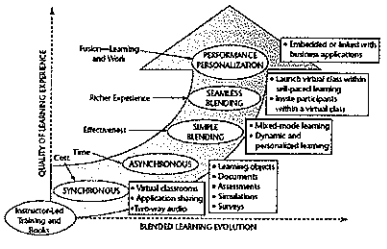
- "Blended learning refers to events that combine aspects of online and face-to-face instruction" (Rooney, 2003, p. 26; Ward & LaBranche, 2003, p. 22)



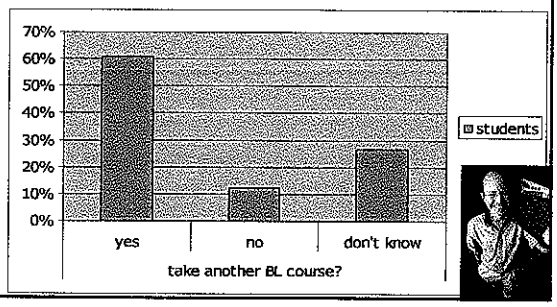
## Harvey Singh (2006)

Blending Learning and Work 477

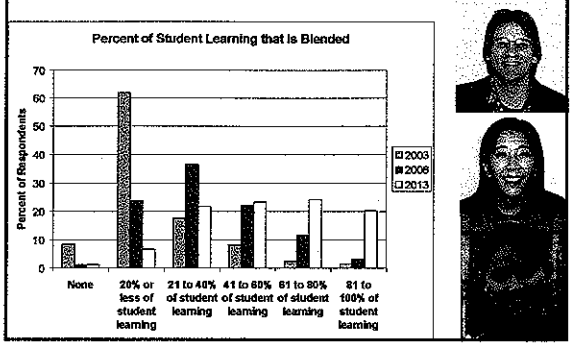
FIGURE 34.1. PAST, PRESENT, AND FUTURE OF BLENDED LEARNING.




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



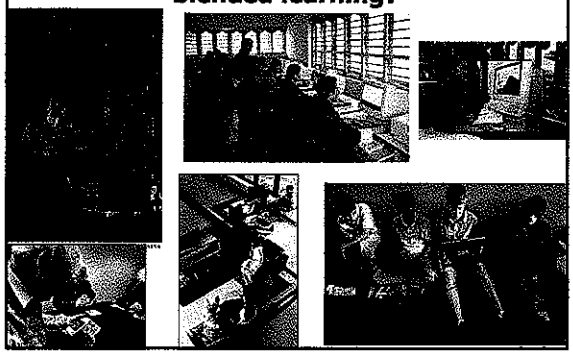
## Future Directions of Blended Learning
**(Bonk, Kim, & Zeng, 2006, Chapter 39)**








## 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**

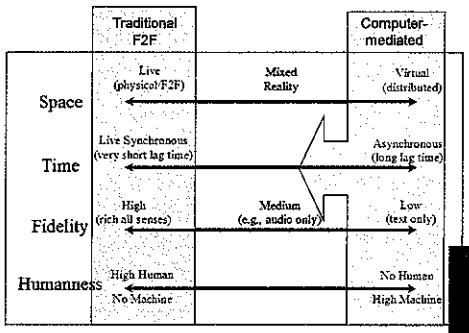
## Fully Online and Blended Learning Advantages

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

## Fully Online and Blended Learning Disadvantages

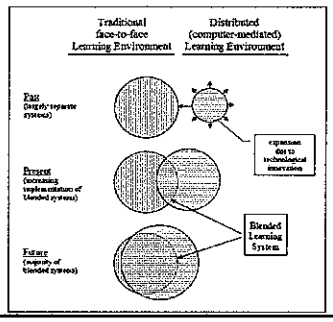
1. Procrastination (trouble managing time and requirements)
2. Problems with technology at the beginning (instructor tries too much)
3. Can be overwhelming or too novel
4. Poor integration or planning
5. Resistance to change
6. Faculty skepticism, increase workload, and reduced productivity

## Frameworks and Models of Blended Learning...



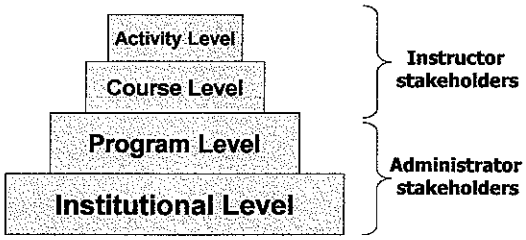

(Graham, 2006)

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



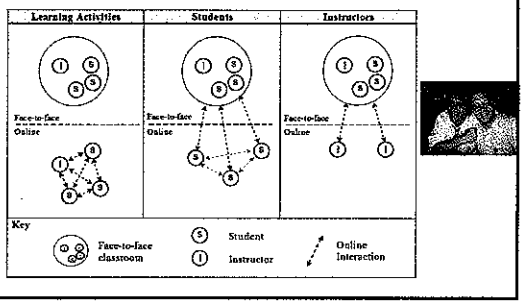

## Models of Blending

**Blending occurs at the following four levels:**



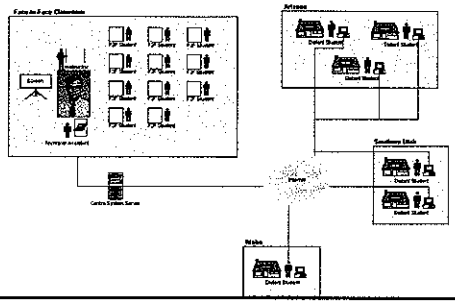
## 1. Activity- and Course-Level Blends

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



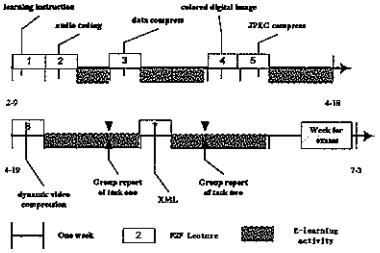

## 2. Course-Level Blend: Using CMS to blend distance and F2F learners

**(Rogers, Graham, et al., 2003)**



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

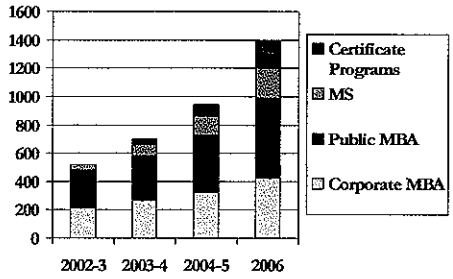
**Alternating F2F and e-learning activities in a multimedia technology course in China.**



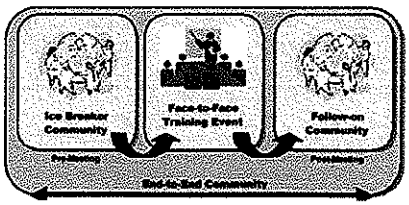

See: Huang Ronghuai, H. & Yueliang Z. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham (Eds.), *Handbook of blended learning: Global perspectives, local designs.* San Fransisco, CA: Pfeiffer Publishing.

## 3. Program-level blending (blend same for all participants)

**Kelley Direct Online MBA (IU)**



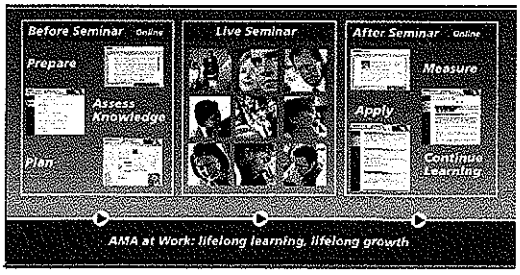

## A Blended Model: Corporate




**Soren Kaplan, Ph.D.**
**Managing Director, iCohere, Strategies for Collaborative Learning**

## AMA Special Report, Effectively Implementing a Blended Learning Approach

**(Steven Shaw & Nicholas Igneri, 2006)**




Source: American Management Association, AMA at Work

## 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**



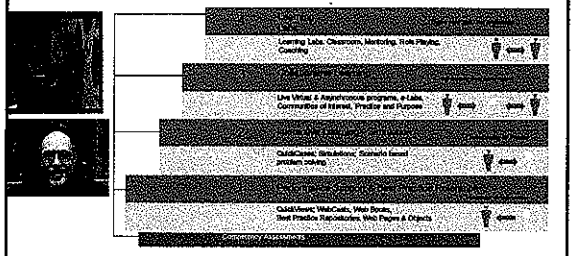
## AMA Special Report, Blended Learning Opportunities; Alison Rossett (2006)

Table 1. What Might Go in the Blend

| | |
|---|---|
| Live face-to-face (formal)<br>• Instructor-led classroom (F2F)<br>• Workshops<br>• Coaching, mentoring<br>• On-the-job (OTJ) training<br>• Work-based problems | Live face-to-face (informal)<br>• Collegial relationships<br>• Work teams<br>• Apprenticeships |
| Virtual collaboration/synchronous<br>• Live e-learning classes<br>• E-coaching, e-mentoring<br>• Instant messaging, SMS | Virtual collaboration/asynchronous<br>• Email<br>• Online communities and discussion boards<br>• Listservs<br>• Blogs, wikis, podcasts |
| Self-paced learning (print, CD/DVD, electronic, wireless)<br>• Online modules<br>• Online resource links<br>• Simulations and scenarios<br>• Assessments and self-assessments<br>• Workbooks, readings | Performance support<br>• Online help systems<br>• Print job aids<br>• Online knowledge databases<br>• Documentation<br>• Performance support tools |

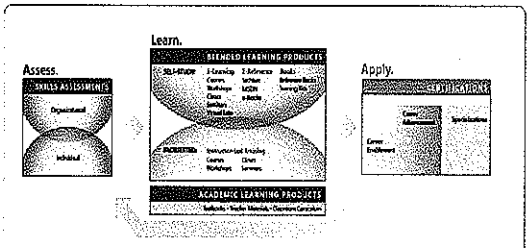
*Adapted from (Rossett, Douglis, & Frazee, 2003, July)*

## 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*



**Framework for organizational development through training**

## Assess, Learn, and Apply
**(Copyright Microsoft, Ziob & Mosher, in press; Handbook of Blended Learning)**




## 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<br>▪Onsite engagement<br>▪Virtual online classroom<br>▪Live video via satellite or videoconferencing<br>▪Online coaching/ mentoring | ▪Instructor-led classroom via e-mail<br>▪Online or computer-based training (CBT)<br>▪Self-study guides, manuals, texts<br>▪Online resources and databases | ▪Chat<br>▪Instant messaging (IM)<br>▪Newsgroups and forums<br>▪Collaboration |

## 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 |

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

Learner Self-Navigation

| | | |
|---|---|---|
| Studying | • Books, articles, guides<br>• References<br>• White papers<br>• Asynchronous Content<br>• Job Aids<br>• Glossaries<br>• FAQs | • Authentic tasks<br>• Role-Play<br>• Projects<br>• Case Studies<br>• Peer Discussion<br>• Discussion Forums |
| Content Delivery Focus | • Classroom Lectures<br>• Synchronous Content<br>• Demonstrations<br>• Reviews/Discussions<br>• Video<br>• Video-conferencing | • Exercises<br>• Diagnostic Labs<br>• Practice Labs<br>• Mentoring/tutoring<br>• Experiments |
| Teaching | Guided Navigation | Coaching |

Practicing

Experience and Practice Focus

## Current Learning Elements
### An Learning Ecology from Sun Microsystems

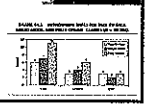
**Current Learning Elements**

- Classroom (instructional) content
- Self-paced web content
- Self-study guides
- Certification
- Practice tests
- Remote labs
- eMentoring
- Asynchronous discussion forums
- Documentation
- Procedural job aids
- Guided lab activities
- Learning management system
- Transfer of Information – recorded audio and slide presentations
- Webcasts
- Video
- Performance Support

## 4. Institutional-level Blending

**Example 1: University of Central Florida**

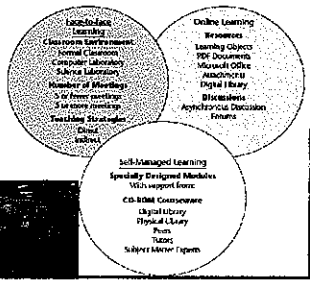
- E courses are technology enhanced courses
- M courses are blended courses with reduced seat time
- W courses are web courses (completely online)

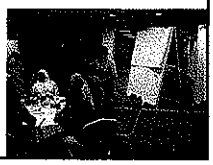
See: Driscoll, C., Hartman, J, Juge, F., Moskal, P., & Sorg, S. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham (Eds.), *Handbook of blended learning: Global perspectives, local designs.* San Francisco, CA: Pfeiffer Publishing.

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

FIGURE 22.1. OPEN UNIVERSITY MALAYSIA'S BLENDED LEARNING MODEL





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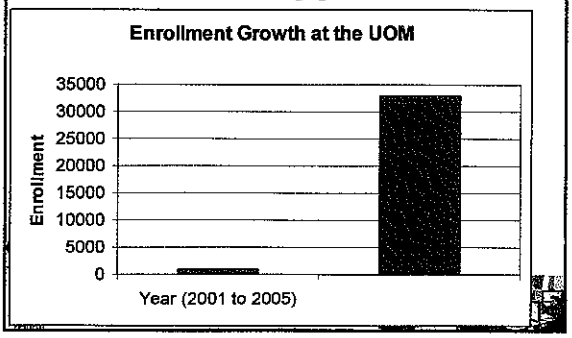



## 4. Institutional-level Blending
### (Brian Linquist, 2006)

**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)

Updated: June 25, 2005, 8:12 PM ET

## Shaq joins University of Phoenix grad

Associated Press

INGLEWOOD, Calif. -- Shaquille O'Neal returned to the Forum on Saturday, not for an NBA game, but to pick up his MBA.

The man who once called himself the Big Aristotle was the tallest and most famous of the 2,200 University of Phoenix graduates at the arena. But O'Neal said he was simply getting ready for the real world.

"It's just something to have on my resume [for] when I go back into reality," the 7-foot-1 Miami Heat

Shaquille O'Neal
Center
Miami Heat
Profile

2004-2005 SEASON STATISTICS

| GM | PPG | RPG | APG | FG% | FT% |
|---|---|---|---|---|---|
| 73 | 22.9 | 10.4 | 2.7 | .601 | .461 |



## Categories of Blends

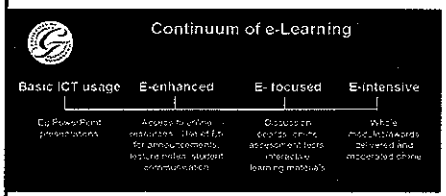
| | |
|---|---|
| **A. Enabling Blends** | **Enabling blends primarily focus on addressing issues of access and convenience; provide similar learning experiences.** |
| **B. Enhancing Blends** | **Enhancing blends allow for incremental changes to the pedagogy; additional or supplementary online resources.** |
| **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**

| Year / Students Enrolled in Online Classes | FY 2000 | | FY 2002 | | FY 2003 | | FY 2005 | | FY 2006 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Count | % of Total | Count | % of Total | Count | % of Total | Count | % of Total | Count | % of Total |
| In At Least One Online | 4,692 | 18% | 8,574 | 31% | 11,033 | 41% | 13,768 | 53% | 15,774 | 60% |
| In A Majority Online | 783 | 3% | 5,713 | 21% | 7,012 | 26% | 9,107 | 35% | 11,203 | 43% |
| In All Online | 332 | 1% | 1,747 | 6% | 2,602 | 10% | 4,217 | 16% | 5,645 | 22% |
| None | 21,661 | 80% | 19,015 | 69% | 16,044 | 59% | 12,225 | 47% | 10,384 | 40% |
| Total Active Students | 25,436 | | 27,588 | | 27,077 | | 25,993 | | 26,138 | |

## B. Enhancing Blends
### (University of Glamorgan in Wales)




## C. Transforming Blends
### (Kirkley & Kirkley; HOBLe, 2006)

- **Corporate/Military Training**
  - **Workplace learning (integrating learning into workflow)**
  - **Mixed-reality environments combining the virtual and real**

Reality -Virtuality Training Continuum


**What can we say about blended learning then???**

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

**Part II: 13 Fully Online and Blended Learning Problems and 60Solutions**

**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?**

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

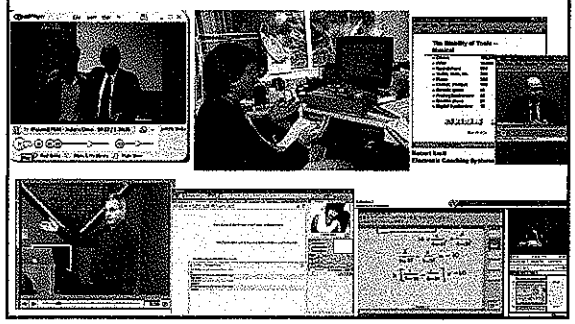
## Blended Solution #1+. Sample Activities for Brief Meetings

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.

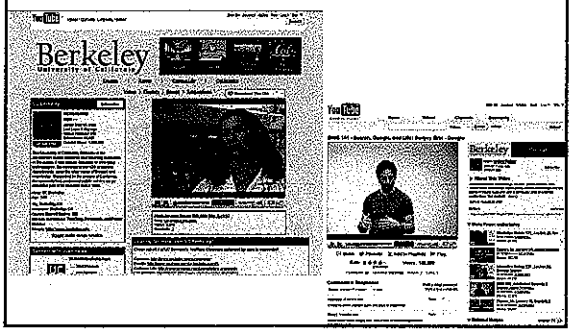
## Problem Situation #2: Student Absenteeism

- 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

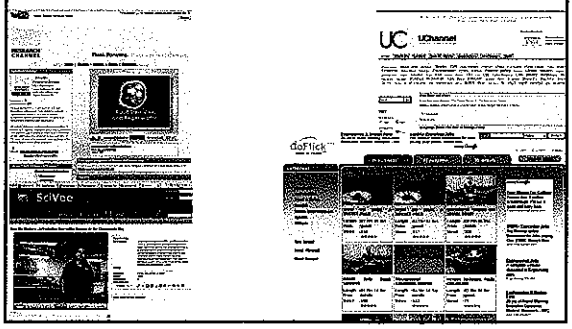


## Blended Solution #3. Post Courses in YouTube and iTunes (e.g., Berkeley)




## Blended Solution #4. Assign Online Shared Video

(SciVee, Research Channel, doFlick, UC)




## 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 #5.

**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).**



## 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.**

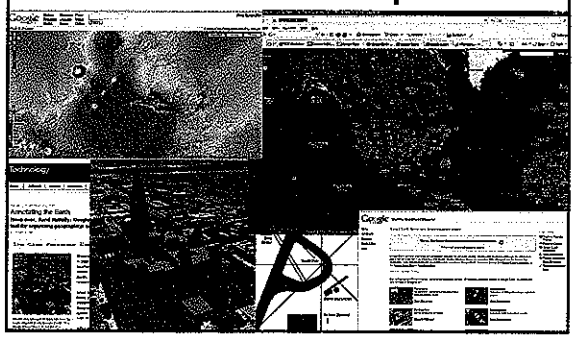
## Blended Solution #6.

**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.)**

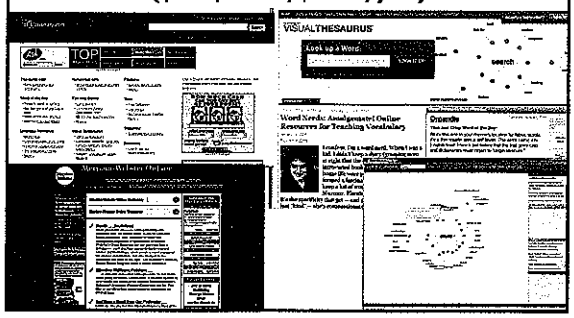


## Blended Solution #7. Electronic Cameras and Maps

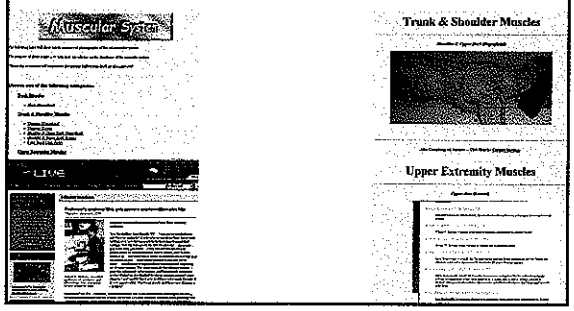


## Blended Solution #8. Online Referenceware (e.g., Websters, Visual Thesaurus)

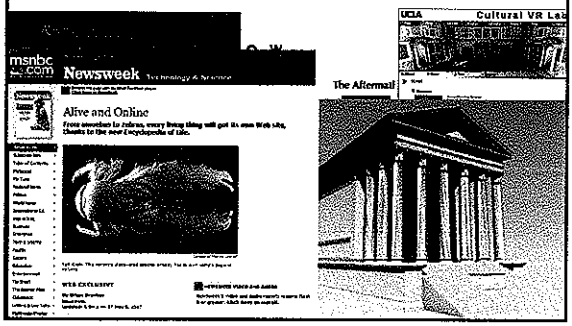
**http://www.visualthesaurus.com/ ($2.95/month; $19.95/year)**



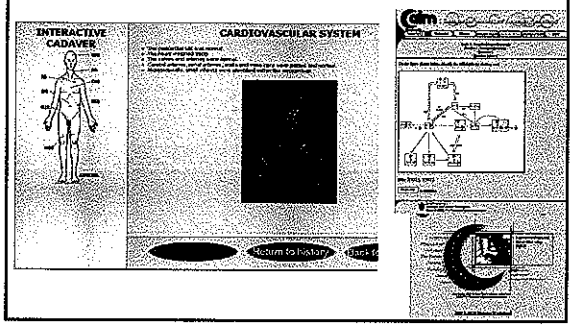

## Blended Solution #9. Online Testing Center: e.g., self study in anatomy



**Blended Solution #10. Online Portals & Resources (Civil Rights Digital Library and Amistad, history, science, literature, etc.)**




**Blended Solution #11. Online Cases (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.

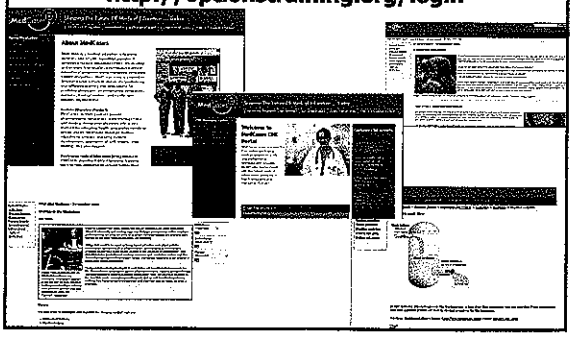
**Blended Solution #12: Student Podcast (in schools—kids have power!)**

"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)

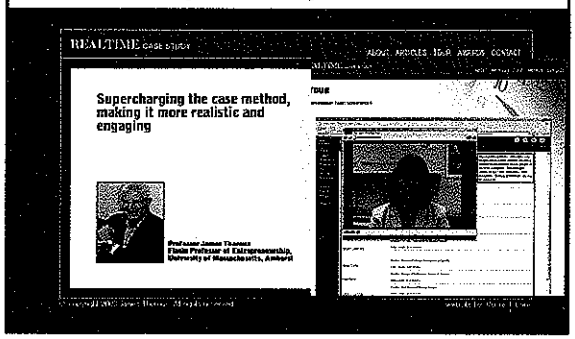
## Problem Situation #6: Preparedness for the Profession

- 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 #13. Community of Learners: Medical and Business Cases Online (cases community) http://optionstraining.org/login**

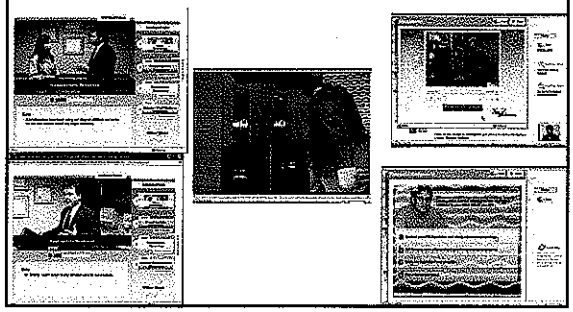


## Blended Solution #14. Real World Problems (PBL online): Real-time Cases

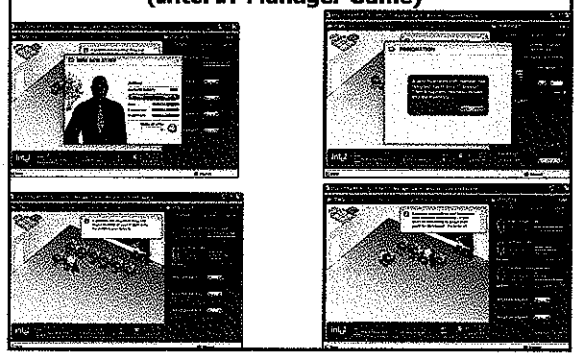



## Blended Solution #15. Video Scenario Learning

(Option 6, Bloomington, IN)

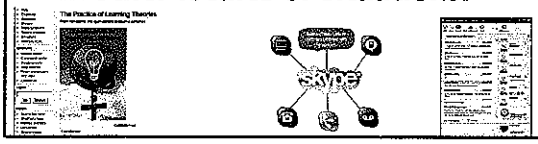


## Blended Solution #16. Educational Simulations (Intel IT Manager Game)

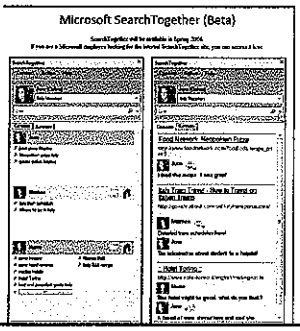


## Problem Situation #7: Collaborative Skill Deficit

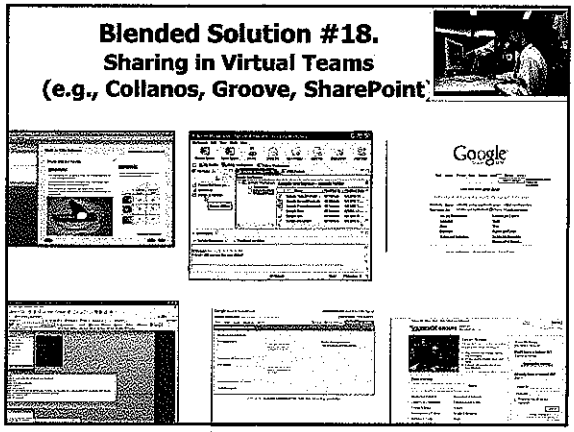
- Students need collaboration and teamwork skills. Want to build virtual teaming skills in class activities or work with learners in other locales or situations.



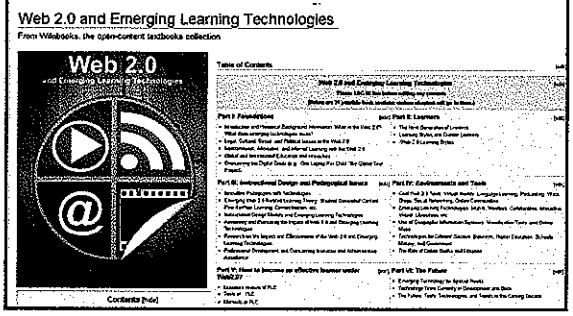

## Blended Solution #17. Collaborative Searching



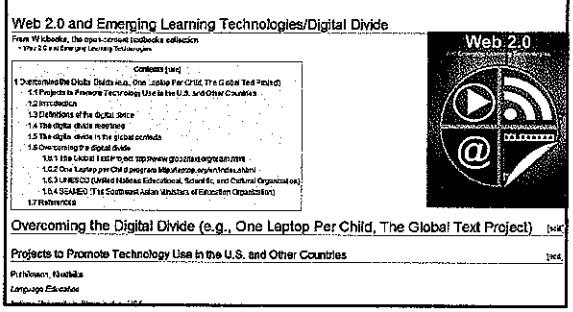

## Blended Solution #18. Sharing in Virtual Teams (e.g., Collanos, Groove, SharePoint)



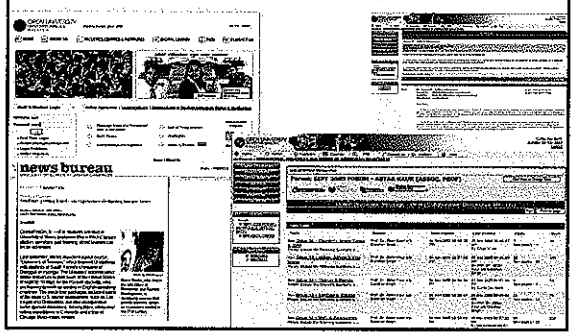
## Blended Solution #19. Wikibooks
**(Web 2.0 and Emerging Learning Technologies (The WELT))**



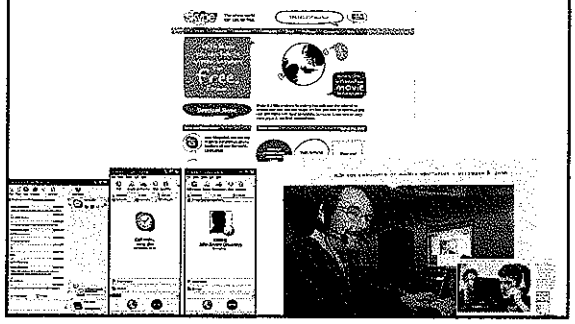

## Fall 2007: Web 2.0 and Emerging Learning Technologies (The WELT)
**http://en.wikibooks.org/wiki/Web_2.0_and_Emerging_Learning_Technologies**




## Blended Solution #20. Cross-Class Collab
**(Indiana University and Open U of Malaysia; Univ of Illinois Tourism class)**



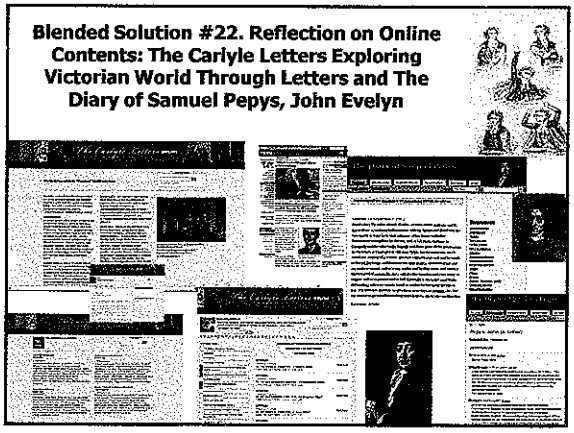

## Blended Solution #21. Language Lessons, Team Meetings, etc., in Skype



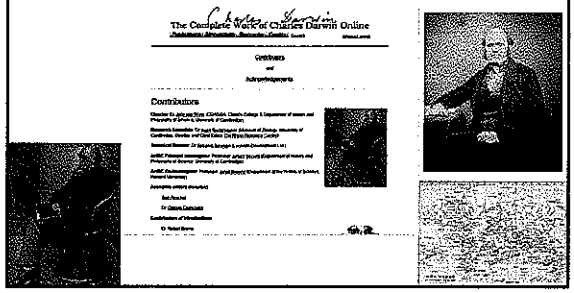
## Problem Situation #8: Student Reflections and Connections

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

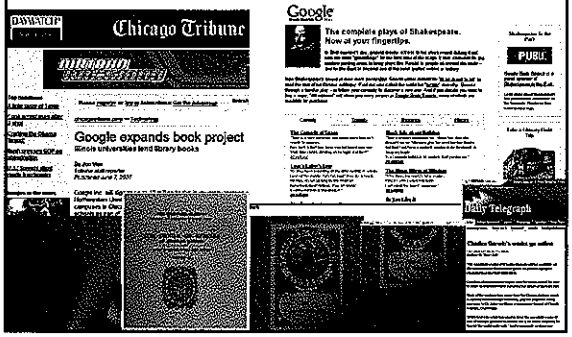
## Blended Solution #22. Reflection on Online Contents: The Carlyle Letters Exploring Victorian World Through Letters and The Diary of Samuel Pepys, John Evelyn



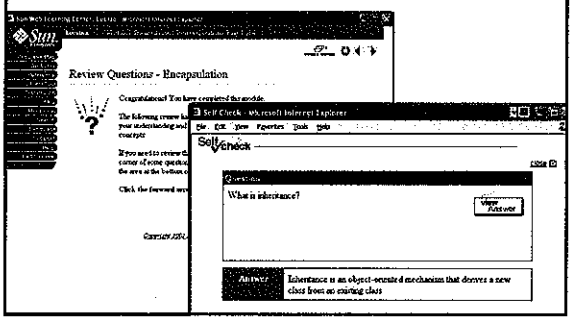
## Blended Solution #23. Learning Portals The Complete Works of Charles Darwin



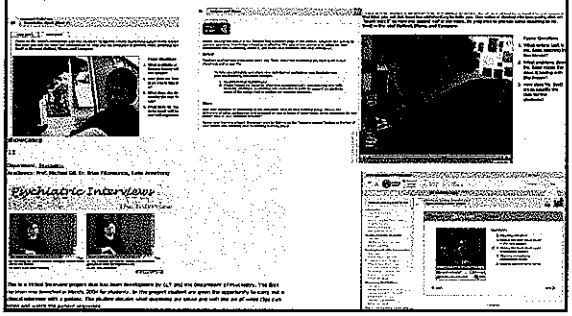

## Note: All of Darwin's and Shakespeare's Works are Online



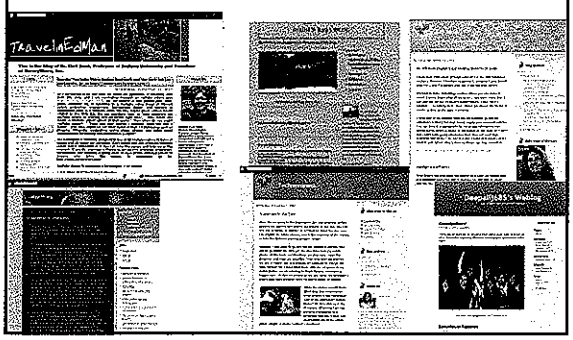

## Blended Solution #25. Learner-Self Interactions and Reflections




## Blended Solution #26. Expert Video Reflections and Scaffolds online (E-Reading First Ohio; reflect, share, and compare)



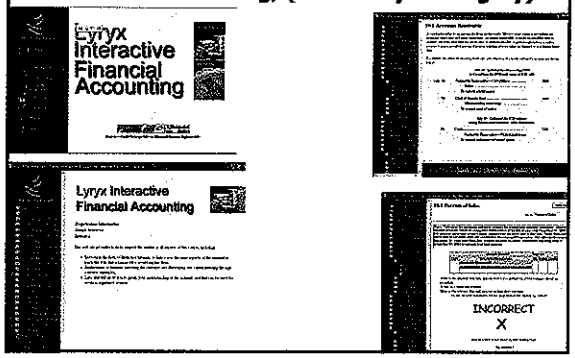

## Blended Solution #27. Blogs with Critical Friends (e.g., http://travelinedman.blogspot.com/)



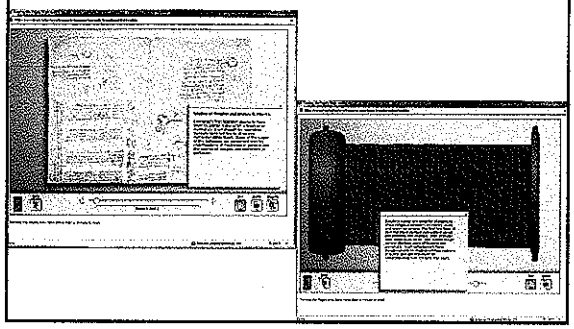

## Blended Solution #28. Workplace and Field Reflections

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




## Blended Solution #30.
(e.g., Turning The Pages, British Library)



## Problem Situation #9: Learning Community

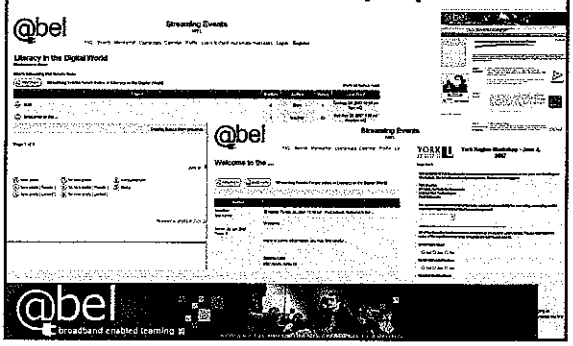
- There is a preference for creating an online learning community in order to increase student learning and retention in the program. Such a community might be in a single class or across a series of classes.

## Blended Solution #31: Teacher Professional Development in Technology Integration (the TICKIT Program)

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

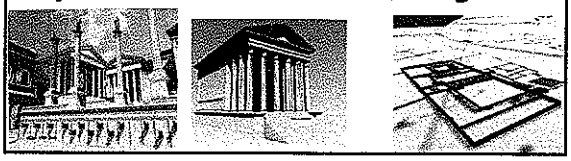

TICKIT: Teacher Institute for Curriculum Knowledge about Integration of Technology

## Blended Solution #32. Asynchronous Discussion of Weekly Topics

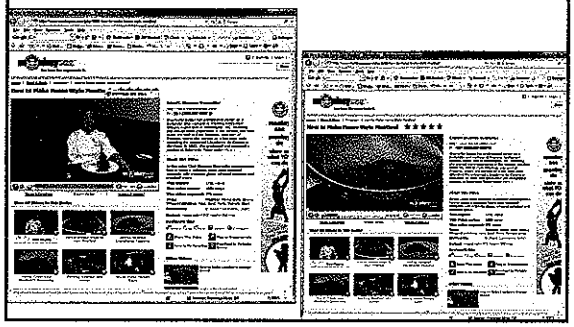



## Problem Situation #10: Need to Visualize Content

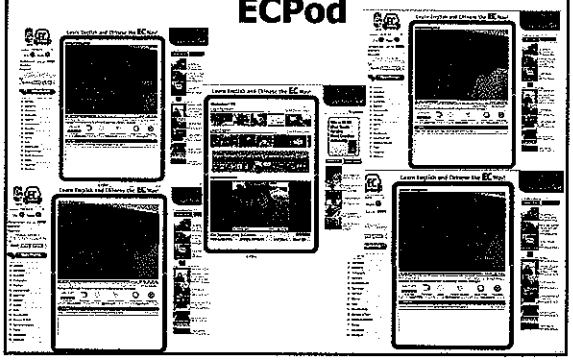
- Content is highly visual in nature and difficult to simply discuss in class. Or students have a preference for visual learning.



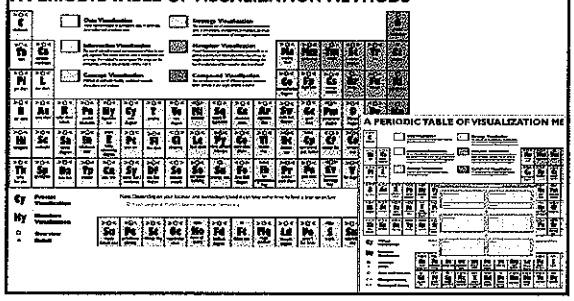
## Blended Solution #33: Shared Online Video Demonstrations (e.g., Monkey See)



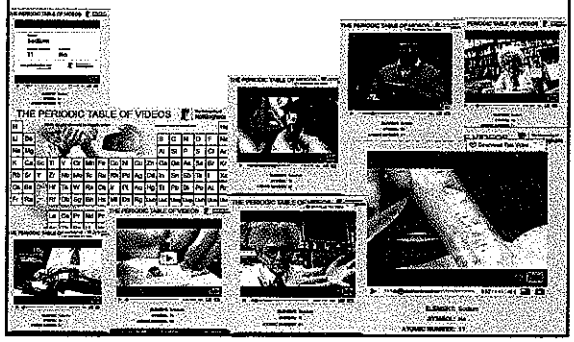
## Blended Solution #34: ECPod



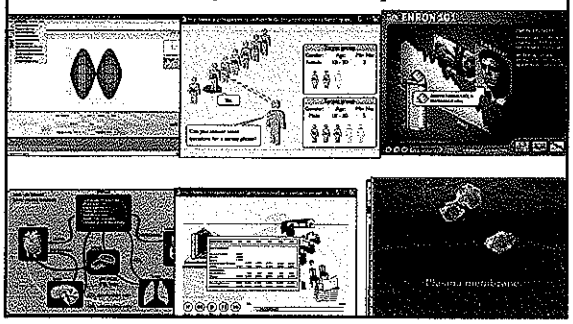
## Blended Solution #35. Visual Resources (e.g., Periodic Table of Visualization; Visual Thesaurus http://www.visualthesaurus.com/; http://www.visual-literacy.org/periodic_table/periodic_table.html)



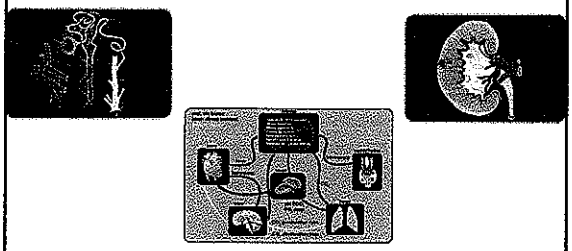

## Blended Solution #36. Videos of the Periodic Table




## Blended Solution #37. Flash, 3-D Visualization, & Laboratory Software



## Blended Solution #38. Flowcharts, Diagrams, Maps, etc.



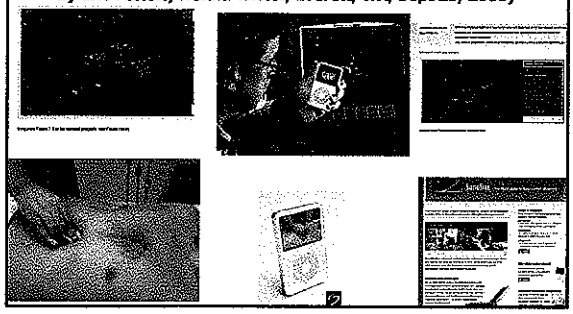
Elements in the system for control of oxygenation in the human body (e.g., the Kidney): From: Next-Generation Educational Software Why We Need It and a Research Agenda for Getting It. Van Dam, Becker, & Simpson, *Educause Review*, March/April 2005

## Solution #39. Exploration and Demonstration: Virtual Fieldtrip and Tours


## Blended Solution #40. Anchored Instuction: Assign a YouTube Videos to Watch and Reflect on

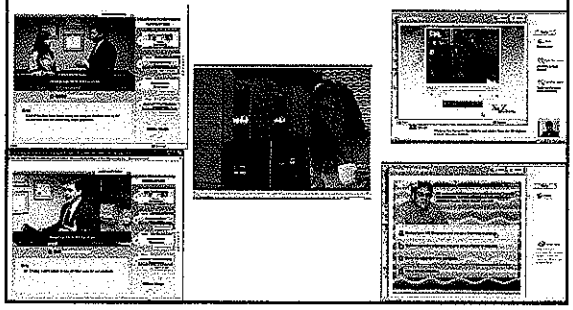
## Blended Solution #42. Vodcast for Medical Training

(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)

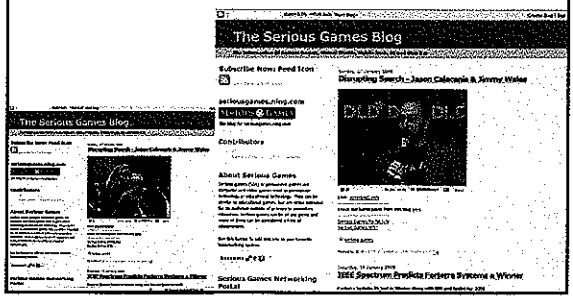


## Blended Solution #43. Video Scenario Learning

(Option 6, Bloomington, IN)

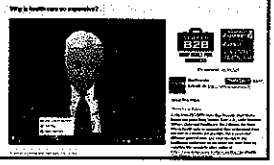


## Blended Solution #44. Watching Online Videos of Conferences or Famous People and Reflecting on them (e.g., Jimmy Wales from Wikipedia

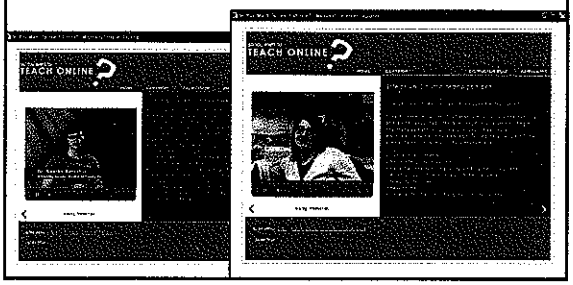



## Blended Solution #45. Demonstration Videos with Commenting (e.g., Viddler)

- You can comment right on the timeline of the video. Your comment can be either text, image, or video. Therefore, for example, if you uploaded the video of your presentation and asked for specific feedback, and let's say I'm critiquing your delivery, on the moment that I wanted to comment, I can place my commentary: "right here, I like you how you pause and wait for the audience to mentally answer your question..."



## Blended Solution #46. Community of Practice: Online Professional Development




## 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 #47. 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 #48. Educational Simulations

(Medical Traumas from TD Magazine, August 2006)

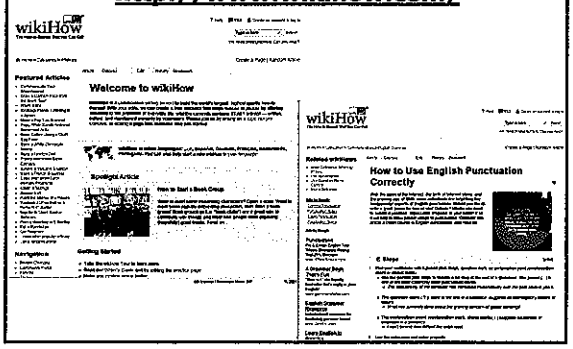
## Blended Solution #49.

Cascaded Scenario, Virtual Crime Scene
Arjuna Multimedia, Bloomington, IN)

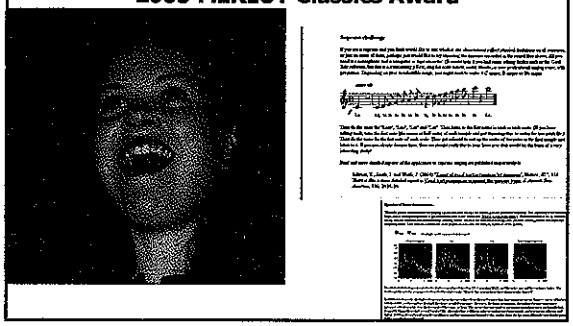

## Problem Situation #12: Preference for Auditory Learning

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

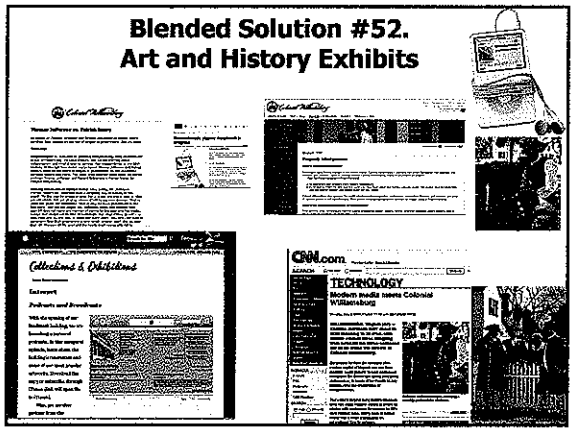
## Blended Solution #50: Wikihow
http://www.wikihow.com/



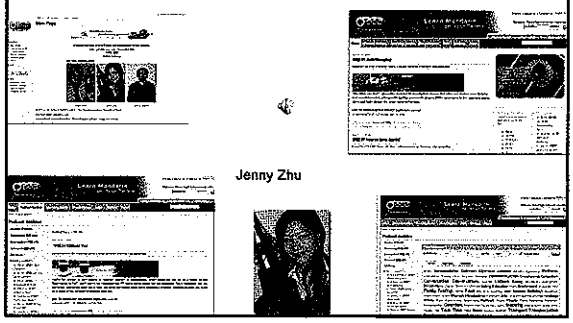

## Blended Solution #51.
Basic Acoustics of Musical Instruments
2005 MERLOT Classics Award



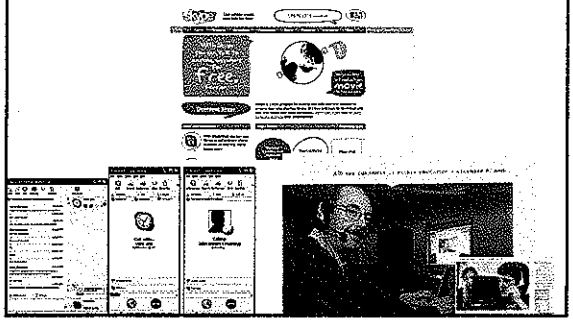
## Blended Solution #52.
Art and History Exhibits



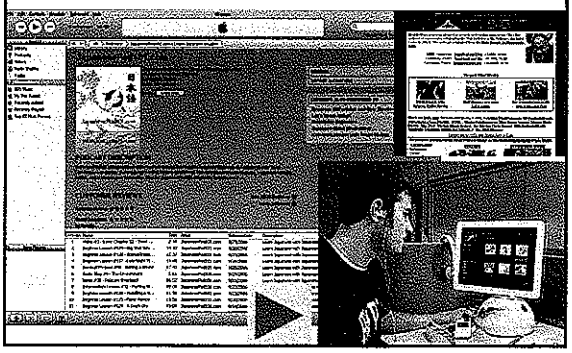

## Blended Solution #53: Free Podcast Shows; Language Learning (ChinesePod—learn Mandarin)



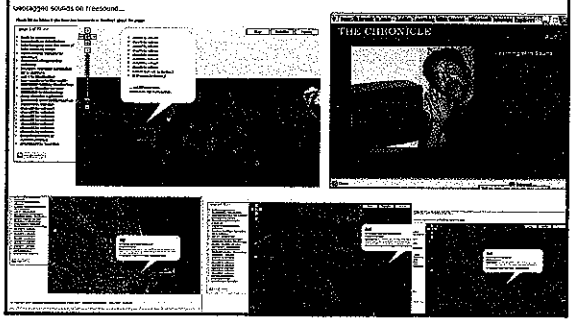

## Blended Solution #54.
Language Lessons, Team Meetings, etc., in Skype



## Blended Solution #55. Self-Paced Language Programs: JapanesePod, Arabic online, etc.



## Blended Solution #56. Indexing Sounds in Cities with Google Maps



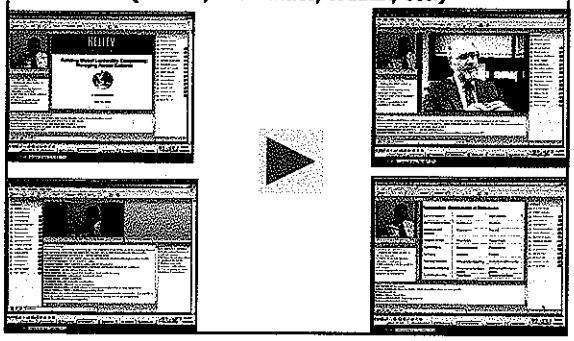
## Problem Situation #13: Lack of Instructor Presence

- 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 #57: Teaching with Twitter

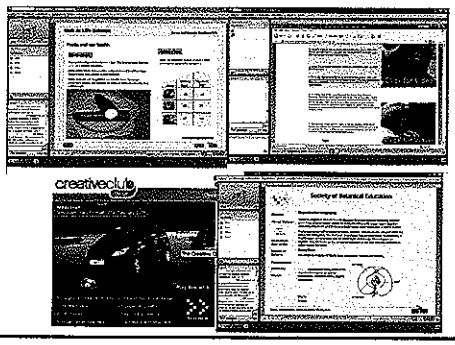

## Blended Solution #58. Instructor Presentation in Synchronous Sessions

(Breeze, Elluminate, WebEx, etc.)



## Blende Solution #59. Peer Critique in Breeze

(Table of Benefits of Peer Critique; Park & Bonk, in review)



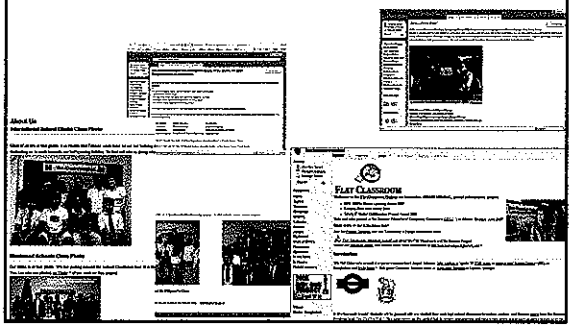

## Blended Solution #60. Video Course Intros

(examples from Northern Virginia Community College and Indiana University KD (online MBA) program)

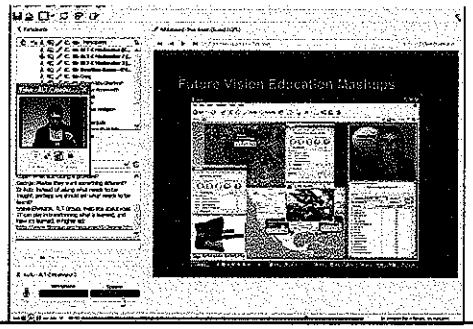
**Time for Convergence!!!**

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

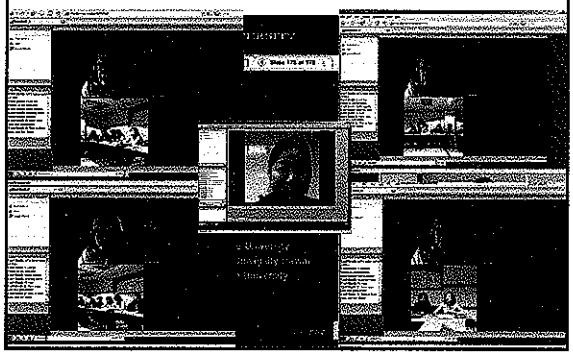
**1. Flat Schools and Flat Classroom Projects!!! (Ning, videoconferencing, online discussions, blogs, wikis, etc.)**



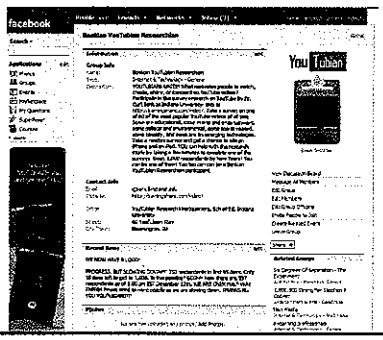
**2. Michelle Selinger, ALT-C Keynote, September 2007, Univ of Nottingham (live presentation, Q&A, chat, etc.)**




**3. Breeze plus Online Videos plus Discussion Forums**

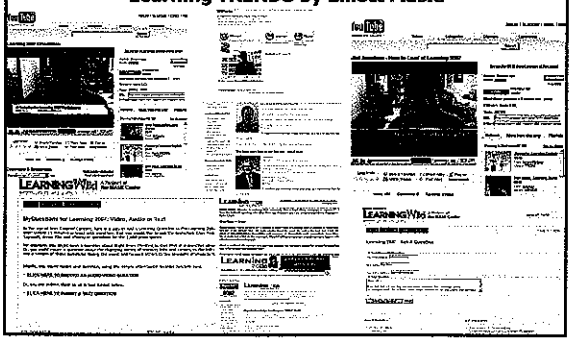


**4. YouTube Research Group in Facebook and Blog on it.**

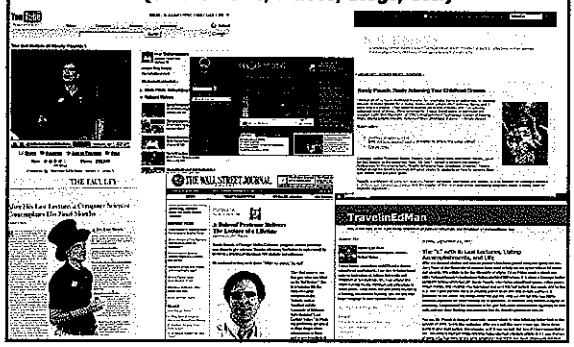



**5. Elliott Masie, Podcast + Video + Transcript**

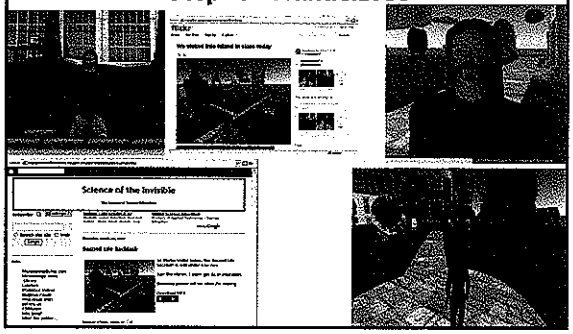
**Learning TRENDS by Elliott Masie**



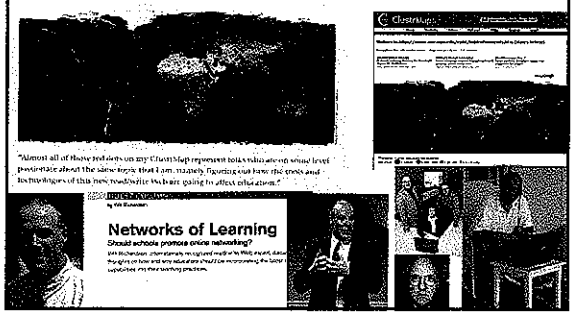
## 6. Archive Last Lectures
**(Randy Pausch, Carnegie Mellon University)**
**(online news, videos, blogs, etc.)**



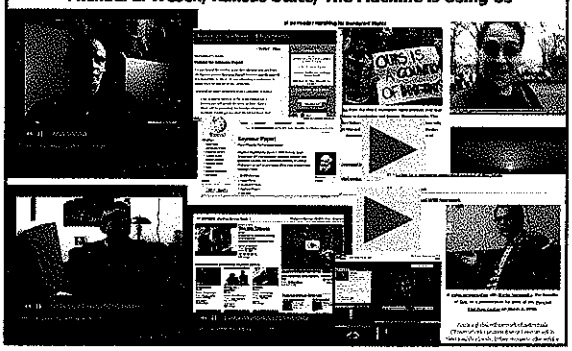

## 7. Combining The Web 2.0 (e.g., Second Life, Blogging, and Photo Posting)
**Stephen Mandelbrot**




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

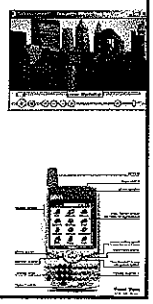



## 10. Vlogging (Video Blogging)
**e.g., Andy Calvin's Waste of Bandwidth**
**Michael L. Wesch, Kansas State, The Machine is Using Us**



## Trend #1.
## Mobile Blended Learning

- **Increasing use of mobile and handheld will create rich and exciting new avenues for blended learning. When one is teaching or learning is less clear.**



## Trend #2.
**Greater Visualization, Individualization, and Hands-on Learning**

- **Blended learning environments will increasingly become individualized; in particular, emphasizing visual and hands-on activities.**

## Trend #3.
### Self-Determined Blended Learning

- Blended learning will foster greater student responsibility for learning. Decisions about the type and format of blended learning will be made by students instead of instructors or instructional designers. Learners will be designing their own programs and degrees.

## Trend #4.
### Increased Connectedness, Community, and Collaboration

- Blended learning will open new avenues for collaboration, community building, and global connectedness. It will become used as a tool for global understanding and appreciation.

## IP Videoconferencing is Free

## Trend #5.
### Increased Authenticity and On-Demand Learning

- Blended learning will focus on authenticity and real world experiences to supplement, extend, enhance, and replace formal learning. As this occurs, blended learning will fuel advancements in the creation and use of online case-learning, scenarios, simulations and role play, and problem-based learning.

## Trend #6.
### Linking Work and Learning

- As blended learning proliferates, the lines between workplace learning and formal learning will increasingly blur. Higher education degrees will have credits from the workplace and even credit for work performed.

## Trend #7.
### Changed Calendaring

- The calendar system or time scheduling of learning will be less appropriate and predefinable.

## Trend #8. Blended Learning Course Designations

- Courses and programs will be increasingly designated as blended learning paths or options.

## Trend #9. Changed Instructor Roles

- The role of an instructor or trainer in a blended environment will shift to one of mentor, coach, and counselor.

## Trend #10. The Emergence of Blended Learning Specialists

- There will emerge specialist teaching certificates, degree programs, and resources or portals related to blended learning courses and programs.

**Poll #3: Which of these 5 predictions do you agree with the most?**

A. Increased self-determined web learning
B. Increased connectedness, community, and collaboration
C. Increased authenticity and on-demand learning
D. Blended learning course designations
E. The emergence of blended learning specialists

**Poll #4: Which of these 5 predictions do you agree with the most?**

A. Increasing use of mobile blended learning
B. Greater visualization, individualization, and hands-on learning
C. Greater linking of workplace and formal learning
D. Changed calendaring
E. Changed instructor roles

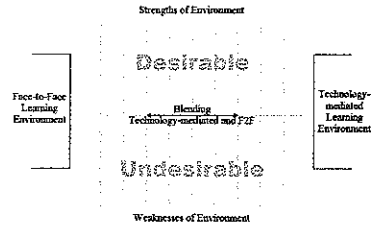
## Six Important Challenges and Issues

1. The role of live interaction
2. Role of learner choice and self regulation
3. Models for support and training
4. Digital Divide
5. Cultural adaptation
6. Finding balance between innovation (creativity) and production (need for cost reduction)

## A Challenge for the Future

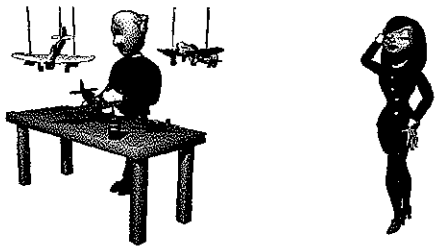
- **Our challenge is to learn how to design effective blended learning systems**
  - **For a wide variety of contexts (tech impoverished to tech rich)**
  - **For a wide variety of learners**
  - **With a broad range of constraints**
- **There are many possible solutions – we should look at many cases – and draw the best, most innovative practices from them to try in our own contexts.**

## A Challenge for the Future




One of our challenges is to determine the strengths and weaknesses of the two archetypal environments and use those to develop solutions that really do take advantage of the "best of both worlds."

## Break for questions or reflections on models...



## 10 Predictions for Blended Learning

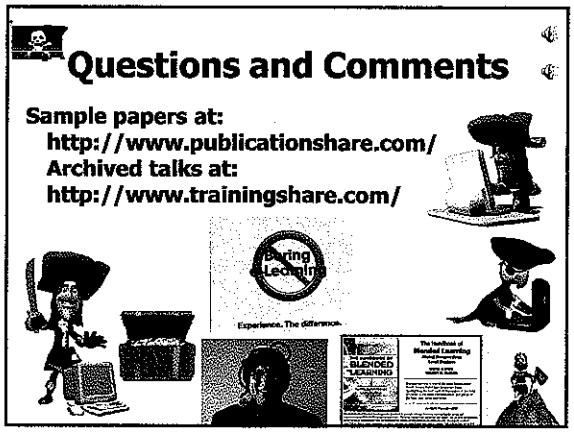
- From: Bonk, C. J., & Kim, K. J. (in press). **Future directions of blended learning in higher education and workplace learning settings.** To appear in C. J. Bonk & C. R. Graham (Eds.). ***Handbook of blended learning: Global Perspectives, local designs.*** San Francisco, CA: Pfeiffer Publishing.

## 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.**

## This talk covered...

1. **Definitions of blended learning**
2. **Advantages and disadvantages**
3. **Models of blended learning**
4. **Examples of blended learning**
5. **Predictions for blended learning**
6. **Challenges for blended learning**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Archived talks at:
http://www.trainingshare.com/
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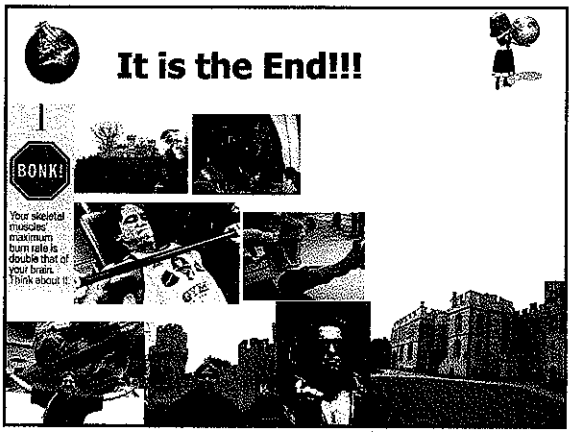
BLENDED LEARNING


It is the End!!!
BONK!
Your skeletal muscles' maximum burn rate is double that of your brain. Think about it.