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


<table>
<thead>
<tr>
<th>Blended Learning Defined and Explained</th>
</tr>
</thead>
</table>

| Traditional | Course which uses no online technology. Most taught in Adjunct or fully online settings. |
| 0% - 25% | Online or web-based technology is used to supplement the teaching and learning, but not a course that is offered fully online. |
| 25% - 75% | Web facilitation | Course which uses web-based technology to facilitate learning in a fully online environment. Instruction is delivered online. The web is used for all of the course content and interaction. |
| 75% - 100% | Blended Hybrid | Course that is blended in the online and face-to-face venues. Educational components of the course is delivered online. Some online content but face-to-face interactions typically for lecture, group work, or small group discussions. |
| 100% | Online | Course where all of the course is delivered online. Typically taught via face-to-face meetings. |
1. Blending Delivery Media

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

2. Blending Instructional Methods

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

3. Blending Online and F2F Instruction

"Blended learning refers to events that combine aspects of online and face-to-face instruction" (Rooney, 2003, p. 26; Ward & LaBranche, 2003, p. 22)
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...
Models of Blending
Blending occurs at the following four levels:

- Activity Level
- Course Level
- Program Level
- Institutional Level

1. Activity- and Course-Level Blends
Blended learning systems: Definitions and directions (Osogtorpe & Graham, 2003)

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

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

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

(Revised: June 2008, By: [Author])
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)

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)


Kelley Direct Online MBA (IU)
The OUM
(Atbar 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)

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
### B. Enhancing Blends

(University of Glamorgan in Wales)

<table>
<thead>
<tr>
<th>Continuum of e-Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic ICT usage</td>
</tr>
<tr>
<td>E-focused</td>
</tr>
<tr>
<td>E-focused</td>
</tr>
<tr>
<td>E-focused</td>
</tr>
<tr>
<td>E-focused</td>
</tr>
</tbody>
</table>

### 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**

- Mixed Reality
- Augmented Reality
- Augmented Veillance
- Virtual Reality

---

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 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?

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 #1+. Sample Activities for Brief Meetings

1. Assign web buddies, email pals, critical friends based on interests, confidence, location, etc.
2. Icebreakers—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.

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

- 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

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

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 #9. Digital Movie Making

Blended Solution #10. Student Vlogging (Video Blogs)
An Anthropologist Explores the Culture of Video Blogging
By JEFFREY N. YOUNG; Michael Wesch, KSU, assoc prof of cultural anthro
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

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.

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

Web 2.0 and Emerging Learning Technologies
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

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

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

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

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 #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

@bel

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

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

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

Solution #29. Exploration and Demonstration: Virtual Fieldtrip and Tours
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 #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.)
Blended Solution #39. Peer Critique in Breeze
(Table of Benefits of Peer Critiques; Park & Bond, 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


Implications and Challenges for Blended Learning

1. Faculty and students are more mobile.
2. Students more choices.
3. Student expectations rise.
6. Courses increasingly modular.
7. Less predefined schedules.
8. When teaching less clear; when learning less clear.

The End...Remember
It's Over...
Poll: Ok, then, who wants more???
  A. Yes
  B. No
  C. Not sure

It is the End!!!

Two Book Projects
Empowering Online Learning
100+ Activities for Teaching, 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