Blended Learning: Situations and Solutions
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This the talk will cover:
1. Definitions of blended learning
2. Advantages and disadvantages
3. Models of blended learning
4. Examples of blended learning
5. Future direction of blended learning

Chris Dede, Campus Technology, June 2006:
Changing the Gold Standard for Instruction

• "Face-to-face may be best for most faculty...However, we know that
many students who are silent in classroom discussions find their voice
and participate actively in different flavors of mediated interaction."

Blended Learning Defined:
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)

The Sloan Consortium
(2003). Sizing the Opportunity: The Quality and Extent of
Online Education in the U.S., 2002 and 2003

• Traditional: 0% online technology
  – (all content in writing or orally)
• Web facilitated: 1 to 29% online
  – (Web syllabus or tasks supplemental)
• Blended/Hybrid: 30-79% of content is delivered online & some FTF meetings
• Online: 80+% of content is online

Historical Emergence of BL
(Graham, 2006)
**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

**Ok, Million Dollar Question: Where is blended learning beneficial?**

![Image of billion dollar bill]

**Where is Blended Beneficial?**
http://www.center.rpi.edu/PewGrant/ProjDesc.html

- Large Classes
- Classes with working students
- Class with many reference/supplemental materials
- Need to put prework or assessment online
- Students spread over a distance
- Classes with certification
- Classes with need for standardization
- New requirements for a profession
- Writing intensive classes
- Need to access to experts online
- Theory classes

**Frameworks and Models of Blended Learning...**

**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

**Working Definition**

(Graham, 2006, HOBLe Chapter 1, Blended Learning Systems)

**KEY**

- Technology enhanced
- Reduced FI2 Instructors
- Basically Distanced
- Optimal IT2 services

![Diagram showing different models of blended learning]
Models of Blending
Blending occurs at the following four levels:

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

Instructor stakeholders
Administrator stakeholders

1. Activity- and Course-Level Blends
Blended learning systems: Definitions and directions (Osborn & 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)
Altering F2F and e-learning activities in a multimedia technology course in China.

3. Program-level blending

Teleconferences Online Seminar 1 Seminar 2 Mentoring

ERM Philosophy, Technology Executive Business Client Research,
Orientation Financial Executive Process Executive
Concepts Strategic Conceptual Executive CRM Qualification,
Presentations, Executive Executive CRM@Club

2.5 Months

Figure 1: Avaya's ESSBa program schedule

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)

4. Institutional-level Blending

(Abtar Kaur & Ansary Ahmed, 2006, Open U Malaysia)

- Started August 2001: approx. 800 students
- Total students (2005): approx. 33,000
- Total full-time academic staff: 60
- Total part-time academic staff (tutors): approx 3,000
- 33 Learning Centres (7 Regional Centres)
- Pedagogical approach: Blended Learning

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)

Blended Learning Scenario

Copyright Microsoft, Zlob & Mosher, 2006; Handbook of Blended Learning Environments

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
<th>Step 4</th>
<th>Step 5</th>
<th>Step 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-study prep</td>
<td>In classroom</td>
<td>Virtual class</td>
<td>e-Learning</td>
<td>Virtual class</td>
<td>In classroom</td>
</tr>
</tbody>
</table>

Community engagement

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

A. Enabling Blends
- Many of the for-profit institutions like Capella,
  Jones International University, and
  University of Phoenix have models that
  focus on making educational opportunities
  available to those who don't have access due to
  time and location constraints.
- National University has a teacher
  preparation program geared towards access
  and flexibility.
- Many international education and training
  programs are also focused on providing access
  (e.g., World Bank, Mexico's Red Escolar
  program, etc.)

B. Enhancing Blends
(Univ of Waikato, New Zealand, 2006)

University of Waikato, New Zealand
- Model for enhancing F2F courses includes:
  - Fully online - students can complete
    qualifications without coming onto the campus
  - Mostly online - there is a mix of online and
    some on-campus work in the qualification
  - Somewhat online - there is an online
    component for on-campus students
  - Supported online - courses are taught in the
    traditional lecture/tutorial mode, supported by
    material provided through the online learning or
    relevant university schools' document
    management systems

C. Transforming Blends
(Kirkley & Kirkley; Oliver, Herrington, & Reeves,
HOBLe, 2006)

Categories of Blends

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
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<tbody>
<tr>
<td>A. Enabling Blends</td>
<td>Enabling blends primarily focus on addressing issues of access and convenience; provide similar learning experiences.</td>
</tr>
<tr>
<td>B. Enhancing Blends</td>
<td>Enhancing blends allow for incremental changes to the pedagogy; additional or supplementary online resources.</td>
</tr>
<tr>
<td>C. Transforming Blends</td>
<td>Transforming blends are blends that allow for a radical transformation of the pedagogy and learner construction of knowledge.</td>
</tr>
</tbody>
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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
What can we say about blended learning then???

• It is everywhere!!!!!!!

• Resistance is futile!!!!!!!

Future learning systems may not be differentiated as much based on whether they blend but rather by how they blend.

-(paraphrase from Ross and Gage, WebCT)

Problem Situation #1: 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.

Video Streaming Course Sessions (e.g., BobWeb)
Problem Situation #2: 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 #2.
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).

Problem Situation #3: 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 #3. Inst Portal: e.g., self study in another language.

Muscular System
Trunk & Shoulder Muscles

Bone names can be found ing Category:

- Sternum
- Acromion process of Scapula
- Clavicle
- Scapula
- Glenoid fossa
- Scapular notch
- Spine of Scapula

Blended Solution #4: Warm-ups Online
Just-In-Time-Teaching (JiTT)
http://webphysics.iupui.edu/jitt/jitt.html

Blended Solution #5. Online Role Play, Surveys, Discussion, etc.
- Enroll famous people in your course
- Students assume voice of that person for one

24 3. Can we wear a hat?
Anna, 11/25/03 05:49 PM
- Training Manuals might have a little bit of a buzz too. Also, I'm boring instructor assistants and videos. Classroom or e-learning - a good audience - they can all be good for learning. Cost allows to go away at an issue, or we might as well face it is instead of open training is better than another - because it costs more. Were did that if the Blues? Didn't you compare prices or spaces and haven't global compact?

24 3. Anyone our message - a learning is NOT cost.
Anna, 11/25/03 05:49 PM
- Atlantic the Blue offense and is NOT value for money, and sure
- NOT inside avoid quality
Problem Situation #4:
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 #6. Use of Weblogs (especially English writing class)

1. Instructor or Tutor blog: resources, information, space to chat
2. Learner blog: reflections, sharing links and pics, fosters ownership of learning
3. Partner blog: work on team projects or activities
4. Class blog: international exchanges, projects, PBL
5. Revision: review and explode sentences from previous posts, add details
6. Nutshell: summarize themes or comments across blogs
7. Blog on blog: reflections on feelings, confusions, and experiences with blogs

Blended Solution #7.
Survey Research and Market Analysis
(e.g., WebSurveyor, Zoomerang, SurveyShare, SurveyKey)

Problem Situation #5:
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 #8.
WikiBook Creation and Collaboration

Blended Solution #9.
Watch Video of Experts (Interviews, Trinity College, Ohio Reading First)
Blended Solution #10. Videoconferencing Expert Lectures and Online Conferences

Problem Situation #6: 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 #11. Cross-Class Collab (Indiana Univ and Open U of Malaysia)

Blended Solution #12. PBL: Tourism Mock Tours

Problem Situation #7: 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 #13. Workplace and Field Reflections, Job Interviews
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

Dynamics of Tourism: students from IU and South Korea use online resources to plan tours and create mock tour packages.
Problem Situation #8: 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.

Problem Situation #9: 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.

Problem Situation #10: 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 #17. Business Classes
(Univ of Glamorgan in Wales & Univ of Calgary)

Blended Solution #18. Educational Simulations, Scenarios, and Manipulations

Blended Solution #19. Real World Problems (PBL online): Real-time Cases

Blended Solution #20. Video Scenario Learning
(Option 6, Arjuna Multimedia, Bloomington, IN)

Problem Situation #11:
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 #21. Basic Acoustics of Musical Instruments
Blended Solution #22:
Podcasting and Coursecasting
(Adam Curry: www.dailysourcecode.com)
• Recordings of lectures (Coursecasting)
• Textbook text
• Student projects
• Interviews
• Language lessons
• Oral reports
• K-12 classroom interactions
• Downloadable library
• Recordings of performances

Problem Situation #12:
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 #23:
Language Learning
(ChinesePod—learn Mandarin)

Implications and Challenges for Blended Learning in Higher Education
• Faculty and students are more mobile.
• Student expectations rise.
• Greater self-determined learning.
• More corporate university partnerships.
• Courses increasingly modular.
• Less predefined schedules.
• Scheduling much more complex.

Blended Solution #24. Synchronous Sessions
(Breeze, Elluminate, WebEx, etc.)

Any questions, comments, or concerns?
Sample HOBLe chapters at: http://www.publicationsshare.com/
Archived talks at: http://www.trainingshare.com/