

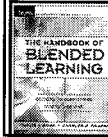
**Blended Learning:
Models, Cases, Stories, and Examples**

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<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



**Blended Learning:
Two Parts**

1. Models and Frameworks
2. Cases, Stories, and 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?

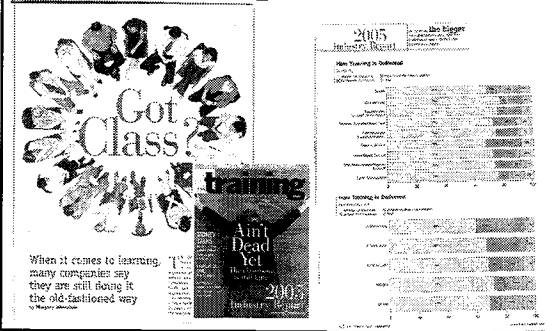
Whose Learning Is It, Anyway?

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

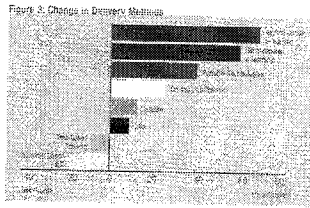
"E-learning proponents promised just-in-time, just-for-me, anytime, anywhere, 24X7, interactive, streaming, real-time, asynchronous, pervasive, motivational, emotional, collaborative, multimedia, blended, adaptive, personalized, intuitive, rich, engaging, strategic, empowering, scalable, consistent,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



December 2005, Training Magazine



A Look at Learning Delivery: Understanding the Blend



Blended Learning Rationale

- BL link to nontraditional and distance learning.
 - Make learning available to learners in a variety of delivery formats (Bonk & Graham, 2006).
 - Make learning adaptable to myriad styles or preferences (Bonk & Zhang, in press).
 - Opportunities for authentic and self-directed learning avenues that have been espoused by nontraditional and distance learning experts for decades (Knowles, 1984; Wedemeyer, 1981).
 - Emerging technologies offer the options and opportunities that adult learners need (Capella, 2006).
 - Instruction must interest learners intrinsically, assist learners in self-development, address learning preferences or styles, & exploit resources of respective institutions or organizations (Bonk et al, 2007).

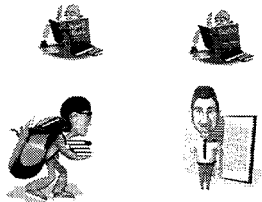
Why Blended?

- Fully e-learning has limitations (e.g., lack social interaction).
- Millions of learners around the planet are actually learning in this fashion of blended learning each day (Bonk & Graham, 2006).
- BL a top ten emerging trend in industry (ASTD, 2003).
- Conceivable that 80-90 percent of college and corporate training classes will be blended (Kim, Bonk, & Zeng, 2005).

Why not blended?

- Time to develop materials, deliver instructions, and enhance interactions.
- Instructors/trainers unwilling to change--skeptical of the effectiveness, fear of using the technology, peers can see them, and fear of lack of control.
- The barriers of institutional culture.
- Insufficient support from management.
- Learners need more self discipline and motivation.
- No one universal model of BL.

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.

Blended Learning Definitions

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

The three most commonly cited definitions include:

1. BL = combining instructional modalities (or delivery media)
2. BL = combining instructional methods
3. BL = combining online and F2F instruction

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)

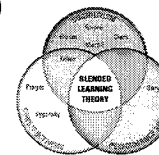
2. Blending Instructional Methods

- "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)

2. Blending Instructional Methods

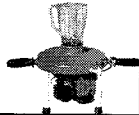
- "Blended learning is the use of two or more distinct methods of training." (Rossett, 2002, p. 59-60)
- "[Blended learning is] training delivered by a combination of methods." (House, 2002)

Jared Carman (2002);
blended learning design



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)



Common Blended Ingredients

Jared Carman (2002), KnowledgeNet, Blended learning design

1. Live Events (face-to-face) or synchronous online (live events get attention)
2. Self-paced learning and reflection (own time)
3. Collaboration and teamwork (peer-to-peer and peer-to-mentor)
4. Assessment and evaluation (test out)
5. Performance on the job and associated performance support (job aids, PDAs, etc.)

BLENDED LEARNING DESIGN: FIVE KEY INGREDIENTS

Jared M. Carman
Director, Product Development
KnowledgeNet

October 2002



Figure 2: 5 Ingredients for Blended Learning

Blended Learning Models

By Purnima Valiathan (2002), Learning Circuits, ASTD
(Skill-Driven BL Plan)

	Technology-based Techniques	Non-technology based Techniques
Announcement	LMS, email push	Flyer, mail, phone
Overview session	Email, Webinar	traditional classroom
Self-paced learning	Web-based tutorial, e-books, EPSS, simulations	Articles, books, job-aids, on-the-job, training
Query resolution	Email, FAQ, instant messenger	face-to-face meeting
Demonstration	Web meeting, simulations	traditional classroom
Practice	simulation	workbook assignment
Feedback	email	face-to-face meeting, print report
Closing session	Email, Webinar	traditional classroom
Certification	Web-based test	print test

Types of Delivery Technology (Option Six, 2006)

The type of media can include but is not limited to:

- Online or Web-Based Delivery
- CD-ROM
- Video/Audio Conference
- Analog or Digital Video including Pod Casts
- Live or Virtual Simulations
- Classroom (ILT)
- Communities of Practice
- OJT or Mentoring
- Performance Labs
- Job Aids

What's Available to Blend? (Option Six, 2006)

Locus of Control:

- Instructor-led
- Facilitated
- Self-Paced

Delivery Technology:

- Web-Based
- CD-ROM
- Video/Audio Conference
- Print
- Videotape
- Simulation
- Classroom

Delivery Timing:

- Synchronous
- Asynchronous

Instructional Strategies:

- Didactic Learning
- Problem Based Learning

Performance Support Strategies

- Communities of Practice
- OJT
- Mentors
- Performance Labs
- Job Aids

Analysis & Design Considerations, (Option Six, 2006)

How can target audience characteristics flavor the blend?

Characteristic:	What if...	Possible Blends:
Size	large	self-paced; WBT; asynchronous; communities
Location	centralized	ILT; classroom; synchronous; mentors
Accessibility to Training	poor	facilitated; OJT
Skill Level	diverse	self-paced
Motivation	high	self-paced; asynchronous; performance labs

Who is demanding fully online and blended learning?



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

Average Percentage of Learning Delivery Methods
(240 organizations in learning Masie consortium):

- 46% Classroom.
- 27% e-Learning.
- 19% Blended.
- 10% Other Methods.

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

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

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 employee population or courses
- Classes with working students
- Students spread over a distance
- Classes with certification or standards
- 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
4. Personalized access to a range of materials
5. Accommodate more learning styles
6. Connect different nationalities and cultures
7. Reduction in physical class or space needs, commuting, parking
8. Increased opportunities for human interaction, communication, & contact among students
9. Introverts participate more
10. Cost effective, time, satisfaction

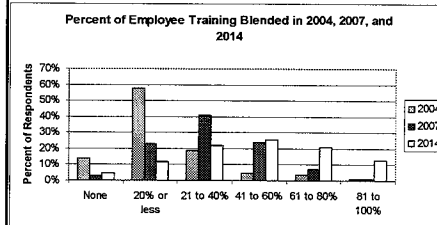


Fully Online and Blended Learning Disadvantages

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

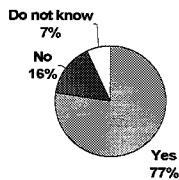


Corporate Training Blended (2003 study)



Korea most likely to have a strategic plan at 85% and UK was 79%; China least likely at 71% (USA (72%) and Taiwan (71%) slightly above)

16-a. Does your organization have a strategic plan for training and development?



3-4 Skills Most Taught Through Blended (Bonk, Kim, et al., 2007)

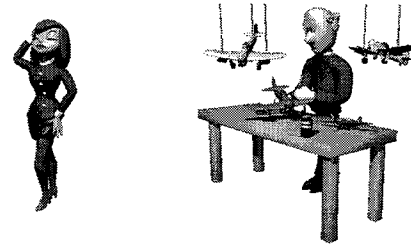
- UK: Computer Apps, Job, Communication/Teamwork, Personal Devel Skills
 - US: Computer Apps, Job, New Hire Orientation, Leadership
- =====
- Korea: Job Related, Leadership, New Hire Orientation, Basic Skills
 - Taiwan: Job Related, New Hire Orientation, Communication/Teamwork Skills
 - China: Communication/Teamwork, Basic Skills, Customer Service, Sales/Marketing

3-4 Skills Least Taught Through Blended

(Bonk, Kim, et al., 2007)

- UK: Ethics, New Hire Orient, Basic Skills, Exec Ed
- US: Basic Skills, Sales/Marketing, Programming, Product Specific, Professional
- Korea: Product Specific, Diversity, Customer Product Training, Compliance
- Taiwan: Diversity, Exec Education, Programming, Leadership, Product Specific, Business Practices
- China: Computer Systems/Programming, New Hire Orientation, Leadership, Product Specific

Frameworks and Models of Blended Learning...



Dimensions of Blended Learning

(Jay Cross, Foreword, 2006)

FIGURE E.1. DIMENSIONS OF THE BLENDED LEARNING STEW.

Blending know-how	[- - - - -]	Learning knowledge
Individual	[- - - - -]	Community
Generic	[- - - - -]	Proprietary
Training	[- - - - -]	Knowledge sharing
Text	[- - - - -]	Visual
Self-directed	[- - - - -]	Guided navigation
Content focus	[- - - - -]	Experience focus
Exploring	[- - - - -]	Participating
Push	[- - - - -]	Pull
Personalized	[- - - - -]	One-size-fits-all
Skills	[- - - - -]	Values
Information	[- - - - -]	Transformation
Formal	[- - - - -]	Informal

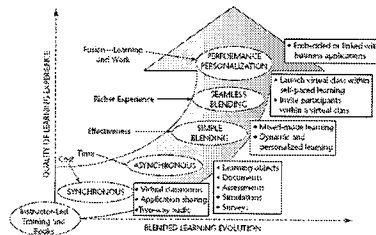


Harvey Singh (2006)

Blending Learning and Work

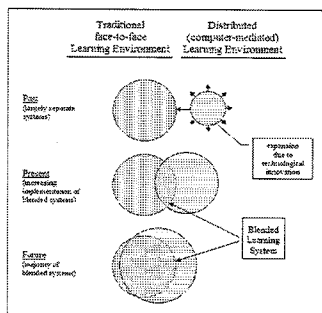
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FIGURE 34.1. PAST, PRESENT, AND FUTURE OF BLENDED LEARNING.



Historical Emergence of Fully Online and Blended

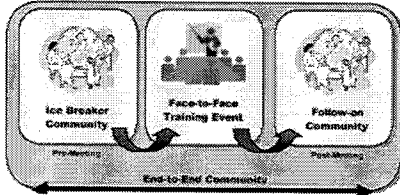
(Graham, 2006)



	Traditional F2F		Computer-mediated
Space	Live (physical F2F)	Mixed Reality	Virtual (distributed)
Time	Live Synchronous (very short lag time)		Asynchronous (long lag time)
Fidelity	High (rich all senses)	Medium (e.g., audio only)	Low (text only)
Humanness	High Human No Machine		No Human High Machine

(Graham, 2006)

A Blended Model: Corporate



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

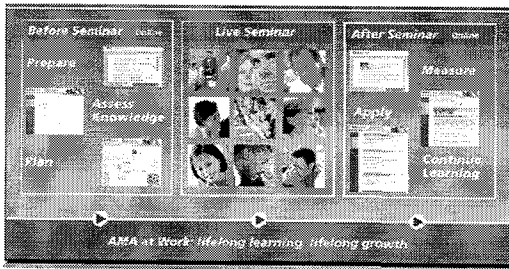
AMA Special Report, Blended Learning Opportunities

Alison Rossett (2006)

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



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



Source: American Management Association, AMA at Work

AMA Special Report, Blended Learning Opportunities

Alison Rossett (2006)

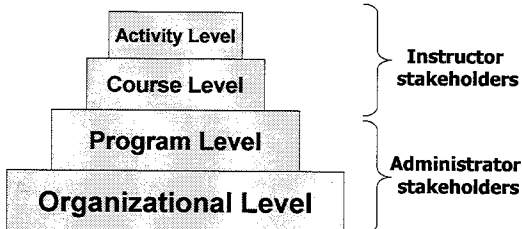
Table 1. What Might Go in the Blend

Live face-to-face (formal) <ul style="list-style-type: none"> • Instructional classroom (FTF) • Workshops • Coaching, mentoring • On-the-job (OTJ) training • Work-based problems 	Live face-to-face (informal) <ul style="list-style-type: none"> • Collegial relationships • Work teams • Apprenticeships
Virtual collaboration/synchronous <ul style="list-style-type: none"> • Live e-learning classes • E-coaching, e-mentoring • Instant messaging, SMS 	Virtual collaboration/asynchronous <ul style="list-style-type: none"> • Email • Online communities and discussion boards • Listservs • Blogs, wikis, podcasts
Self-paced learning (print, CD/DVD, electronic, wireless) <ul style="list-style-type: none"> • Online modules • Online resource links • Simulations and scenarios • Assessments and self-assessments • Workbooks, readings 	Performance support <ul style="list-style-type: none"> • Online help systems • Print job aids • Online knowledge databases • Documentation • Performance support tools

Adapted from Rossett, Douglas, & France, 2003, July

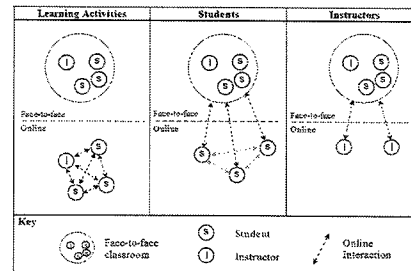
Models of Blending

Blending occurs at the following four levels:

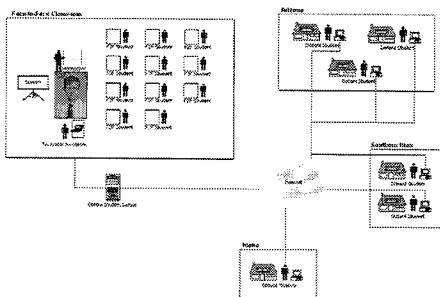


1. Activity- and Course-Level Blends

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



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



3. Program-level blending (Prescriptive or Choice)

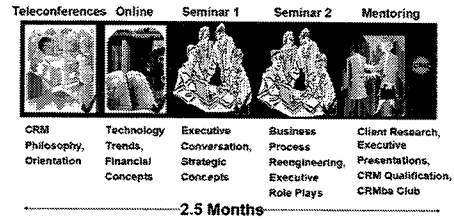
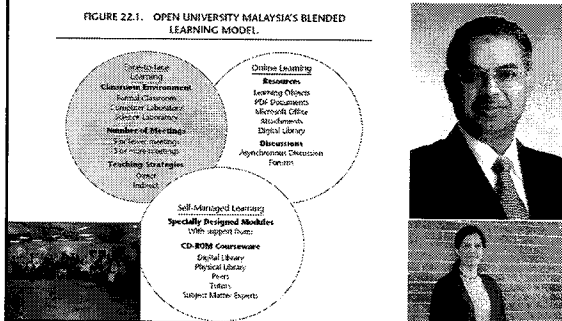


Figure 1: Avaya's ESSBa program schedule



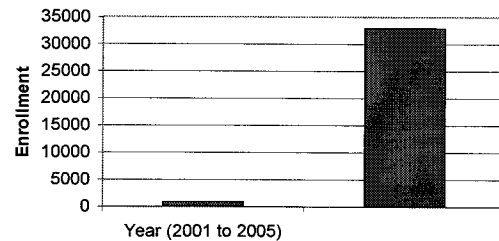
4. Institutional-level Blending (Abtar Kaur & Ansary Ahmed, 2006, Open U Malaysia)

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



The OUM

Enrollment Growth at the UOM



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)

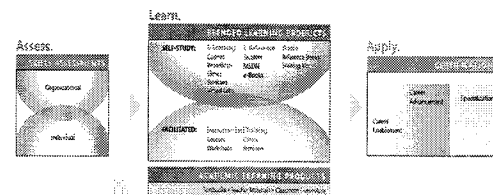


Framework for organizational development through training


Assess, Learn, and Apply

(Copyright Microsoft, Zioh & Mosher, in press; Handbook of Blended Learning)


Microsoft Products and Services for Lifelong Learning



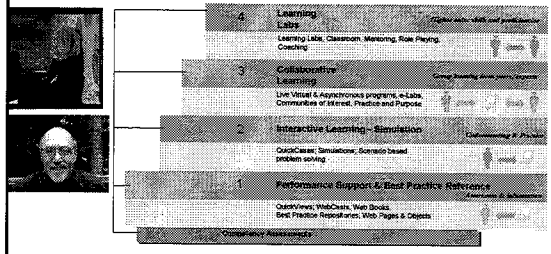
4. Blended Learning Form Factors (copyright Microsoft, Ziob & Mosher, 2006; Handbook of Blended Learning Environments)

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 

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
						

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



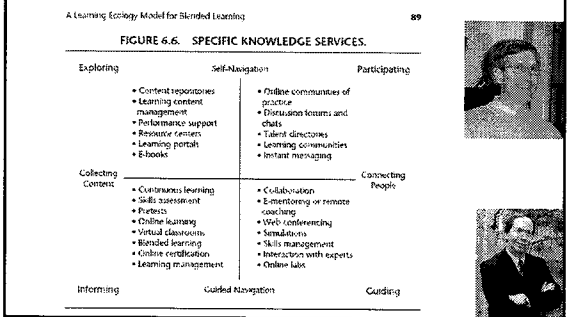
The IBM Four Tier Learning Model (2006) Blending Learning for Business Impact – IBM's case for learning success, 2006 Handbook of Blended Learning, Nancy Lewis, VP, & Peter Orton, IBM

TABLE S.1. IMPROVED BEHAVIOR EFFECT ON THE BUSINESS.


Attribute Emphasized in Training	Correlation with Financial Indicators
Increase in leadership competencies	.34***
Improvement in managerial style behaviors	.31***
Increase emphasis on aspects surrounding organizational climate	.27**
Increase in coaching behaviors	.32***
Improvement in managing telling behaviors	.29**
Better diagnosing and managing resistance to change	.24*
Gains from case study approach adopted in program	.35***
Increase in knowledge about leadership	.22*
Improved efficacy (confidence in managerial ability)	.26**
Reduction in perceived barriers to behavior change	.19*

*p < .1. **p < .05. ***p < .01. ****p < .001.

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



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
- 

Transforming Blends

(Kirkley & Kirkley; Oliver, Herrington, & Reeves, HOBLE, 2006)

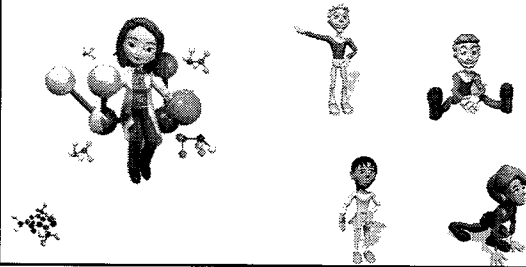


- Corporate/Military Training
 - Workplace learning (integrating learning into workflow)
 - Performance support and knowledge management using mobile technologies
 - Mixed-reality environments combining the virtual and real



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

Best BL Model 99 Second Stretch Break!!!



Part II: 13 Fully Online and Blended Learning Problems and 43 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.

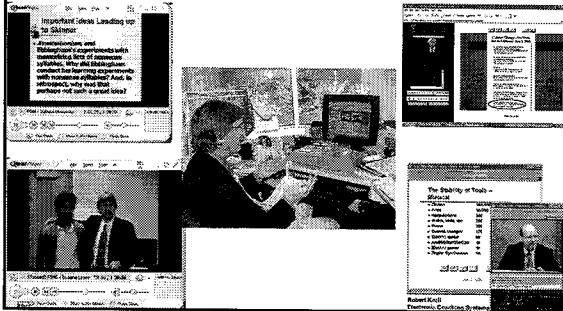
Blended Solution #1-10. Sample Activities for Brief Meetings

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.

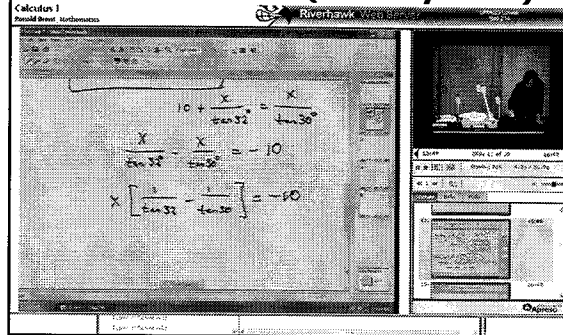
Problem Situation #2: Learner Absenteeism

- Learners miss class due to work situation. Learners 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 #11. Video Streamed Lectures and Expert Commenting



Blended Solution #12. Webcast Lectures (slides synched)



Problem Situation #3: Facilities and Time

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

Blended Solution #13-15. Training Magazine Award Winners, December 2007

13. Capital One Best Employee Orientation Program: 4 hour e-learning modules followed by a 4 hour live session for about business model, products, services, expectations.
14. Cingular Wireless Best Sales Training Program: IBM developed Web-based pre-work, one day classroom sessions, and management follow-up; includes PowerPoint, job aids, virtual classroom, streaming videos.
15. JPMorgan Chase Best Global Training Program for risk professionals: share knowledge—4 online modules followed by 7 hour class session includes PowerPoint, video, guests, interactive breakouts.

Blended Solution #14.

Divide Online and Class Experiences: English Classes Online
 Graham, Ure, & Allen (2003, July). Blended Learning Environn
 A Literature Review and Proposed Research Agenda

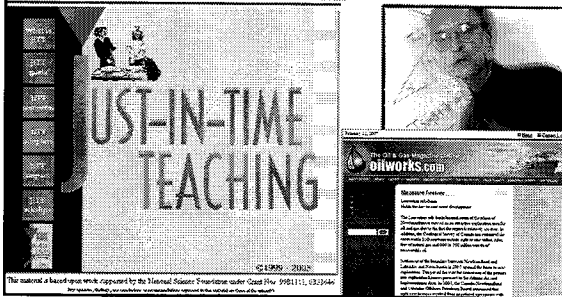
- Freshman English at BYU: Students are required to meet F2F once a week instead of three times a week. Online modules provide writing instruction and teaching assistants use online and F2F contact to provide feedback and guidance on writing (Waddoups et al., 2003).



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 learners to explore.

**Blended Solution #15: Warm-ups Online
Just-In-Time-Teaching (JITT)**
http://webphysics.iupui.edu/jitt/jitt.html

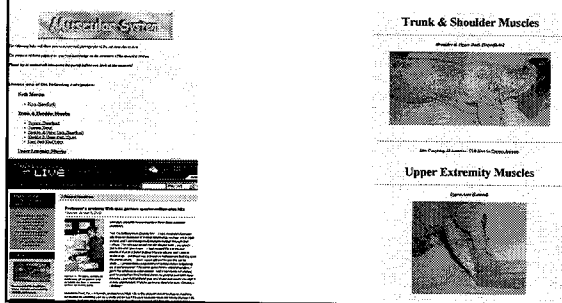


Blended Solution #16.
CPA Exam Review and Web Videos in Accounting

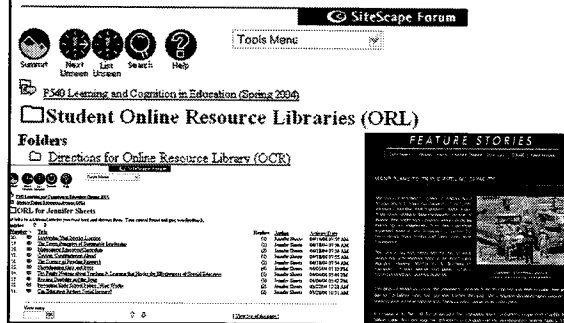
- Texas A&M University–Corpus Christi combines CPA courseware with bi-monthly class meetings to prep for CPA Exam. (study text, proficiency questions, electronic flashcards and practice exams, scheduled assignments, goals, online grading, progress reports, tailored discussion groups, and personalized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



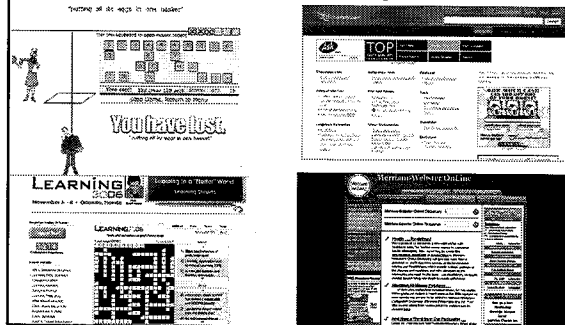
**Blended Solution #17. Course
Portal (e.g., self study in anatomy)**



**Blended Solution #18. Online
Resource Libraries**



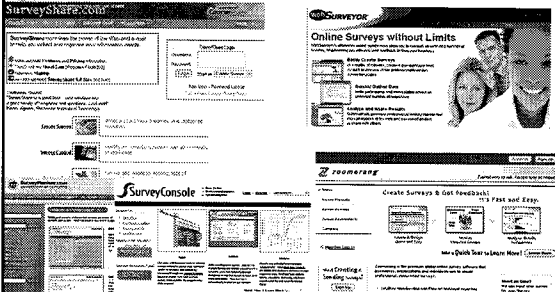
**Blended Solution #19. Referenceware
and Terminology Exercises Online
(puzzles, games, etc.)**



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

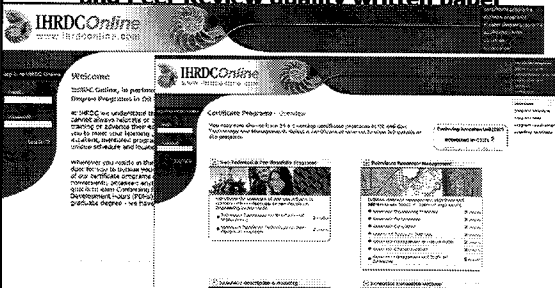


The image shows a collage of survey software interfaces. On the left is SurveyShare.com with a form for creating a survey. In the center is SurveyKey with a 'Create Surveys & Get Feedback' section. On the right is Zoomerang with a 'Create Surveys & Get Feedback' section. The SurveyShare.com interface includes fields for 'Survey Name', 'Survey Description', 'Survey Type', and 'Survey Length'. The SurveyKey and Zoomerang interfaces feature promotional text and images of people using the software.

Problem Situation #6: Preparedness for the Profession

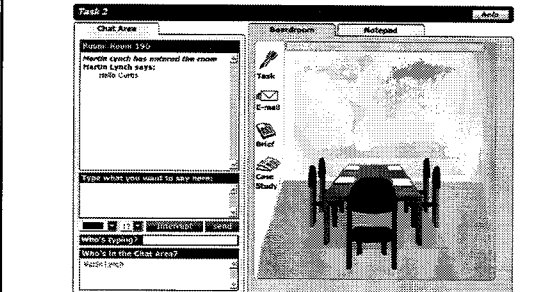
- Learners need to be better prepared for their professions when they graduate. Or want to better apprentice students into their chosen profession. Want to provide opportunities to work with practitioners, experts, mentors, and coaches in authentic learning environment.

programs are all Blended Learning, a combination of e-Learning; mentor assisted learning; Practical Assignments (On the Job) and Peer Review quality written paper



The image shows the IHRDOnline website. The top section has a 'Welcome' message and a 'Courses' link. Below is a 'Courses' section with a list of courses including 'Business Management', 'Human Resources', 'Marketing', 'Finance', 'Operations', 'Project Management', 'Quality Management', 'Information Systems', 'Healthcare Management', 'Construction Management', 'Energy Management', 'Transportation Management', 'Agriculture Management', 'Fisheries Management', 'Tourism Management', 'Hospitality Management', 'Retail Management', 'Food Service Management', 'Event Management', 'Sports Management', 'Media Management', 'Public Relations Management', 'Non-Profit Management', 'Government Management', 'International Management', 'Global Management', 'Cross-Cultural Management', 'Diversity Management', 'Inclusion Management', 'Work-Life Balance Management', 'Employee Well-being Management', 'Organizational Development Management', 'Change Management', 'Innovation Management', 'Entrepreneurship Management', 'Social Entrepreneurship Management', 'Social Impact Management', 'Social Responsibility Management', 'Sustainability Management', 'Green Management', 'Circular Economy Management', 'Regenerative Management', 'Resilience Management', 'Antifragile Management', 'Adaptability Management', 'Agility Management', 'Resilience Management', 'Antifragile Management', 'Adaptability Management', 'Agility Management'. The bottom section has a 'Contact Us' link.

Blended Solution #22. Business Class Simulated Boardroom Chat eCollege Wales, Univ. of Glamorgan



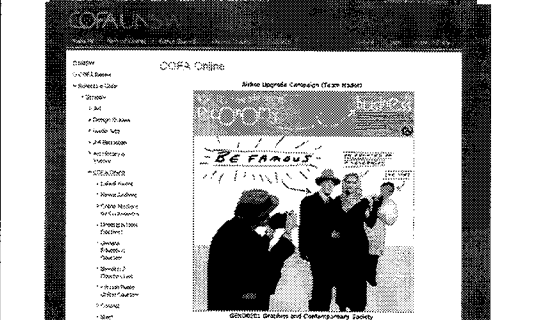
The image shows a simulated boardroom chat interface. On the left is a 'Chat Area' with a text input field and a 'Send' button. On the right is a 'Boardroom' window showing a 3D scene of a boardroom with a table and chairs. The chat area contains text: 'Morten Lynch 19:00', 'Morten Lynch has entered the room', 'Morten Lynch says: Hello Guys', and 'Morten Lynch says: Hello Guys'. The boardroom window has a 'Task' button and a 'Send' button.

Blended Solution #23. Apprenticeship: Electronic Guests & Mentoring



The image shows a website for apprenticeship. The top section has a 'Welcome' message and a 'Courses' link. Below is a 'Courses' section with a list of courses including 'Business Management', 'Human Resources', 'Marketing', 'Finance', 'Operations', 'Project Management', 'Quality Management', 'Information Systems', 'Healthcare Management', 'Construction Management', 'Energy Management', 'Transportation Management', 'Agriculture Management', 'Fisheries Management', 'Tourism Management', 'Hospitality Management', 'Retail Management', 'Food Service Management', 'Event Management', 'Sports Management', 'Media Management', 'Public Relations Management', 'Non-Profit Management', 'Government Management', 'International Management', 'Global Management', 'Cross-Cultural Management', 'Diversity Management', 'Inclusion Management', 'Work-Life Balance Management', 'Employee Well-being Management', 'Organizational Development Management', 'Change Management', 'Innovation Management', 'Entrepreneurship Management', 'Social Entrepreneurship Management', 'Social Impact Management', 'Social Responsibility Management', 'Sustainability Management', 'Green Management', 'Circular Economy Management', 'Regenerative Management', 'Resilience Management', 'Antifragile Management', 'Adaptability Management', 'Agility Management', 'Resilience Management', 'Antifragile Management', 'Adaptability Management', 'Agility Management'. The bottom section has a 'Contact Us' link.

Blended Solution #24. Expert Mentoring Online in Art and Design (COFA Online, Omnium Project, Creative Waves—online graphics and photomedia project)



The image shows the COFA Online website. The top section has a 'Welcome' message and a 'Courses' link. Below is a 'Courses' section with a list of courses including 'Business Management', 'Human Resources', 'Marketing', 'Finance', 'Operations', 'Project Management', 'Quality Management', 'Information Systems', 'Healthcare Management', 'Construction Management', 'Energy Management', 'Transportation Management', 'Agriculture Management', 'Fisheries Management', 'Tourism Management', 'Hospitality Management', 'Retail Management', 'Food Service Management', 'Event Management', 'Sports Management', 'Media Management', 'Public Relations Management', 'Non-Profit Management', 'Government Management', 'International Management', 'Global Management', 'Cross-Cultural Management', 'Diversity Management', 'Inclusion Management', 'Work-Life Balance Management', 'Employee Well-being Management', 'Organizational Development Management', 'Change Management', 'Innovation Management', 'Entrepreneurship Management', 'Social Entrepreneurship Management', 'Social Impact Management', 'Social Responsibility Management', 'Sustainability Management', 'Green Management', 'Circular Economy Management', 'Regenerative Management', 'Resilience Management', 'Antifragile Management', 'Adaptability Management', 'Agility Management', 'Resilience Management', 'Antifragile Management', 'Adaptability Management', 'Agility Management'. The bottom section has a 'Contact Us' link.

Blended Solution #25. Reuse Chat Transcripts

Blended Solution #26. Video Observations (e.g., Virtual Psychiatric Interview, Trinity College, Dublin)

showcases

18

Department: **Psychiatry**
Academics: Prof. Michael Gill, Dr. Brian Fitzmaurice, Katie Armstrong



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

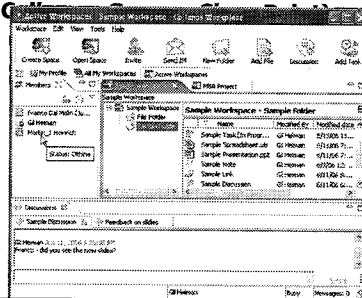
Problem Situation #7: Collaborative Skill Deficit

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



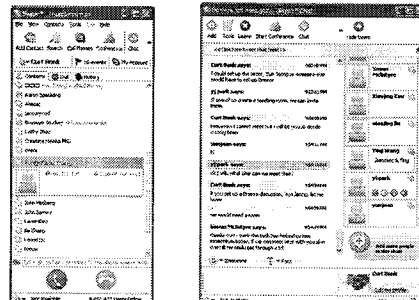
Blended Solution #27. Sharing in Virtual Teams

(e.g., C



Blended Solution #28. Cross-Class Collab (Indiana Univ and Open U of

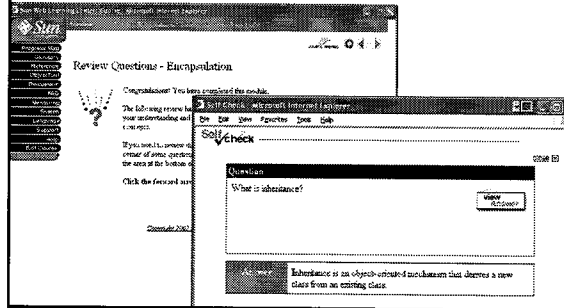
Blended Solution #29. Team Meetings in Skype



**Problem Situation #8:
Learner Reflections and Connections**


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

**Blended Solution #30.
Learner-Self Interactions and Reflections**

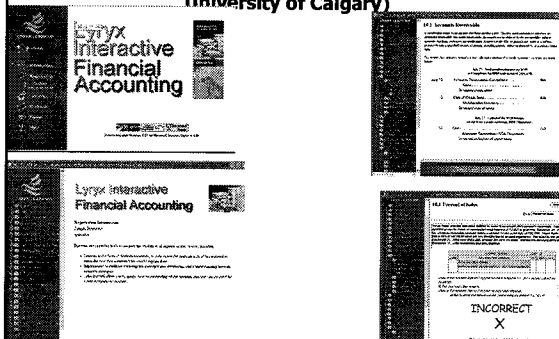


**Blended Solution #31.
Workplace and Field Reflections**

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 #32. Hands-on Online Simulations (e.g., Financial Accounting; from the University of Calgary)



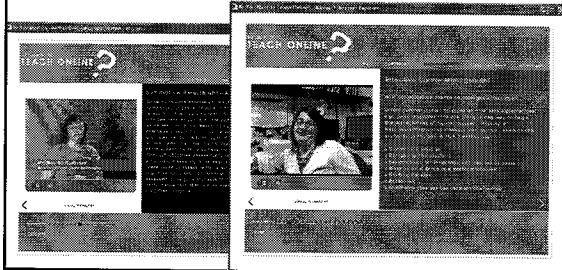
**Problem Situation #9:
Learning Community**

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

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

- 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

Blended Solution #34. Community of Practice: Online Professional Development

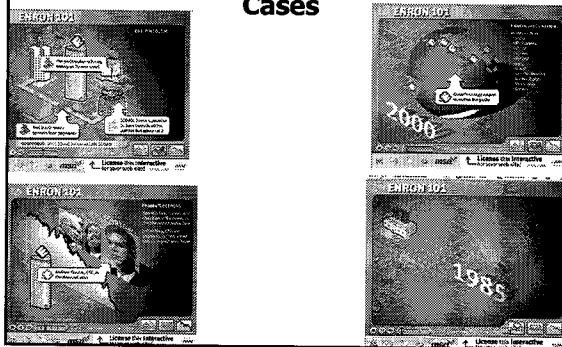


Problem Situation #10: Need to Visualize Content

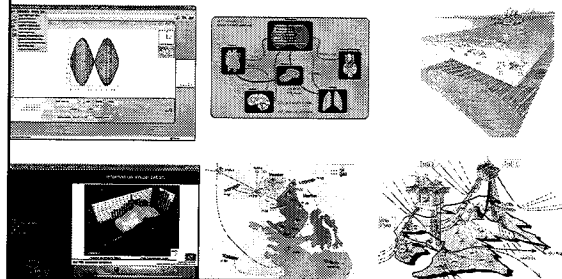
- Content is highly visual in nature and difficult to simply discuss in class. Or learners have a preference for visual learning.



Blended Solution #35. Interactive Online Stories & Flash Animation Cases



Blended Solution #36. 3-D Visualization & Laboratory Software



Blended Solution #37. Anchored Instruction: News Content Videos (CTGV, 1990?)



Blended Solution #38. Concept Mapping Tools

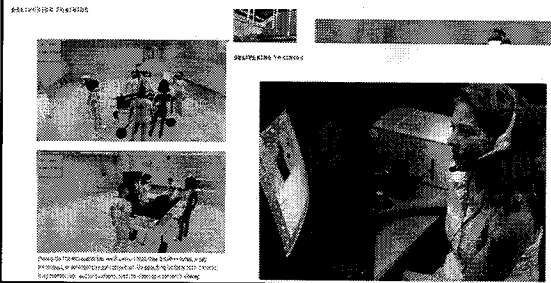
- And at the Harvard-MIT (MA) Division of Health Sciences and Technology, MindManager is helping make complex learning content more manageable. Dava Newman, professor of aeronautics, astronautics, and engineering systems, is using the program to deliver interactive lectures, incorporate student questions and feedback in real time, and provide an enhanced learning environment.



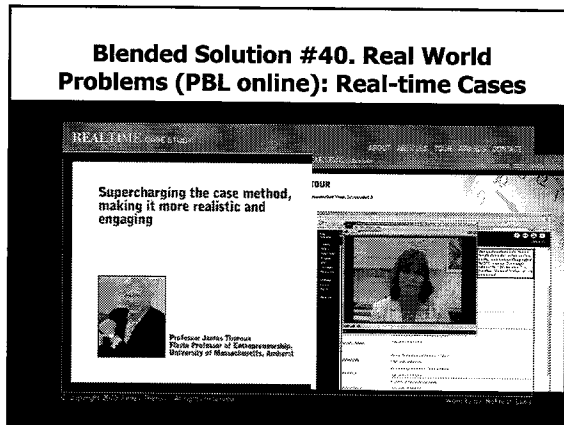
Problem Situation #11: Need for Hands-On Learning

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

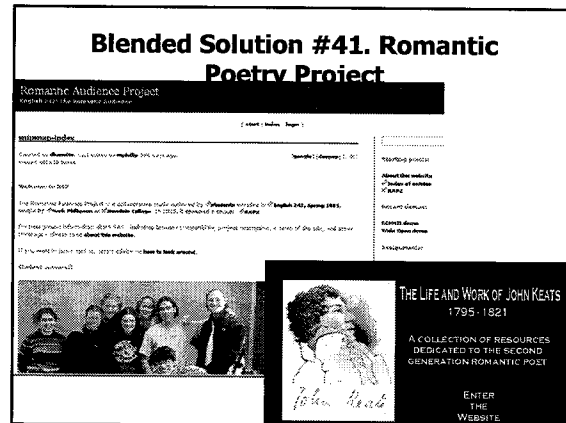
Blended Solution #39. Educational Simulations (HEALING GAMES: Computer simulations don't have to be violent -- they can give peace a chance, Scott Duke Harris May 21, 2006, San Fran Chronicle; and Medical Traumas from TD Magazine, August 2006)



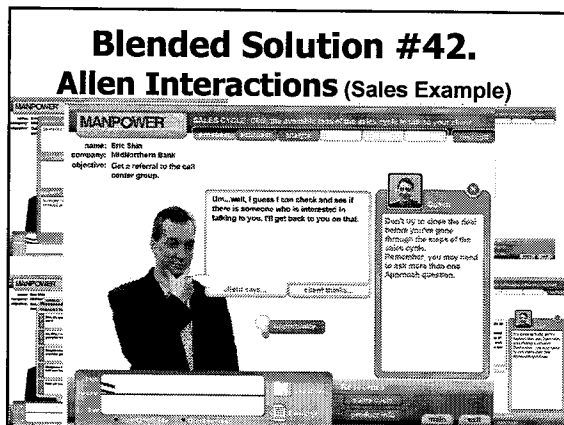
Blended Solution #40. Real World Problems (PBL online): Real-time Cases



Blended Solution #41. Romantic Poetry Project



Blended Solution #42. Allen Interactions (Sales Example)



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 #43.
Basic Acoustics of Musical Instruments

THE UNIVERSITY OF NEW SOUTH WALES - SYDNEY - AUSTRALIA

PHYSICS
Music Acoustics

Introduction to the acoustics of brass instruments

How does a trumpet work? Why does a trombone sound the way it does? Why is the French horn hard to play? (This page explains the physics of brass instruments (originally the by-read family). It requires no mathematics beyond multiplication and division, but some technical knowledge of acoustics. For a range of background topics in acoustics (waves, dispersion, resonance, details etc) click on "Basic" in the navigation bar at left.

- Overview
- Some basic about brass
- The Bell control the air flow
- Changes in the end flange
- Closed pipes and open pipes
- Resonances and harmonics of pipes with different shapes
- The effect of the bell
- The effect of the mouthpiece
- Connections and control valves
- Harmonics of the natural trumpet and horn
 - Harmonics in the natural trumpet series
 - Dispersion in the natural trumpet series
 - "Stretching of the harmonic series"
- How the instruments and brass work together
- Examples of brass instruments
- Notes
- Values and units
- Different members of the brass family
- Frequency response and acoustic impedance

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 #44.
Instructor Presentation in Synchronous Sessions

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.

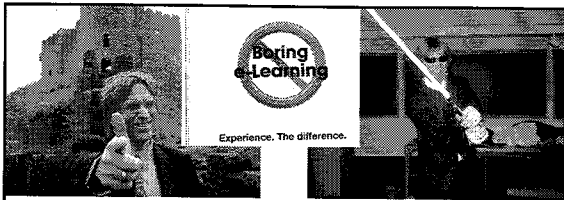
Blended Works: Here's Proof
Jeff Barbian, September 2002, Online Learning

"The question is not if we should blend...rather the question is what are the ingredients."

— Per Marc Rosenberg, E-Learning: Strategies for Delivering Knowledge in the Digital Age

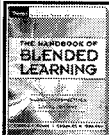
This talk covered...

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



Experience. The difference.

Questions???



The Handbook of
Blended Learning
Global Perspectives
Local Strategies
Charles A. Davis
Charles F. Grimes

Blended learning is the most effective way to deliver content and engage learners. This handbook provides a comprehensive overview of the field, including the latest research, best practices, and emerging trends. It is an essential resource for anyone involved in education, training, or corporate learning.

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