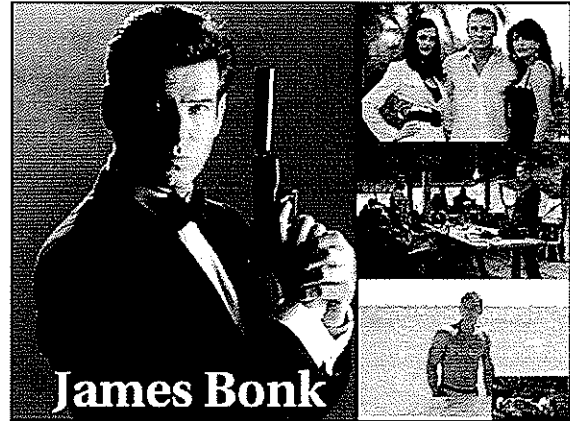


**Blended Learning Situations, Solutions,
and Several Stunning Surprises**

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



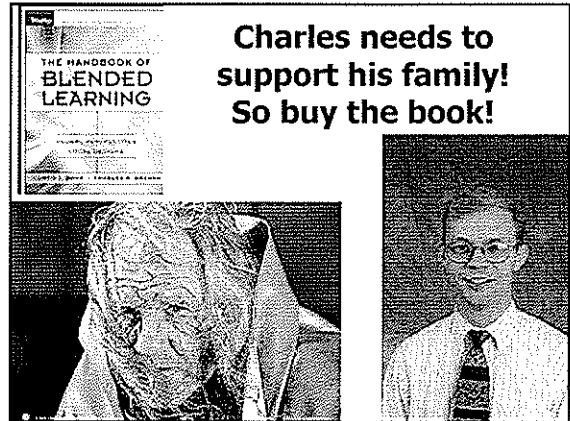
James Bonk

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



**Charles needs to
support his family!
So buy the book!**



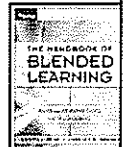
**Blended Learning:
Two Parts**

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: Burning Blended Learning Q's

(Pick any that interest you)

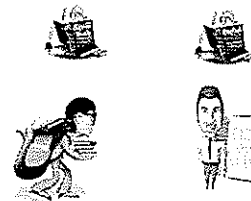
- A. What does blended learning mean?
- B. What is typically being blended?
- C. How much to blend?
- D. Why blend (advantages and disadvantages)?
- E. Where is this all headed?

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

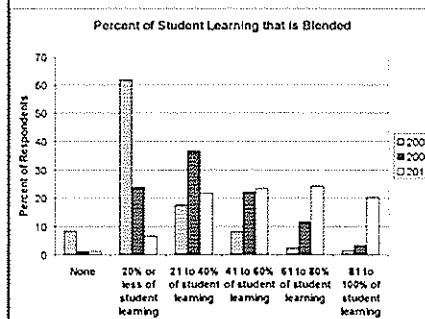


The Sloan Consortium
(2003). Sizing the Opportunity: The Quality and Extent of Online Education in the U.S., 2002 and 2003
http://www.sloan-c.org/resources/sizing_opportunity.pdf

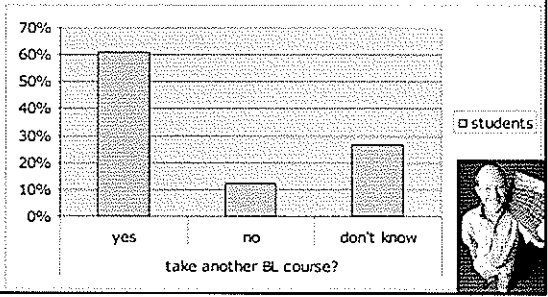
Percent of Courses	Course Format	Course Description
0%	Traditional	Course with no online technology used; course is delivered in writing or orally.
11 to 27%	Web-facilitated	Course which uses web-based technology to facilitate what is essentially a face-to-face course. May use Blackboard or WebCT to post the syllabus and assignments, for example.
30 to 39%	Blended/ hybrid	Course that is a blend of the online and face-to-face formats. Substantial proportion of the content is delivered online. Typically uses online discussions, typically has some face-to-face meetings.
40%	Online	A course where the vast bulk of the content is delivered online. Typically has no face-to-face meetings.



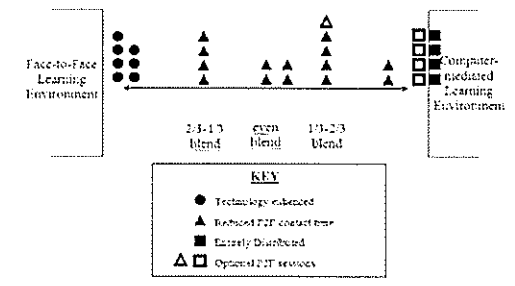
Future Directions of Blended Learning (Bonk, Kim, & Zeng, 2006, Chapter 39)



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



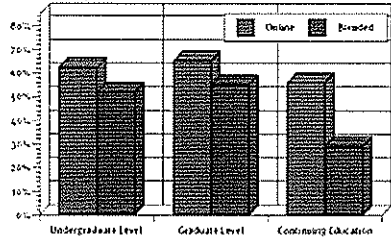
Range of Blends in Pew Cases



Source: Graham, C. R., & Allen, S. (2005). Blended learning: An emerging trend in education. In C. Howard B. J. V. Boettcher & L. Jubb (Eds.), *Encyclopedia of Distance Learning* (pp. 172-178). 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

FIGURE 1: ONLINE AND BLENDED COURSE PENETRATION RATES - FALL 2004



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

FACE-TO-FACE, ONLINE, AND BLENDED COURSE OFFERINGS - FALL 2004

	Face-to-Face	Online	Blended
Undergraduate Level	88.5%	55.3%	45.9%
Graduate Level	39.7%	25.9%	21.9%
Continuing Education	38.6%	21.7%	11.3%

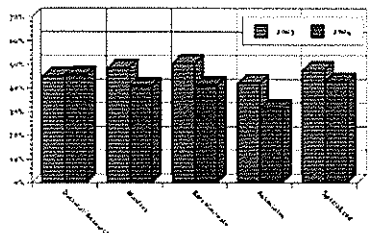
Allen, I. E., Seaman, J., & Garrett, R. (2007). Blending in: The extent and promise of blended education in the United States. The Sloan Consortium (Sloan-C). Retrieved July 4, 2007, from http://www.eduventures.com/PDF/Blending_In.pdf

FIGURE 2: DO BLENDED COURSES HOLD MORE PROMISE THAN FULLY ONLINE - PERCENT AGEZING 2003 AND 2004

Field	2003	2004
Business	47.2%	67.0%
Computer and Information Sciences	55.3%	41.5%
Education	24.9%	36.5%
Health Professions and Related Sciences	31.2%	43.3%
Liberal Arts and Sciences, General Studies, Humanities	40.2%	47.3%
Psychology	25.6%	22.1%
Social Sciences and History	28.4%	31.4%
All Other Programs	35.2%	40.1%

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

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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

ONLINE AND BLENDED COURSE PENETRATION RATES - FALL 2006

Level	Online	Blended
Undergraduate Level	11.1%	11.1%
Graduate Level	14.2%	14.2%
Continuing Education	14.2%	14.2%

ONLINE AND BLENDED COURSE PENETRATION RATES - FALL 2006

Country	Online	Blended	Online	Blended	Online	Blended	Online	Blended
United States	11.1%	11.1%	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%
Canada	11.1%	11.1%	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%
United Kingdom	11.1%	11.1%	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%

Blended and Online Program Penetration Rates

FALL TO FALL, ONLINE AND BLENDED PROGRAM CREDITS - FALL 2006

Region	Online	Blended
California	11.1%	11.1%
Florida	11.1%	11.1%
Illinois	11.1%	11.1%
Michigan	11.1%	11.1%
Minnesota	11.1%	11.1%
North Carolina	11.1%	11.1%
Ohio	11.1%	11.1%
Pennsylvania	11.1%	11.1%

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

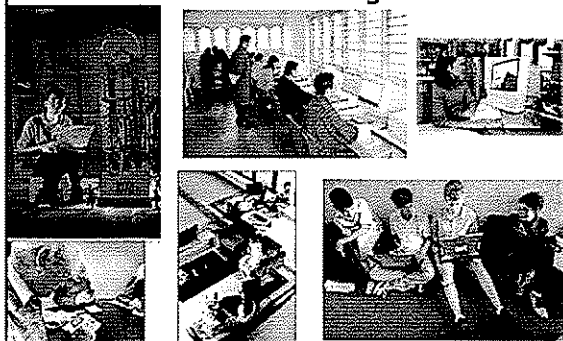
- “Blended learning: to combine various pedagogical approaches (e.g., constructivism, behaviorism, cognitivism) to produce an optimal learning outcome with or without instructional technology.” (Driscoll, 2002, p. 54)

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)



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

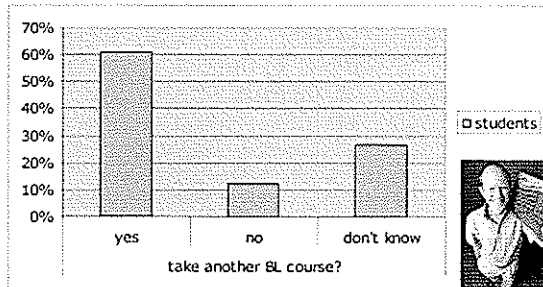


Fully Online and Blended Learning Advantages

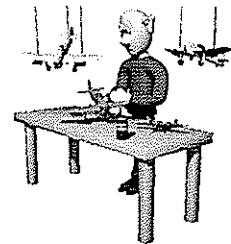
1. Increased Learning (better papers, higher scores)
2. More effective pedagogy and interaction
3. Course access at one's convenience and flexible completion (e.g., multiple ways to meet course objectives)
4. Reduction in physical class or space needs, commuting, parking
5. Increased opportunities for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



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



Frameworks and Models of Blended Learning...



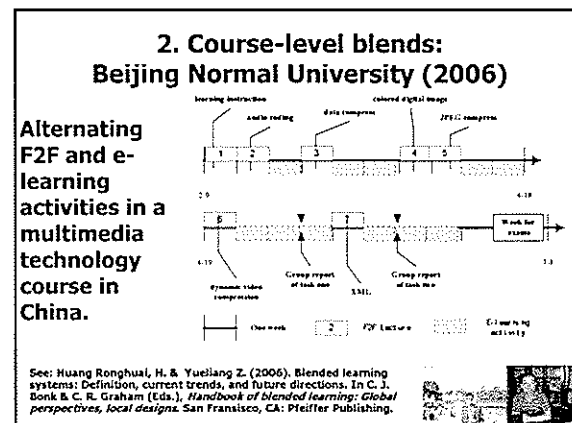
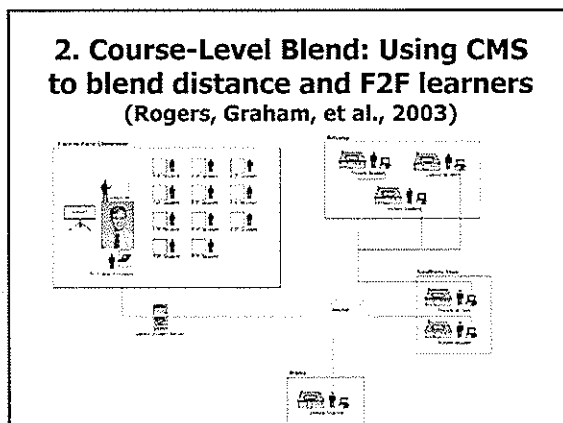
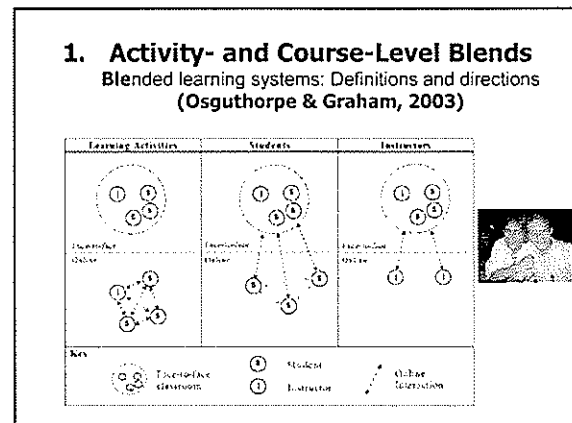
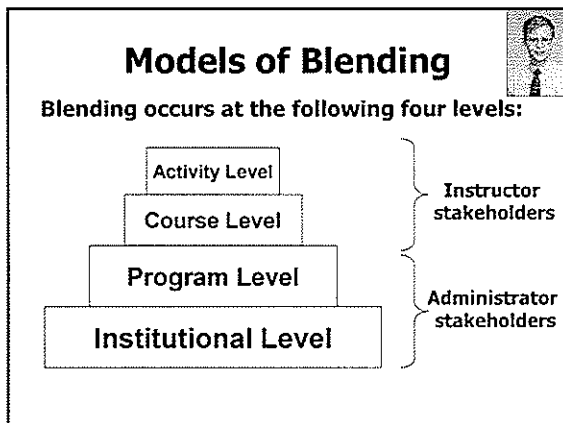
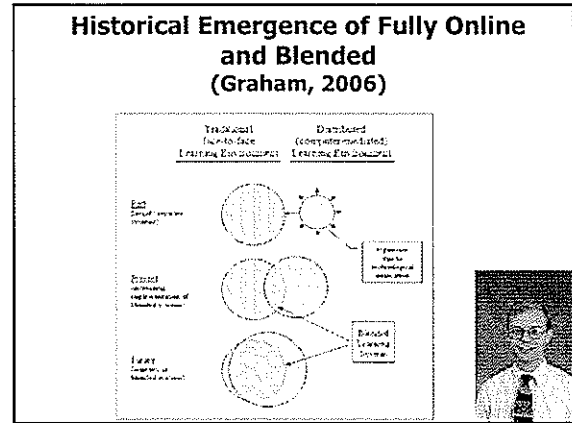
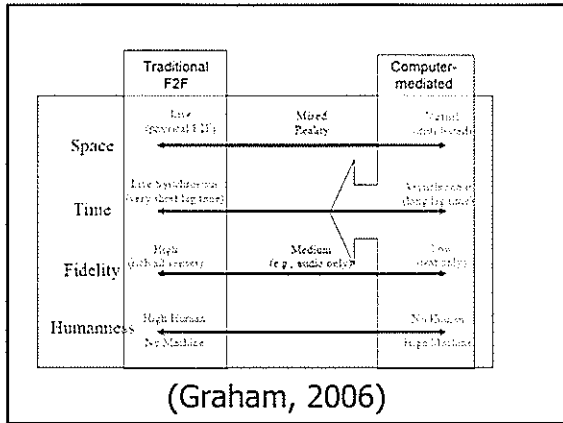


TABLE 21.1. NUMBER OF COLLEGE STUDENTS IN CHINA, 1998–2003.


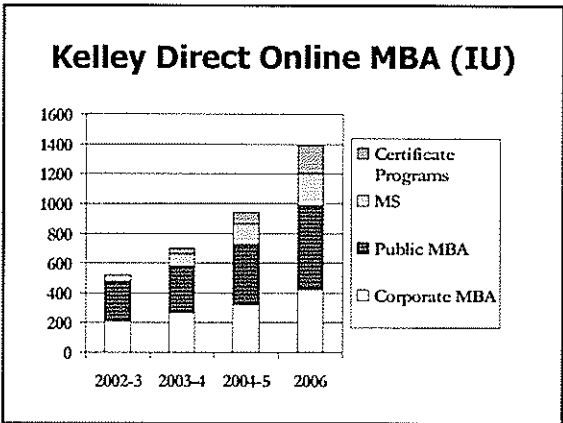
Year	Number of College Students (million)	Percentage of Annual Increase
1998	3.409	7.4
1999	4.134	21.27
2000	5.561	34.52
2001	7.193	29.31
2002	9.034	25.63
2003	11.736	16.6

Note: B-learning = blended learning.
 Source: Based on statistics from the National Statistics Bureau, excluding graduate students. Available at <http://www.stats.gov.cn/tjsj/ndpd/index.htm>

3. Program-level blending

HOBLe handbook has lots of examples of program-level blends

- **Prescriptive blends:**
 - Programs where the nature of the blend is the same for all participants
 - Online MBA at Indiana University—two 1 week residencies
- **Choice blends:**
 - Programs where the nature of the blend is chosen by the student
 - (e.g., Ross & Gage (WebCT chapter in HOBLe) talk about trend in degree programs to allow the students to select a mix of online or F2F courses.)





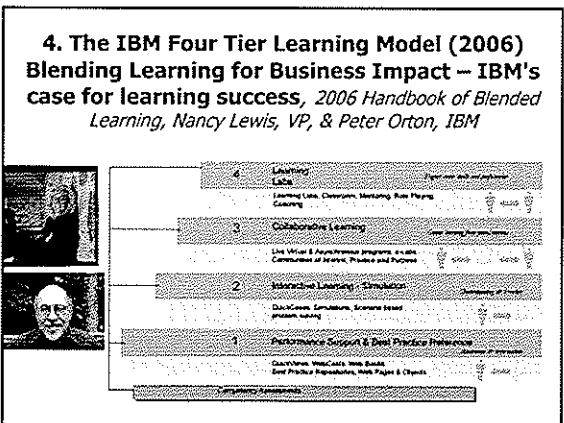
AMA Special Report, Effectively Implementing a Blended Learning Approach (Steven Shaw & Nicholas Ignieri, 2006)

AMA at Work: Helping learning. Helping growth.

Source: American Management Association, AMA at Work.

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
<ul style="list-style-type: none"> • Traditional classroom • Onsite engagement • Virtual online classroom • Live video via satellite or videoconferencing • Online coaching/mentoring 	<ul style="list-style-type: none"> • Instructor-led classroom via e-mail • Online or computer-based training (CBT) • Self-study guides, manuals, texts • Online resources and databases 	<ul style="list-style-type: none"> • Chat • Instant messaging (IM) • Newsgroups and forums • Collaboration 

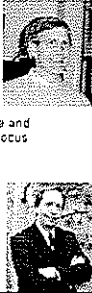


4. Specific Learning Elements An Learning Ecology from Sun Microsystems (Wenger & Ferguson, 2006)

Learner Self-Navigation

Studying <ul style="list-style-type: none"> Books, articles, guides References White papers Asynchronous Content Job Aids Glossaries FAQs 	Practicing <ul style="list-style-type: none"> Authentic tasks Role-Play Projects Case Studies Peer Discussion Discussion Forum
Content Delivery Focus <ul style="list-style-type: none"> Classroom Lectures Synchronous Content Demonstrations Reviews/Discussions Video Video-conferencing 	Experience and Practice Focus <ul style="list-style-type: none"> Exercises Diagnostic Labs Practice Labs Mentoring/Coaching Experiments
Testing	Coaching


Guided Navigation



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

TABLE 6.1. LEARNING ELEMENTS.


- Classroom (instructional) content
- Self-paced web content
- Self-study guides
- Certification
- Practice tests
- Remote labs
- Flipped learning
- 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



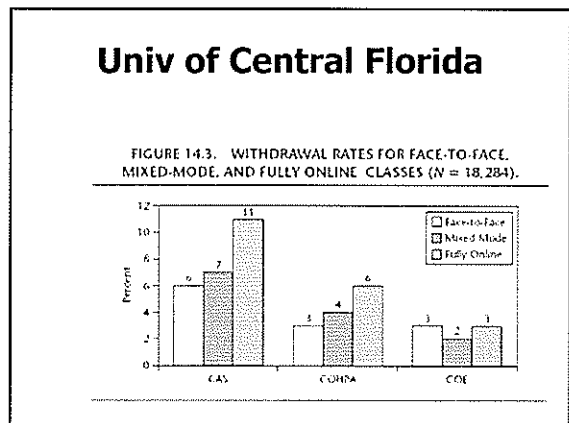
4. Institutional-level Blending

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)

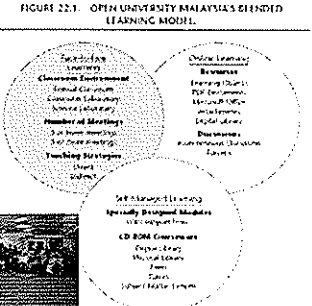


See: Orsiban, C., Hartman, J., Jugs, F., Nossal, P., & Sorg, S. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham (Eds.), *Handbook of blended learning: Global perspectives, local designs*. San Francisco, CA: Pfeiffer Publishing.



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


FIGURE 22.1. OPEN UNIVERSITY MALAYSIA'S BLENDED LEARNING MODEL.




Face-to-Face Learning: Classroom Environment, Formal Classroom, Computer Laboratory, Lecture Theatre, Number of Meetings, Self-paced Learning, Teaching Strategies, Short Lectures.

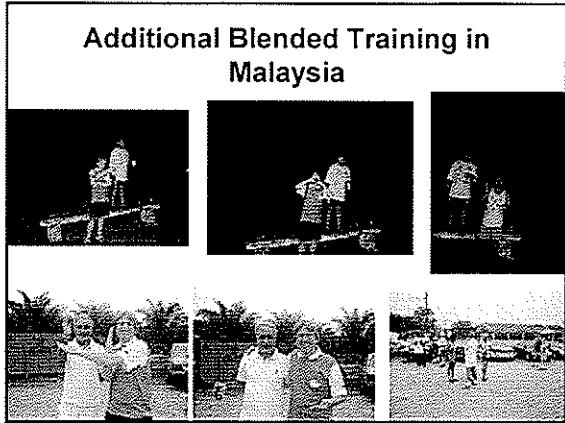
Online Learning: Resources, Learning Objectives, PDF Documents, Microsoft Office applications, Digital Library, Discussion, Self-paced Learning, Tutorials.

Self-Directed Learning: Openly Designed Modules, Self-paced Learning, CD-ROM Courseware, Paper-based, Virtual Labs, Journals, Online Course System.



Sample Blended Training at the OUM

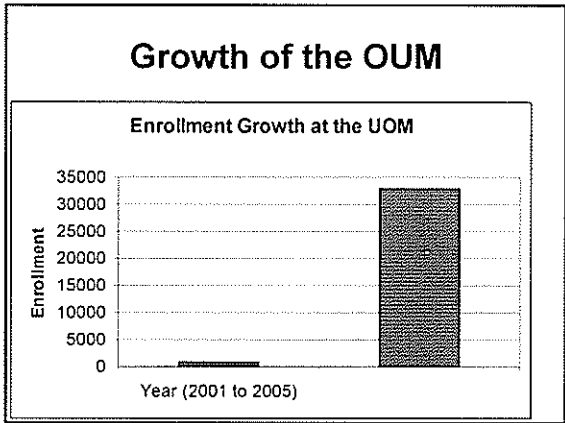




The OUM

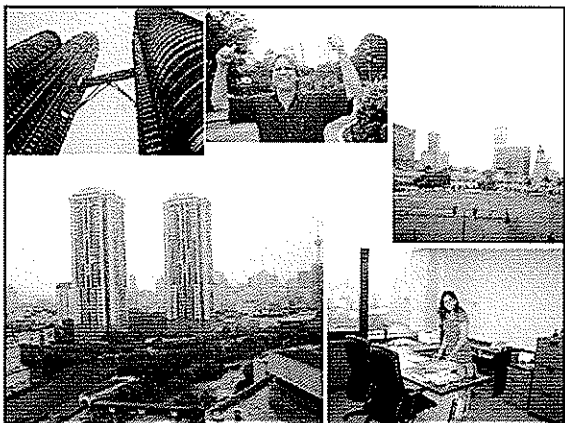
(Abtar Kaur, 2005, Ed Media)

- 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



Learning Examples at the Open University of Malaysia

- A learner in the remote areas of Sabah and Sarawak in East Malaysia may depend entirely on the specially designed print module and attend three out of the five assigned face-to-face classes.
- A learner in the towns of Sabah and Sarawak in East Malaysia may use the specially designed print module as a guide, use textbooks and online digital resources as core study materials for self-managed learning, attend all five face-to-face classes, meet with peers for small-group discussions, and actively participate in online discussion forums.
- A learner in Kuala Lumpur City in West Malaysia may depend entirely on one line of resources such as digital books, journal articles, and related links; and online discussions but also attend classes two out of five times, mainly to sit for the tests.



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, 8:17 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

6M 5P0 3R0 2AP0 10A 1E7A
72 222 104 27 601 1401

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%	11,633	41%	13,768	53%	15,774	60%
In A Majority Online	763	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	59%	16,044	59%	12,225	47%	10,394	40%
Total Active Students	25,436		27,369		27,977		25,993		26,138	

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


University of Glamorgan in Wales

Continuum of e-Learning

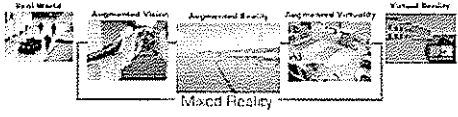
Basic ICT usage	E-enhanced	E-focused	E-intensive
Eg PowerPoint presentations	Access to online resources. Use of Bb for announcements. Lecture notes, eSupport communication	Discussion boards, online assessment tests, interactive learning materials	Whole modules/wards delivered and moderated online

C. Transforming Blends

(Kirkley & Kirkley; HOBL, 2006)



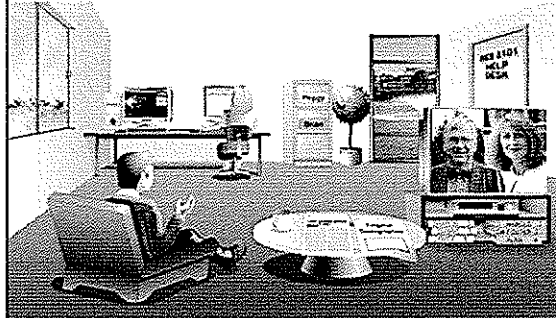
- Corporate/Military Training
 - Workplace learning (integrating learning into workflow)
 - Performance support and knowledge management using mobile technologies
 - Mixed-reality environments combining the virtual and real Reality-Virtuality Training Continuum



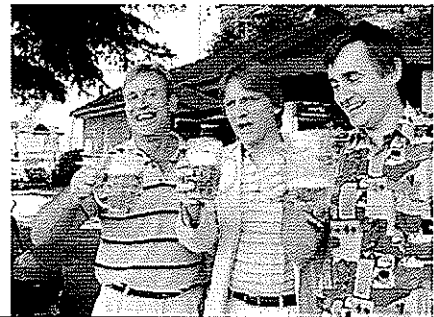
Example of levels of mixed reality that allow a blending of the real and virtual worlds.

C. Transforming Blends

(Oliver, Herrington, & Reeves, HOBL, 2006)



Ron Oliver, Edith Cowan University (the top e-learning research in the world)

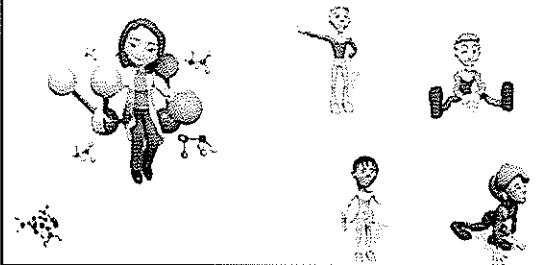


What can we say about blended learning then???

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



Best BL Model 99 Second Stretch Break!!!



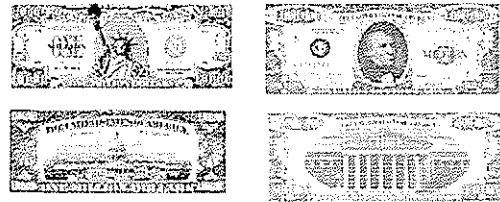
Part II: 13 Fully Online and Blended Learning Problems and 32 Solutions



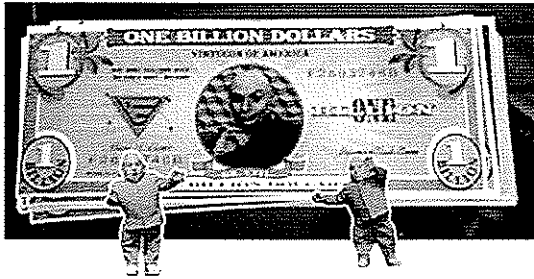
Problem Situation #1: Brief FTF Experiences

- 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?



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



Blended Solution #1+. Sample Activities for Brief Meetings

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

Problem Situation #2: Student Absenteeism

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

Blended Solution #2. Video Streamed and Webcast Lectures

Problem Situation #3: Facilities and Time

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

Blended Solution #3.

Divide Online and Class Experiences: English Classes Online

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

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



Blended Solution #4.

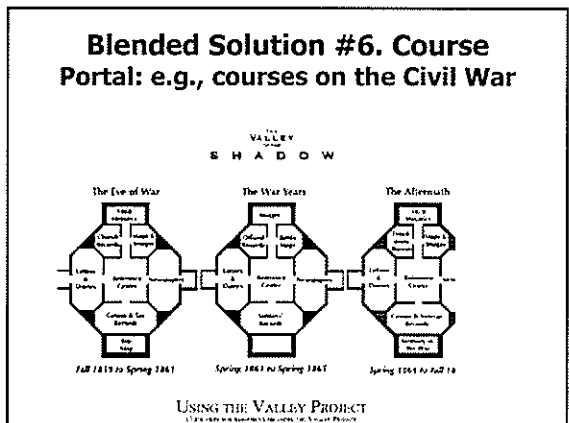
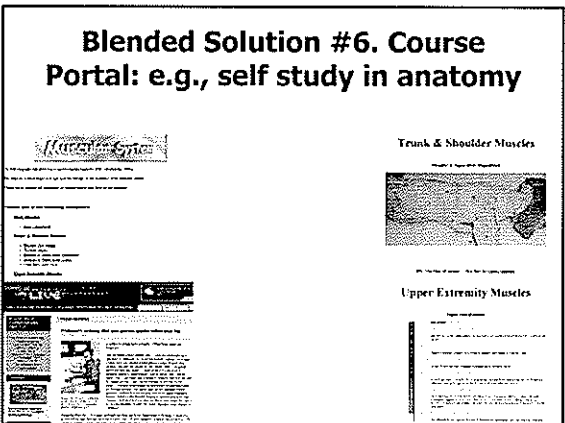
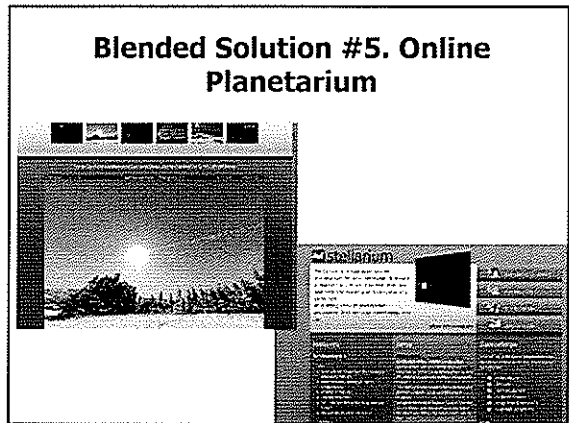
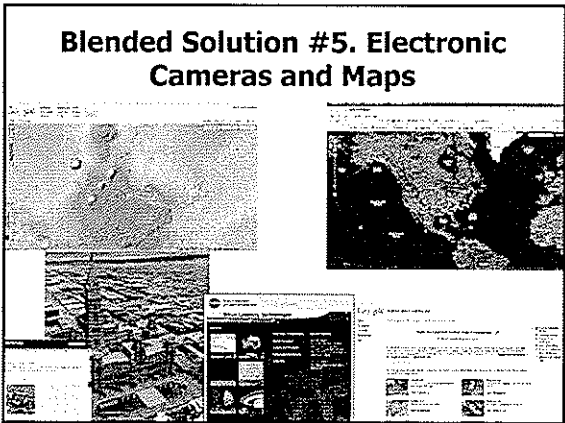
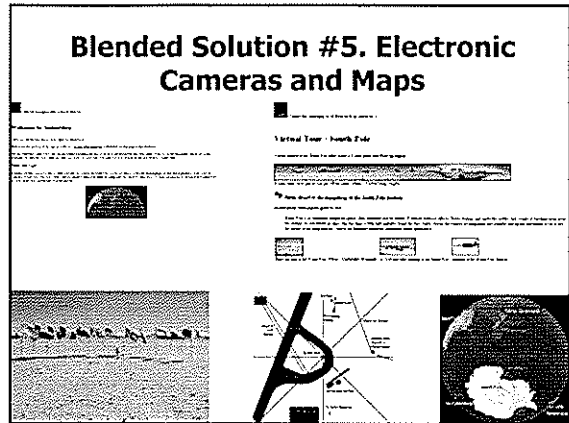
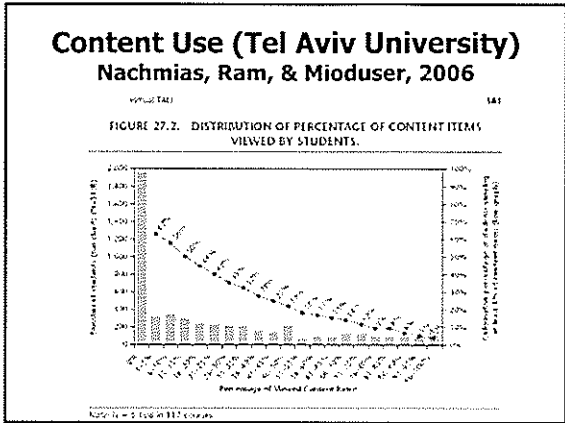
CPA Exam Review (June 14, 2003)
and Web Videos in Accounting (July, 2003)

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

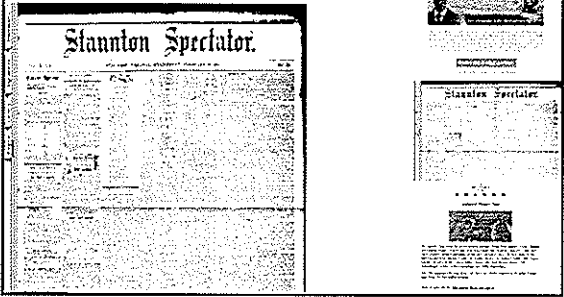


Problem Situation #4: Web Supplemental Activities

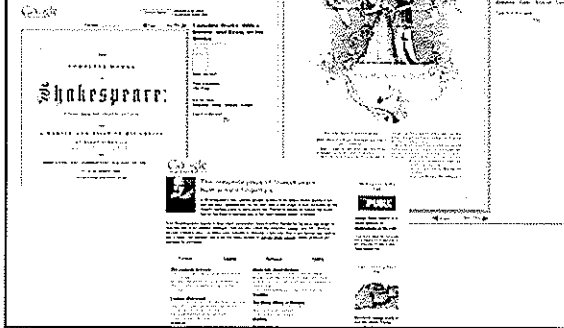
- Fail to finish class discussion or other activity in time. Or desire to integrate the Web more in your face-to-face instruction or outside of class. Want to provide course resources and activities for students to explore.



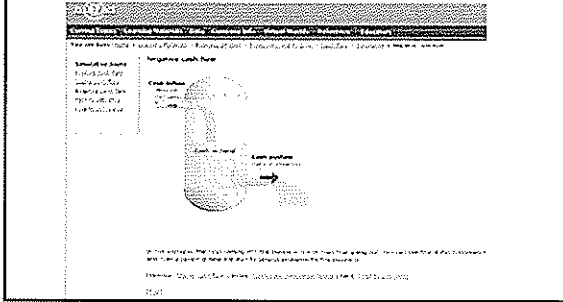
Blended Solution #6. Course Portal: e.g., courses on the Civil War



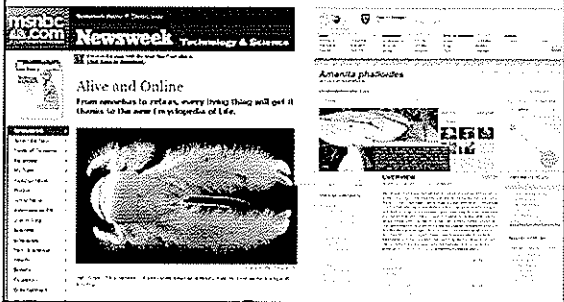
Blended Solution #6. Course Portal: e.g., English Literature



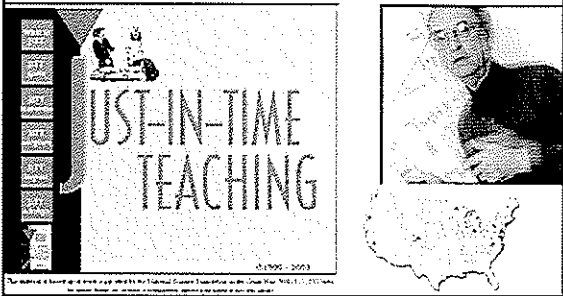
Blended Solution #6. Course Portal: e.g., business cases



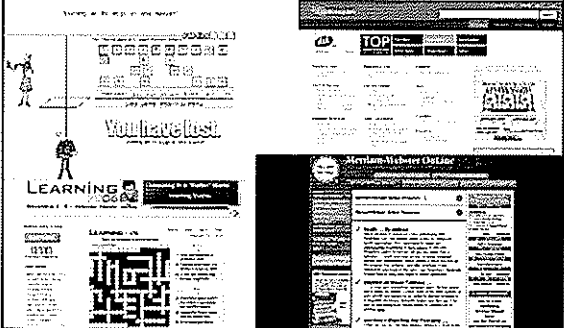
Blended Solution #6. Course Portal: e.g., self study in biology; the Encyclopedia of the Species



Blended Solution #7: Warm-ups Online Just-In-Time-Teaching (JITT)
<http://webphysics.iupui.edu/jitt/jitt.html>



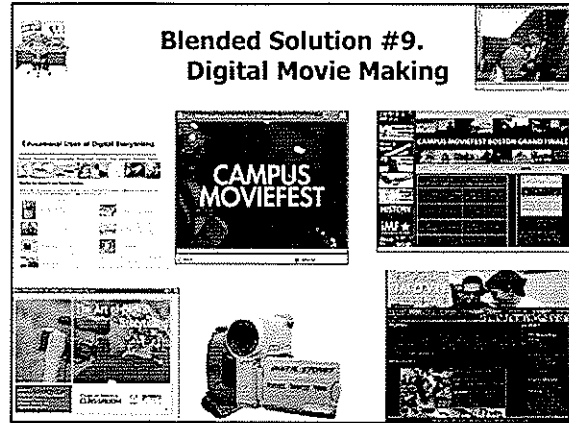
Blended Solution #8. Referenceware and Terminology Exercises Online (puzzles, games, etc.)



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 #9. Digital Movie Making



Blended Solution #10. Student Vlogging (Video Blogs)

Chronicle of Higher Ed, May 11, 2007
An Anthropologist Explores the Culture of Video Blogging
By JEFFREY R. YOUNG; Michael Wesch, KSU, asst prof of cultural anthro

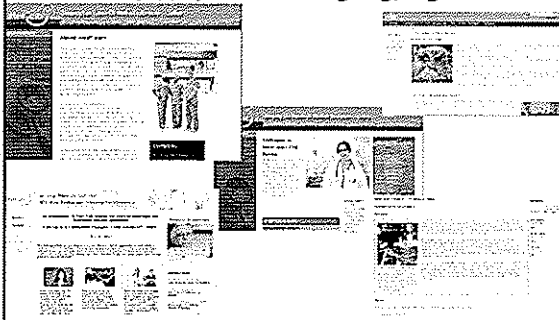


Problem Situation #6: Preparedness for the Profession

- 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.

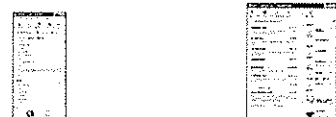
Blended Solution 11. Community of Learners: Medical and Business Cases Online (cases community)

<http://optionstraining.org/login>



Problem Situation #7: Collaborative Skill Deficit

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



Blended Solution #12. Cross-Class Collab (Indiana Univ and Open U of Malaysia)

Blended Solution #12. Cross-Class Collab (Indiana Univ and Open U of Malaysia)

Blended Solution #12. Cross-Class Collab (Indiana Univ and Open U of Malaysia)

University of Illinois: Mock Tourism Packages with students from Korea

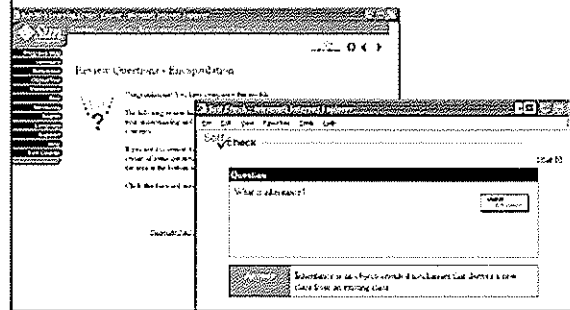
Blended Solution #13. Online Groups and Collaborative Tools...

Blended Solution #14. 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.

**Blended Solution #15.
Learner-Self Interactions and Reflections**

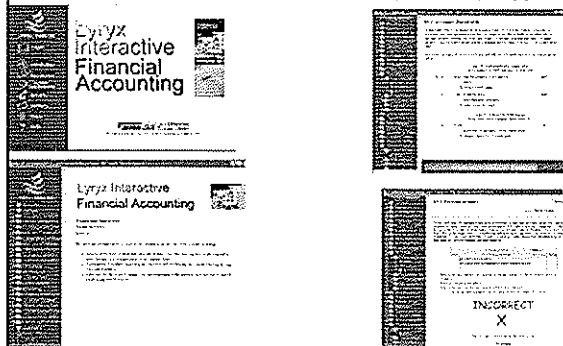


**Blended Solution #16.
Workplace and Field Reflections**

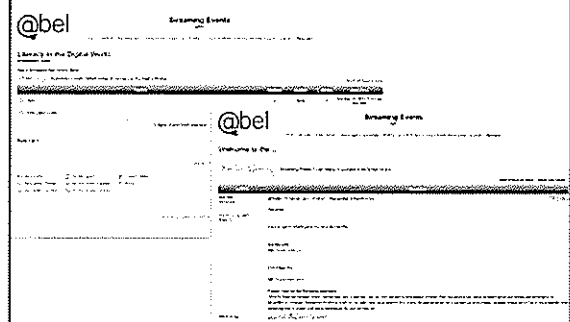
1. Instructor provides reflection or prompt for job related or field observations
2. Reflect on job setting or observe in field
3. Record notes on Web and reflect on concepts from chapter
4. Respond to peers
5. Instructor summarizes posts



**Blended Solution #17. Online Simulation:
Financial Accounting; (University of Calgary)**



**Blended Solution #18. Asynchronous
Discussion of Weekly Topics**



Problem Situation #9: Learning Community

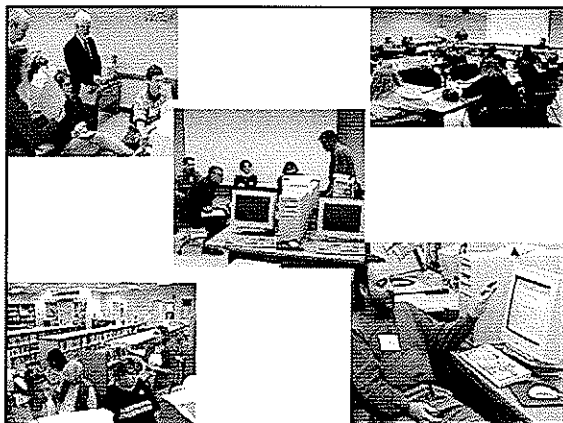
- There is a preference for creating an online learning community in order to increase student learning and retention in the program. Such a community might be in a single class or across a series of classes.

Blended Solution #19: 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

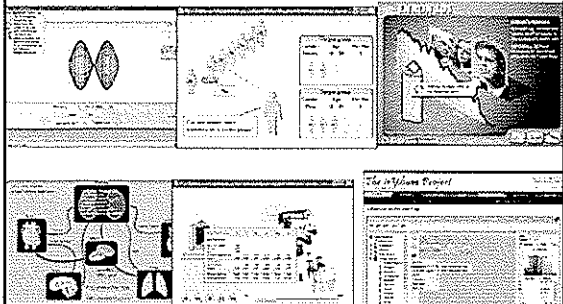


Problem Situation #10: Need to Visualize Content

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



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

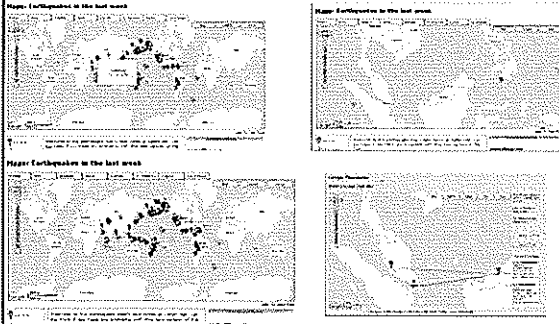


Blended Solution #21. Use Google Maps Mashups in K-12 Educ

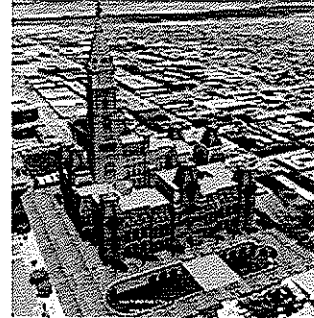
By Jeffrey Branzburg, May 15, 2006
<http://www.techlearning.com/story/showArticle.jhtml?articleID=187002846>

- Studying Earth Science? Earthquakes in the Last Week uses Google Maps with data provided by the U.S. Geological Survey to show earthquakes of magnitude 2.5 or greater in the past seven days. *Suggested activities:* Study patterns, then correlate them with plate tectonics and faults. Click the map markers for further information regarding the specific quake.

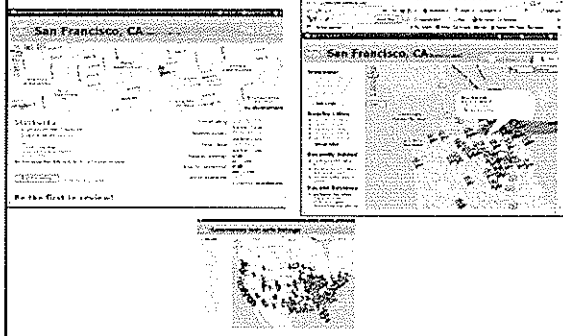
Math and Social Studies



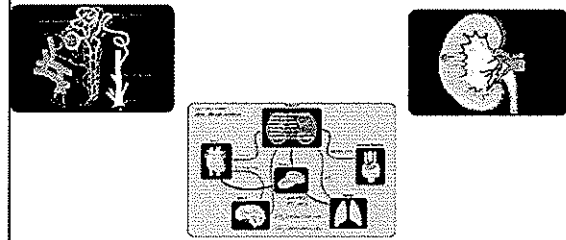
Architecture



Find Cafes and Food

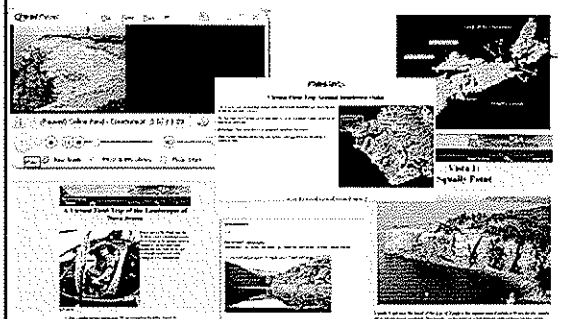


Blended Solution #22. Flowcharts, Diagrams, Maps, etc.

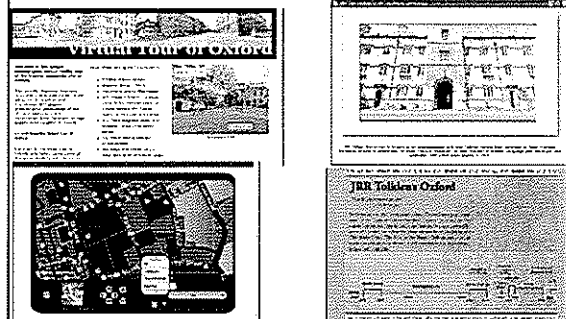


Elements in the system for control of oxygenation in the human body (e.g., the Kidney): From: Next-Generation Educational Software Why We Need It and a Research Agenda for Getting It. Van Dam, Becker, & Simpson, *Educause Review*, March/April 2005

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



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



Blended Solution #24. Assign a YouTube Videos to Watch and Reflect on

Blended Solution #25. Virtual Worlds/Virtual Reality/MMOG (e.g., Second Life)

Blended Solution #26. Reading Vlogs e.g., Andy Calvin's Waste of Bandwidth

**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.

BlendedSolution #27. 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)

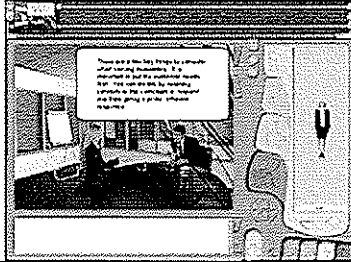
U.N. Food Force, called the first humanitarian game, simulates problems of getting supplies to wartime refugees.

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

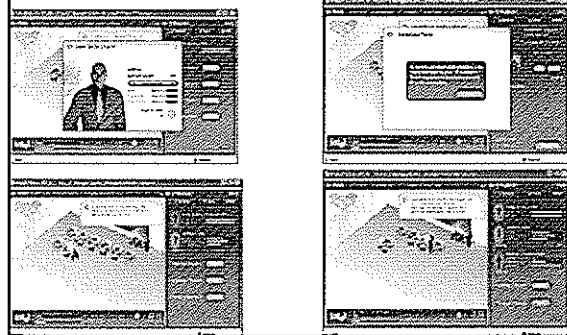
BlendedSolution #27. Educational Simulations
(Medical Traumas from TD Magazine, August 2006)

**BlendedSolution #27. Educational Simulations
(Business Meetings)**

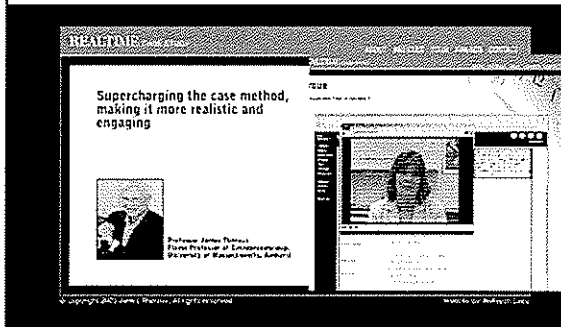
In this example, the green bubble contains the text that will be read aloud by the character in the video. Text boxes above also be enriched with rich-media or animations.



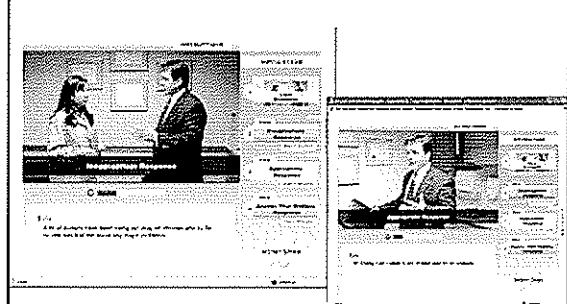
**BlendedSolution #27. Educational Simulations
(Intel IT Manager Game)**



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



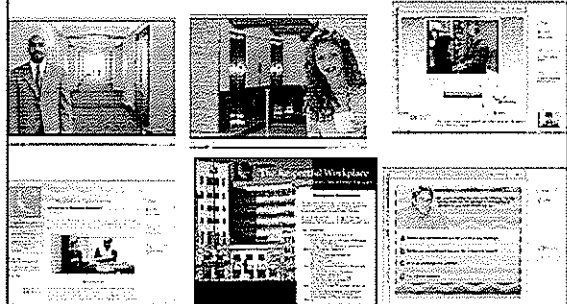
**Blended Solution #29.
Video Scenario Learning
(Option 6, Bloomington, IN)**



**Blended Solution #29.
Cascaded Scenario, Virtual Crime Scene
Arjuna Multimedia, Bloomington, IN)**



**Blended Solution #29.
Video Scenario Learning
(Option 6, Bloomington, IN)**



Blended Solution #30. Videoconferencing with Hearing Impaired Students Online

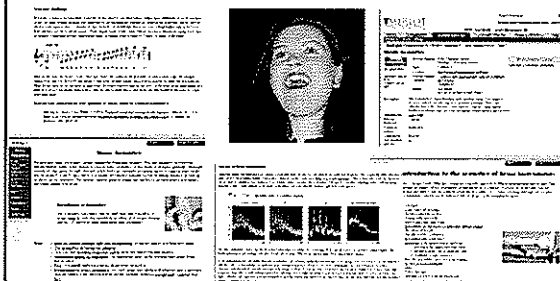
- College students tutoring high schools on their homework
- Instructors observing how teacher education students are doing in field placements (practice presentation and communication skills)
- Interpret speaker via Web cam



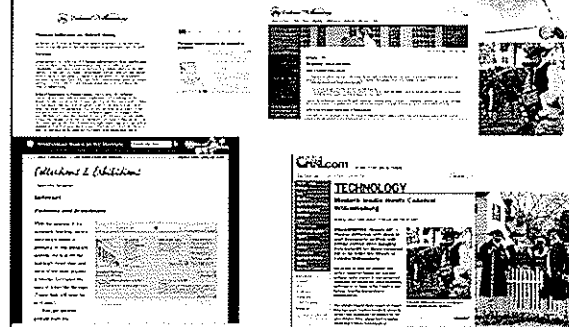
Problem Situation #12: Preference for Auditory Learning

- 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 #31. Basic Acoustics of Musical Instruments
2005 MERLOT Classics Award



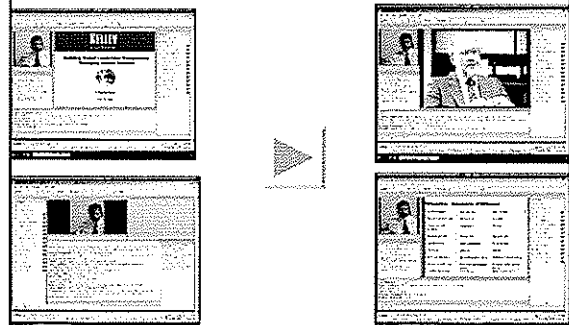
Blended Solution #32. Art and History Exhibits



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.

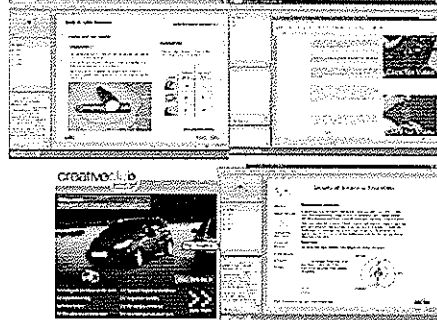
Blended Solution #33. Instructor Presentation in Synchronous Sessions
(Breeze, Elluminate, WebEx, etc.)



Blende Solution #34. Peer Critique in Breeze
 (Table of Benefits of Peer Critique; Park & Bonk, in review)

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

Blende Solution #34. Peer Critique in Breeze
 (Table of Benefits of Peer Critique; Park & Bonk, in review)

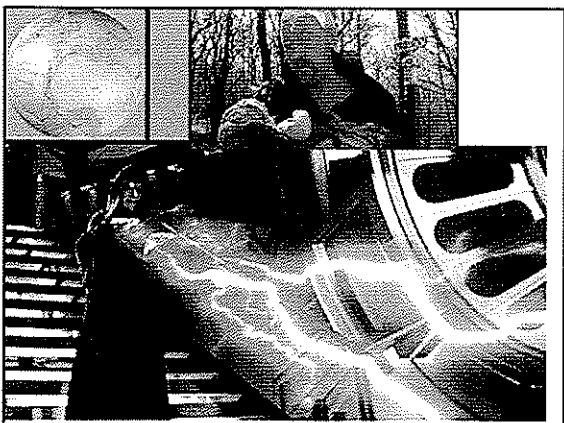


Blended Solution #35. Video Course Intros
 (examples from Northern Virginia Community College and Indiana University KD (online MBA) program)



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



Experience. The difference.

