

Blended Learning Situations, Solutions, and Several Stunning Surprises

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



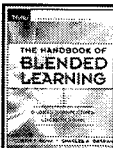
This the talk will cover:

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

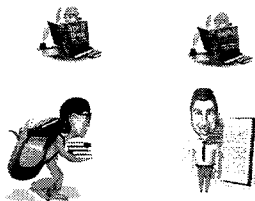


Poll #1. Have you taught, taken, or designed a blended learning course?

- A = yes
- B = no
- C = not sure, I am here to find out what blended means



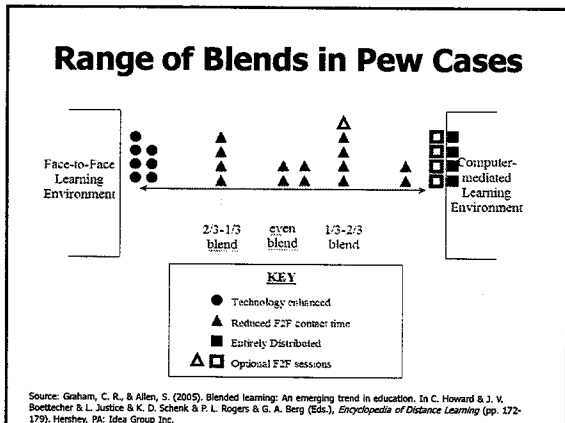
Blended Learning Defined and Explained



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

Percentage of courses 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 portion 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.





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

PERMEATION RATES - FALL 2003

	Online	Blended
Business	42.7%	47.0%
Computer and Information Sciences	35.3%	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%

ONLINE AND BLENDED COURSE PERMEATION RATES - FALL 2004

Level	Online	Blended
Undergraduate Level	41.1%	43.9%
Graduate Level	41.1%	41.6%
Continuing Education	37.2%	39.7%

ONLINE AND BLENDED COURSE PERMEATION RATES - FALL 2004

Level	Online	Blended
Undergraduate Level	34.9%	39.2%
Graduate Level	34.9%	34.2%
Continuing Education	31.7%	34.2%

Blended and Online Program Penetration Rates

FACE-TO-FACE, ONLINE, AND BLENDED PROGRAM OFFERTING - FALL 2004

Level	Face-to-Face	Blended	Online
Undergraduate	47.3%	47.1%	49.7%
Graduate	54.9%	53.3%	54.2%
Business	34.0%	34.2%	33.8%
Health	36.2%	32.4%	34.6%
Education	34.8%	34.2%	33.5%
Continuing	31.7%	34.2%	34.2%

1. Blending Delivery Media

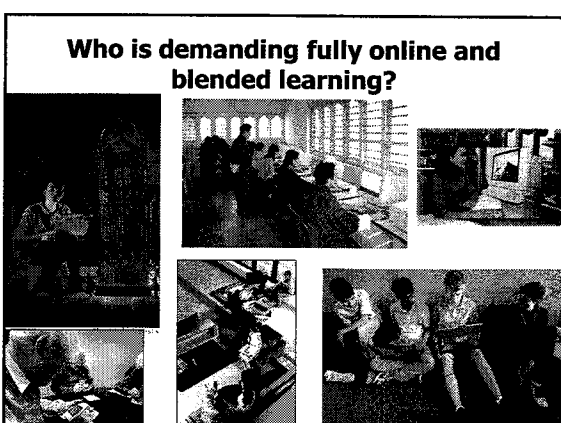
- "Blended learning means the combination of a wide range of learning media (instructor led, web based courseware, simulations, job aids, webinars, documents) into a total training program designed to solve a specific business problem." (Bersin & Associates, 2003, p. 3)

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)



Why Blend and Advantages and Disadvantages of BL...



Why Teaching Fully Online or Blended? Three Key Reasons

1. **Improved Pedagogy**
 - Interactive vs. Transmissive environments
 - Authenticity integration into work
2. **Increased Access/Flexibility**
 - Reduced seat time courses – UCF M courses
3. **Increased Cost Effectiveness**
 - Corporate: ROI – IBM 47:1, Avaya, Microsoft
 - Higher Ed: PEW Grants

Where is Blended Beneficial?

<http://www.center.rpi.edu/PewGrant/ProjDesc.html>

- **Large Classes** (spanish, intro psych, algebra, elementary statistics, biology)
- **Classes with working students**
- **Students spread over a distance**
- **Classes with certification**
- **Classes with need for standardization**
- **New requirements for a profession**
- **Writing intensive classes**
- **Theory classes**



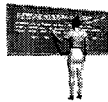
Examples of Blended Learning, Margaret Driscoll, e-Learning, March 2002

- **Put assessments/reviews online**
- **Follow-up in community of practice**
- **Put reference materials on Web**
- **Deliver pre-work online**
- **Provide office hours online**
- **Use mentoring/coaching tool**
- **Access experts live online**
- **Use e-mail and instant messaging**

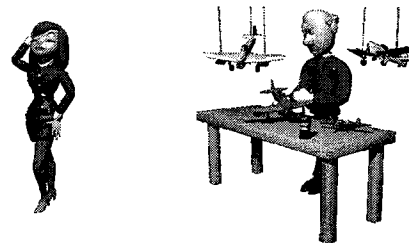


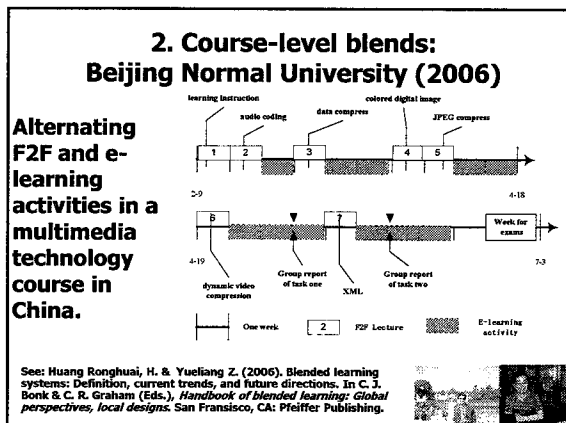
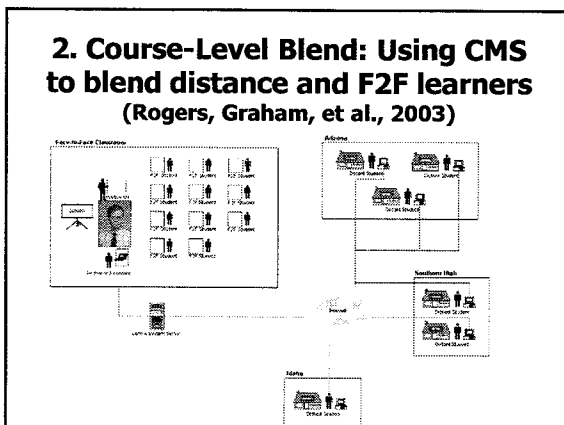
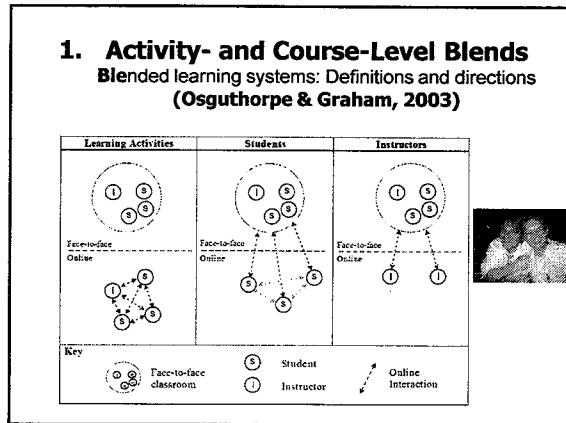
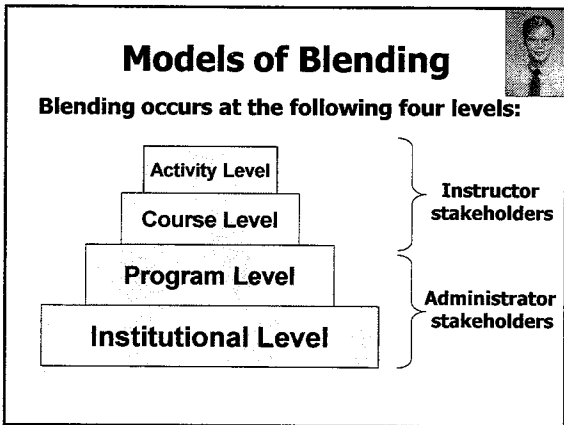
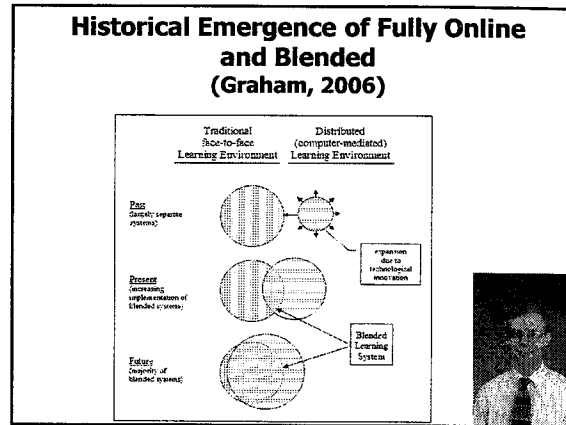
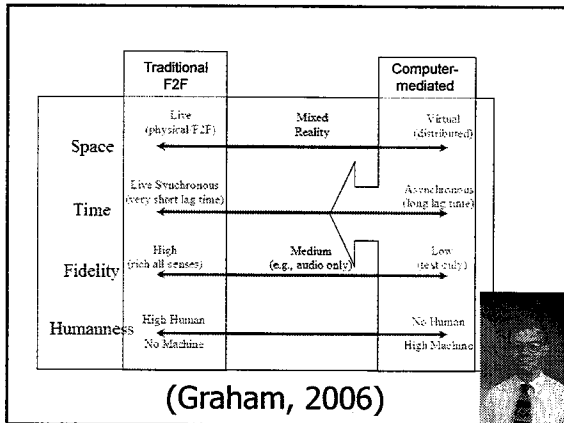
Fully Online and Blended Learning Advantages

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



Frameworks and Models of Blended Learning...





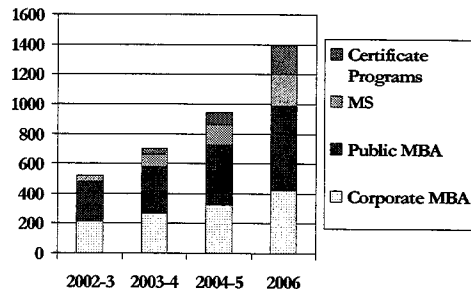
3. Program-level blending

HOBLe handbook has lots of examples of program-level blends

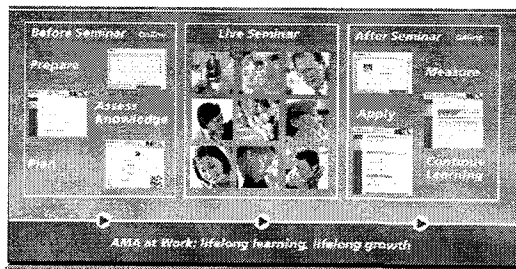
- **Prescriptive blends:**
 - Programs where the nature of the blend is the same for all participants
 - Online MBA at Indiana University—two 1 week residencies
- **Choice blends:**
 - Programs where the nature of the blend is chosen by the student
 - (e.g., Ross & Gage (WebCT chapter in HOBLe) talk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



Kelley Direct Online MBA (IU)

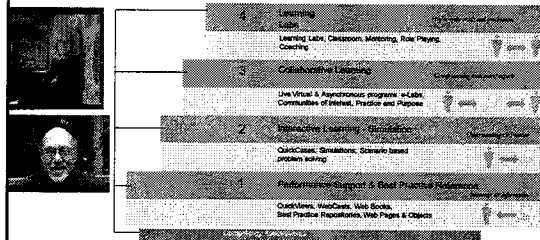


AMA Special Report, Effectively Implementing a Blended Learning Approach (Steven Shaw & Nicholas Igneri, 2006)



Source: American Management Association, AMA at Work

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



4. Institutional-level Blending

Example 1: University of Central Florida

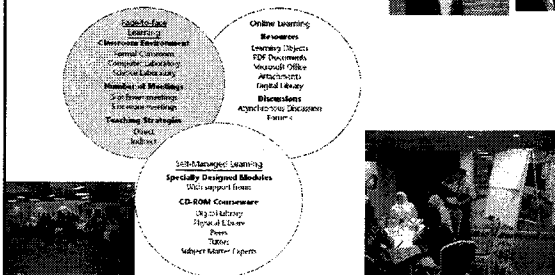
- **E** courses are technology enhanced courses
- **M** courses are blended courses with reduced seat time
- **W** courses are web courses (completely online)



See: Dziuban, C., Hartman, J, Jugo, F., Mostkal, 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



The OUM

(Abtar Kaur, 2008, Ed Media)

- Started August 2001 : approx. 800 students
- Total students (2008): approx. 65,000
- Total full-time academic staff : 73 (less than 30 associate or full professors)
- Total part-time academic staff (tutors) : approx 3,000
- 33 Learning Centres (7 Regional Centres)
- Pedagogical approach : Blended Learning




4. Institutional-level Blending

(Brian Linquist, 2006)

Example 2: University of Phoenix

- Completely online courses
- Residential F2F courses
- Blended Courses
 - *Local Model* = 5 week courses with first and last week F2F
 - *Distance Model* = 5 week courses with half first and half last week F2F (the last meeting of one course is coordinated to be back-to-back with the first meeting of the next 5 week course)



Updated: June 25, 2006, 9:12 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 Anstotte 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.

Shaquille O'Neal
Career
Miami Heat

Profile

2004-2005 SEASON STATISTICS

GM	PPG	RPG	APG	SPG	TP%
73	22.3	10.4	2.7	3.01	46%




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

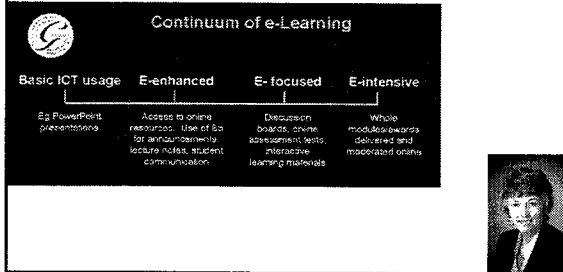
National University
Department of Teacher Education
(Reynolds & Greiner, 2006)

- 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



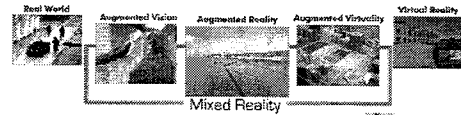
Year / Students Enrolled In Online Classes	FY 2000		FY 2002		FY 2003		FY 2005		FY 2006	
	Count	% of Total	Count	% of Total	Count	% of Total	Count	% of Total	Count	% of Total
In At Least One Online	4,692	18%	8,574	31%	11,033	41%	13,768	53%	15,774	60%
In A Majority Online	763	3%	5,713	21%	7,012	26%	9,107	35%	11,203	43%
In All Online	332	1%	1,747	6%	2,602	10%	4,217	16%	5,645	22%
None	21,951	80%	19,015	59%	16,044	59%	12,225	47%	10,394	40%
Total Active Students	25,436		27,599		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

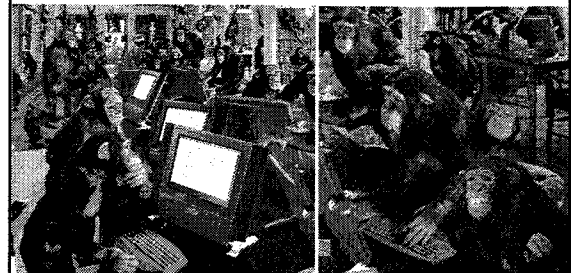


What can we say about blended learning then???

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



Part II: 13 Fully Online and Blended Learning Problems and 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

Calculus I
Riverhawk

$$10 = \frac{x}{\tan 32^\circ} - \frac{x}{\tan 38^\circ}$$

$$\frac{x}{\tan 32^\circ} - \frac{x}{\tan 38^\circ} = -10$$

$$x \left[\frac{1}{\tan 32^\circ} - \frac{1}{\tan 38^\circ} \right] = -10$$

**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)

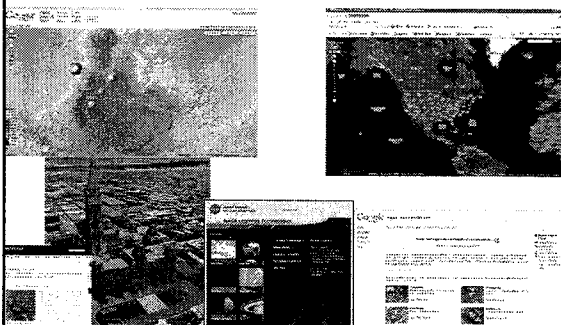
- **Texas A&M University–Corpus Christi combines CPA courseware with bi-monthly class meetings to prep for CPA Exam. (study text, proficiency questions, electronic flashcards and practice exams, scheduled assignments, goals, online grading, progress reports, tailored discussion groups, and personalized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



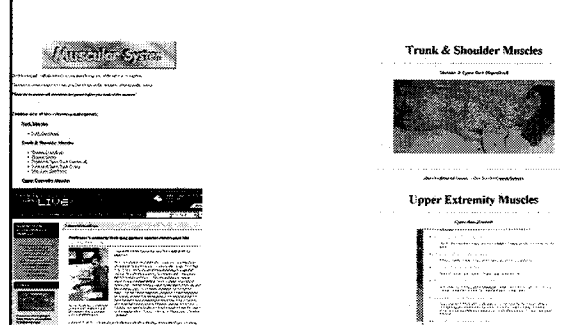
**Problem Situation #4:
Web Supplemental Activities**

- **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 #5. Electronic Cameras and Maps



Blended Solution #6. Online Testing Center: e.g., self study in anatomy



Blended Solution #7. Historical Course Portal: e.g., courses on the Civil War

THE VALLEY OF THE SHADOW

Using the Valley Project
Click here for more information on the Valley Project

**Blended Solution #8: Warm-ups Online
Just-In-Time-Teaching (JiTT)**
<http://webphysics.iupui.edu/jitt/jitt.html>

**Problem Situation #5:
Student Learning Control**

- Want to give students more control and ownership over their own learning. Want to foster student generative learning or being authors of their own knowledge.

**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>

Blended Solution #12. Real World Problems (PBL online): Real-time Cases

Supercharging the case method, making it more realistic and engaging

Professor James Yoncos
 Fozzie Professor of Entrepreneurship,
 University of Massachusetts, Amherst

Blended Solution #13. Video Scenario Learning (Option 6, Bloomington, IN)

Blended Solution #14. 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.**

The Practice of Learning Theories

Blended Solution #15. Wikibooks (Web 2.0 and Emerging Learning Technologies (The WELT))

Web 2.0 and Emerging Learning Technologies
 From Wikibooks: the open-content textbooks collection

Table of Contents	
Web 2.0 and Emerging Learning Technologies	
From Wikibooks: the open-content textbooks collection	
Part I: Foundations	
1. Introduction to Web 2.0 and Emerging Learning Technologies	1-1
2. The Web 2.0 and Emerging Learning Technologies	1-2
3. The Web 2.0 and Emerging Learning Technologies	1-3
4. The Web 2.0 and Emerging Learning Technologies	1-4
5. The Web 2.0 and Emerging Learning Technologies	1-5
6. The Web 2.0 and Emerging Learning Technologies	1-6
7. The Web 2.0 and Emerging Learning Technologies	1-7
8. The Web 2.0 and Emerging Learning Technologies	1-8
9. The Web 2.0 and Emerging Learning Technologies	1-9
10. The Web 2.0 and Emerging Learning Technologies	1-10
11. The Web 2.0 and Emerging Learning Technologies	1-11
12. The Web 2.0 and Emerging Learning Technologies	1-12
13. The Web 2.0 and Emerging Learning Technologies	1-13
14. The Web 2.0 and Emerging Learning Technologies	1-14
15. The Web 2.0 and Emerging Learning Technologies	1-15
16. The Web 2.0 and Emerging Learning Technologies	1-16
17. The Web 2.0 and Emerging Learning Technologies	1-17
18. The Web 2.0 and Emerging Learning Technologies	1-18
19. The Web 2.0 and Emerging Learning Technologies	1-19
20. The Web 2.0 and Emerging Learning Technologies	1-20
21. The Web 2.0 and Emerging Learning Technologies	1-21
22. The Web 2.0 and Emerging Learning Technologies	1-22
23. The Web 2.0 and Emerging Learning Technologies	1-23
24. The Web 2.0 and Emerging Learning Technologies	1-24
25. The Web 2.0 and Emerging Learning Technologies	1-25
26. The Web 2.0 and Emerging Learning Technologies	1-26
27. The Web 2.0 and Emerging Learning Technologies	1-27
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29. The Web 2.0 and Emerging Learning Technologies	1-29
30. The Web 2.0 and Emerging Learning Technologies	1-30
31. The Web 2.0 and Emerging Learning Technologies	1-31
32. The Web 2.0 and Emerging Learning Technologies	1-32
33. The Web 2.0 and Emerging Learning Technologies	1-33
34. The Web 2.0 and Emerging Learning Technologies	1-34
35. The Web 2.0 and Emerging Learning Technologies	1-35
36. The Web 2.0 and Emerging Learning Technologies	1-36
37. The Web 2.0 and Emerging Learning Technologies	1-37
38. The Web 2.0 and Emerging Learning Technologies	1-38
39. The Web 2.0 and Emerging Learning Technologies	1-39
40. The Web 2.0 and Emerging Learning Technologies	1-40
41. The Web 2.0 and Emerging Learning Technologies	1-41
42. The Web 2.0 and Emerging Learning Technologies	1-42
43. The Web 2.0 and Emerging Learning Technologies	1-43
44. The Web 2.0 and Emerging Learning Technologies	1-44
45. The Web 2.0 and Emerging Learning Technologies	1-45
46. The Web 2.0 and Emerging Learning Technologies	1-46
47. The Web 2.0 and Emerging Learning Technologies	1-47
48. The Web 2.0 and Emerging Learning Technologies	1-48
49. The Web 2.0 and Emerging Learning Technologies	1-49
50. The Web 2.0 and Emerging Learning Technologies	1-50
51. The Web 2.0 and Emerging Learning Technologies	1-51
52. The Web 2.0 and Emerging Learning Technologies	1-52
53. The Web 2.0 and Emerging Learning Technologies	1-53
54. The Web 2.0 and Emerging Learning Technologies	1-54
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56. The Web 2.0 and Emerging Learning Technologies	1-56
57. The Web 2.0 and Emerging Learning Technologies	1-57
58. The Web 2.0 and Emerging Learning Technologies	1-58
59. The Web 2.0 and Emerging Learning Technologies	1-59
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61. The Web 2.0 and Emerging Learning Technologies	1-61
62. The Web 2.0 and Emerging Learning Technologies	1-62
63. The Web 2.0 and Emerging Learning Technologies	1-63
64. The Web 2.0 and Emerging Learning Technologies	1-64
65. The Web 2.0 and Emerging Learning Technologies	1-65
66. The Web 2.0 and Emerging Learning Technologies	1-66
67. The Web 2.0 and Emerging Learning Technologies	1-67
68. The Web 2.0 and Emerging Learning Technologies	1-68
69. The Web 2.0 and Emerging Learning Technologies	1-69
70. The Web 2.0 and Emerging Learning Technologies	1-70
71. The Web 2.0 and Emerging Learning Technologies	1-71
72. The Web 2.0 and Emerging Learning Technologies	1-72
73. The Web 2.0 and Emerging Learning Technologies	1-73
74. The Web 2.0 and Emerging Learning Technologies	1-74
75. The Web 2.0 and Emerging Learning Technologies	1-75
76. The Web 2.0 and Emerging Learning Technologies	1-76
77. The Web 2.0 and Emerging Learning Technologies	1-77
78. The Web 2.0 and Emerging Learning Technologies	1-78
79. The Web 2.0 and Emerging Learning Technologies	1-79
80. The Web 2.0 and Emerging Learning Technologies	1-80
81. The Web 2.0 and Emerging Learning Technologies	1-81
82. The Web 2.0 and Emerging Learning Technologies	1-82
83. The Web 2.0 and Emerging Learning Technologies	1-83
84. The Web 2.0 and Emerging Learning Technologies	1-84
85. The Web 2.0 and Emerging Learning Technologies	1-85
86. The Web 2.0 and Emerging Learning Technologies	1-86
87. The Web 2.0 and Emerging Learning Technologies	1-87
88. The Web 2.0 and Emerging Learning Technologies	1-88
89. The Web 2.0 and Emerging Learning Technologies	1-89
90. The Web 2.0 and Emerging Learning Technologies	1-90
91. The Web 2.0 and Emerging Learning Technologies	1-91
92. The Web 2.0 and Emerging Learning Technologies	1-92
93. The Web 2.0 and Emerging Learning Technologies	1-93
94. The Web 2.0 and Emerging Learning Technologies	1-94
95. The Web 2.0 and Emerging Learning Technologies	1-95
96. The Web 2.0 and Emerging Learning Technologies	1-96
97. The Web 2.0 and Emerging Learning Technologies	1-97
98. The Web 2.0 and Emerging Learning Technologies	1-98
99. The Web 2.0 and Emerging Learning Technologies	1-99
100. The Web 2.0 and Emerging Learning Technologies	1-100

Fall 2007: Web 2.0 and Emerging Learning Technologies (The WELT)


http://en.wikibooks.org/wiki/Web_2.0_and_Emerging_Learning_Technologies

Web 2.0 and Emerging Learning Technologies/Digital Divide

From Wikibooks, the open-content textbooks collection

Contents (36)

- 1 Overview of the Digital Divide (e.g., One Laptop Per Child, The Global Text Project)
- 2 Projects to Promote Technology Use in the U.S. and Other Countries
- 3 References



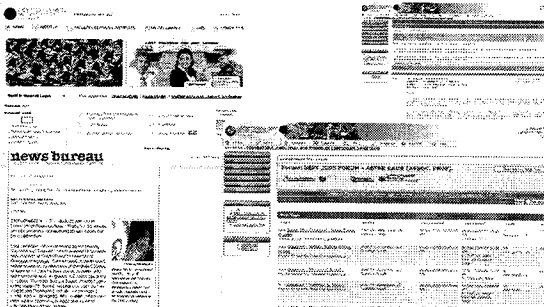
Overcoming the Digital Divide (e.g., One Laptop Per Child, The Global Text Project) [edit]

Projects to Promote Technology Use in the U.S. and Other Countries [edit]

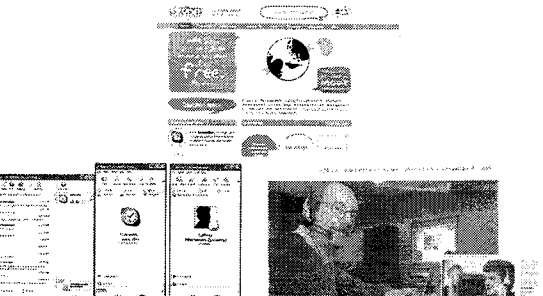
References in books

Language Education

Blended Solution #16. Cross-Class Collab (Indiana University and Open U of Malaysia; Univ of Illinois Tourism class)



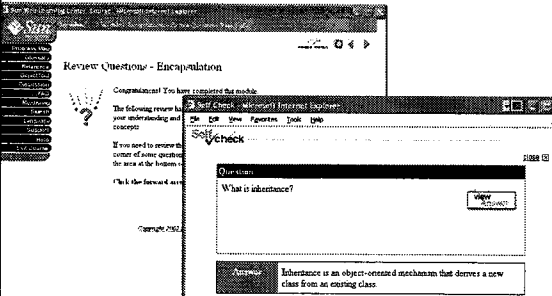
Blended Solution #17. Language Lessons, Team Meetings, etc., in Skype



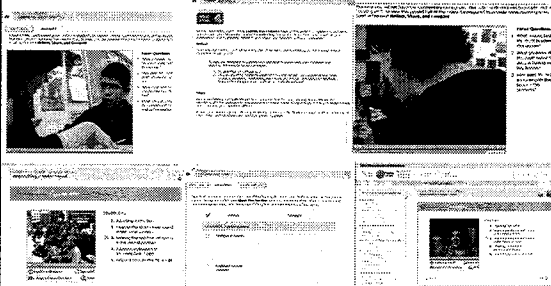
Problem Situation #8: Student Reflections and Connections

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

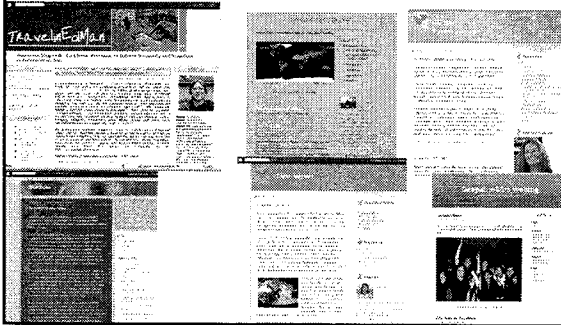
Blended Solution #18. Learner-Self Interactions and Reflections



Blended Solution #19. Reflection Sheets and Scaffolds online (E-Reading First Ohio) (reflect, share, and compare)



Blended Solution #20. Blogs with Critical Friends
(e.g., <http://travelinedman.blogspot.com/>)



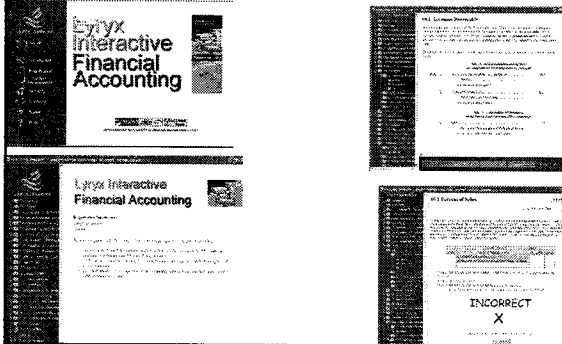
Blended Solution #21.
Workplace and Field Reflections



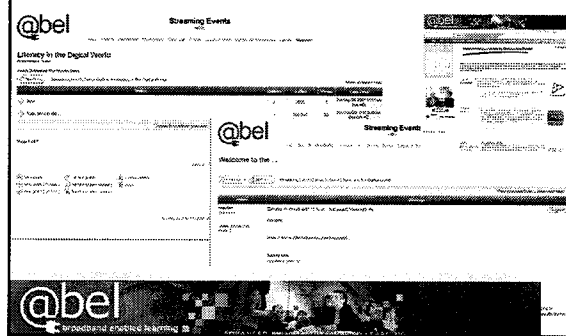
1. Instructor provides reflection or prompt for job related or field observations
2. Reflect on job setting or observe in field
3. Record notes on Web and reflect on concepts from chapter
4. Respond to peers
5. Instructor summarizes posts



Blended Solution #22. Online Simulation:
Financial Accounting; (University of Calgary)



Blended Solution #23. Asynchronous
Discussion of Weekly Topics

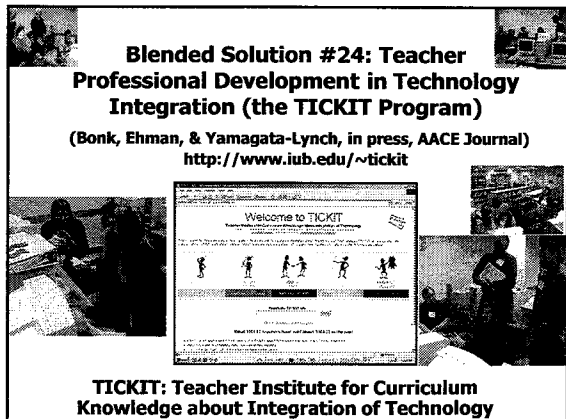


Problem Situation #9:
Learning Community

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

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



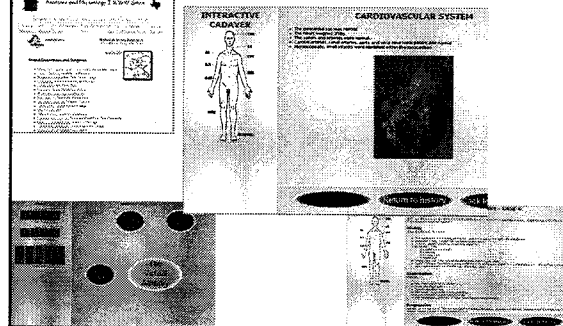
TICKIT: Teacher Institute for Curriculum
Knowledge about Integration of Technology

**Problem Situation #10:
Need to Visualize Content**

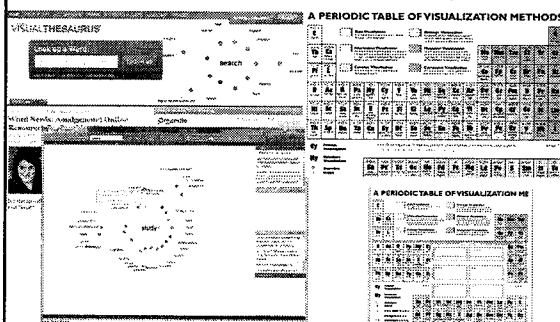
- Content is highly visual in nature and difficult to simply discuss in class. Or students have a preference for visual learning.



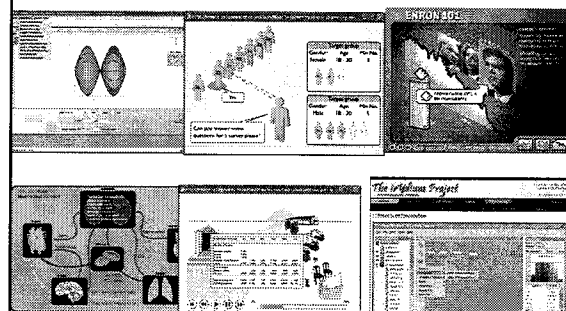
Blended Solution #25. Online Anatomy and Physiology



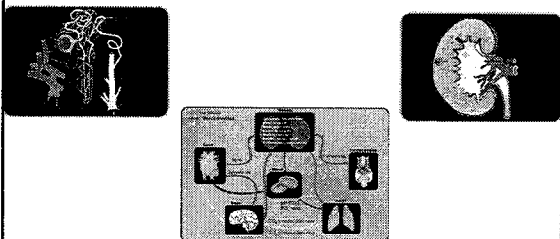
**Blended Solution #26. Visual Resources
(Periodic Table of Visualization; Visual Thesaurus
<http://www.visualthesaurus.com/>; http://www.visual-literacy.org/periodic_table/periodic_table.html)**



Blended Solution #27. Flash, 3-D Visualization, & Laboratory Software

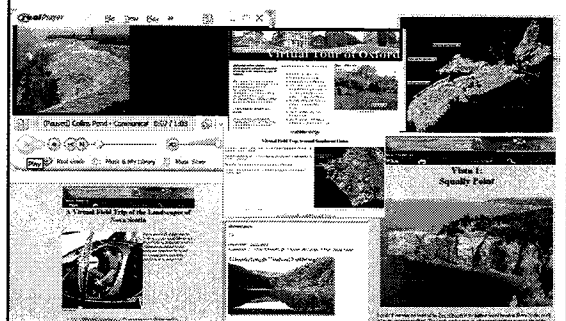


Blended Solution #28. Flowcharts, Diagrams, Maps, etc.

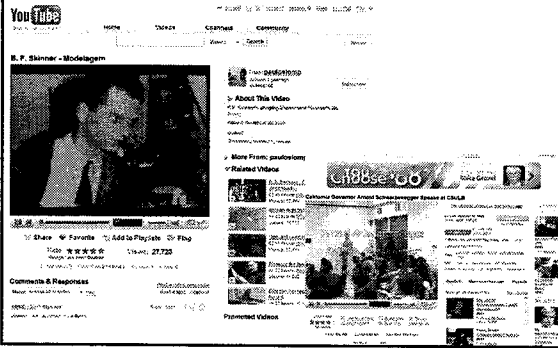


Elements in the system for control of oxygenation in the human body (e.g., the Kidney): From: Next-Generation Educational Software Why We Need It and a Research Agenda for Getting It. Van Dam, Becker, & Simpson, *Educause Review*, March/April 2005

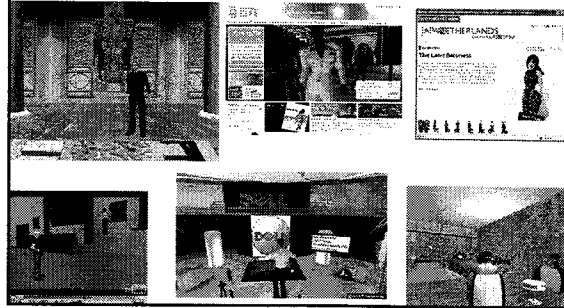
**Solution #29. Exploration and Demonstration:
Virtual Fieldtrip and Tours**



Blended Solution #30. Anchored Instruction: Assign a YouTube Videos to Watch and Reflect on



Blended Solution #31. Virtual Worlds/Virtual Reality/MMOG (e.g., Second Life)



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



Blended Solution #33. Interactive: A. Text Messaging
 Students at the Mennonite Centre for Newcomers are testing mobile learning – downloading an English grammar lesson, then answering a series of multiple choice, or true or false questions.
 Friday, February 9, 2007, CBC News



Blended Solution #34. Cascaded Scenario, Virtual Crime Scene
 Arjuna Multimedia, Bloomington, IN)



Blended Solution #35. Videoconferencing with Hearing Impaired Students Online

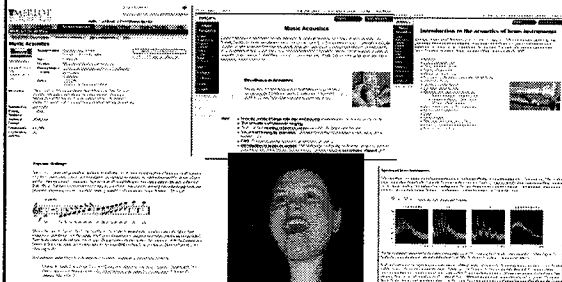
- College students tutoring high schools on their homework
- Instructors observing how teacher education students are doing in field placements (practice presentation and communication skills)
- Interpret speaker via Web cam



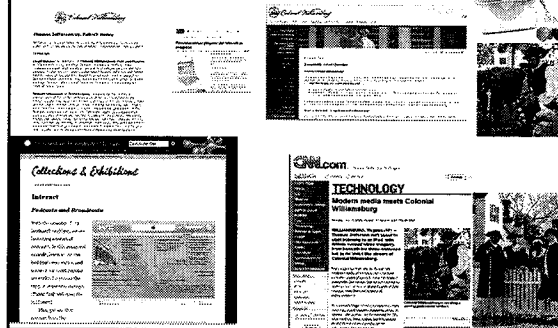
Problem Situation #12: Preference for Auditory Learning

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



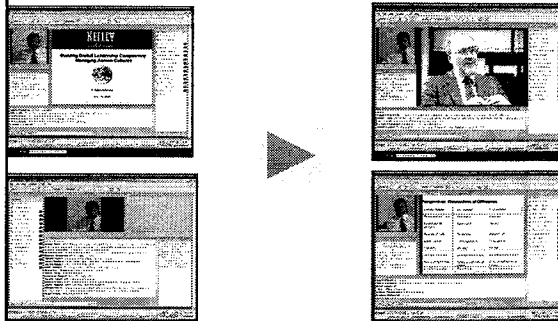
Blended Solution #37. Art and History Exhibits



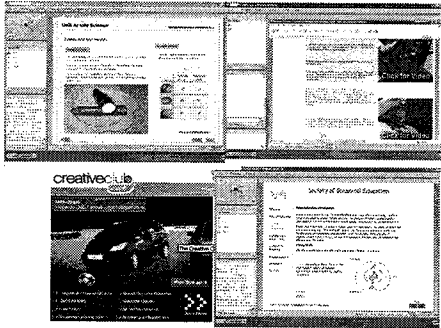
Problem Situation #13: Lack of Instructor Presence

- 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.

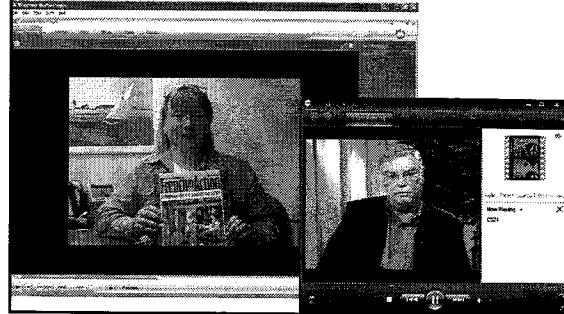
Blended Solution #38. Instructor Presentation in Synchronous Sessions (Breeze, Elluminate, WebEx, etc.)



Blende Solution #39. Peer Critique in Breeze
 (Table of Benefits of Peer Critique; Park & Bonk, in review)



Blended Solution #40. 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. (2006). **Future directions of blended learning in higher education and workplace learning settings.** 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

This is an advertisement for a book. It features a logo that says 'Boring Learning' with a large 'X' over it. Below the logo is the text 'Experience. The difference.' and an image of a woman wearing a headset, smiling. To the left is the book cover for 'The Handbook of Blended Learning: Global Perspectives, Local Designs' edited by Bonk and Graham.

It's Over...

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

A. Yes
B. No
C. Not sure

It is the End!!!

BONK!

Your student's musical instrument here falls is double that of your brain. Think about it.

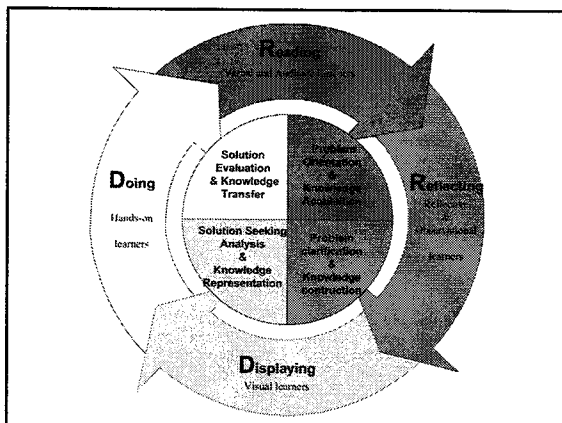
Two Book Projects

Empowering Online Learning

100+ Activities for Reading, Reflecting, Displaying & Doing

The R2D2 Method

1. **Read (Auditory and Verbal Learners)**
2. **Reflect (Reflective Learners)**
3. **Display (Visual Learners)**
4. **Do (Tactile, Kinesthetic, Exploratory Learners)**



TEC-VARIETY Model for Online Motivation and Retention

1. **Tone/Climate: Psych Safety, Comfort, Belonging**
2. **Encouragement, Feedback: Responsive, Supports**
3. **Curiosity: Fun, Fantasy, Control**
- ...
4. **Variety: Novelty, Intrigue, Unknowns**
5. **Autonomy: Choice: Flexibility, Opportunities**
6. **Relevance: Meaningful, Authentic, Interesting**
7. **Interactive: Collaborative, Team-Based, Community**
8. **Engagement: Effort, Involvement, Excitement**
9. **Tension: Challenge, Dissonance, Controversy**
10. **Yields Products: Goal Driven, Products, Success, Ownership**