Designing Blended Learning to Engage Learners Online and In-Class
Overview

1. Brief Introductions
2. What is Blended Learning?
3. What do learners think about blended learning?
4. What does effective BL look like?
Family and Research

Getting to know you

What discipline areas do you teach in?

- Sciences
- Education
- Social Sciences
- Engineering
- Fine Arts
- Business
- Law
- Humanities
Have you taught an online or blended learning course before?
Books and research articles on Blended Learning

BL Research Articles

BL Presentations

BL Institutional Adoption Checklist

BL Video Examples
What is Blended Learning?
Definition:

*Blended learning* combines face-to-face instruction with computer-mediated (online) instruction.
Blended Learning Spectrum

Traditional F2F (no online components)

Technology Enhanced (no reduction in F2F contact time)

Blended Learning (reduction in F2F contact time)

Mostly Online (supplemental or optional F2F contact)

Completely Online (no F2F components)
Sometimes institutions call these blended but often they are not considered to be blended

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Because of the supervisory responsibility in K-12 . . . often the online portions are done in the brick and mortar school.
What do learners think about blended learning?
Learner Preferences

**ECAR 2011** - Responses from 3,000 students at 1,179 colleges and universities provided a *nationally representative sample* of students.


**ECAR 2012** - 195 institutions; 106,575 student responses, stratified sample of 10,000 U.S.-based respondents to proportionally match IPEDS undergraduate demographics.

2011 ECAR survey

- Seminars and other smaller classes with some online components: 36%
- Classes that give me the option to use as many or as few online components as I need to: 22%
- Large lecture classes with some online components: 16%
- Seminars and other smaller classes with no online components: 10%
- Seminars and other smaller classes that are completely online: 6%
- Large lecture classes with no online components: 5%
- Large lecture classes that are completely online: 5%

74% of students say they have taken at least one course that includes online components.

70% of students say they learn most in blended learning environments.

In 2008 15% of students said they took a class completely online; in 2012 31% did.

16% of students say they skip classes when course lectures are available online.

54% of students say they are more actively involved in courses that use technology.

55% of students say they wish their instructors used more simulations or educational games.

57% of students say they wish their instructors used more open educational resources.

What does research say about the effectiveness of BL?

Barbara Means meta analysis:

- **45 very different blends**
- **Improved outcomes** for blended learning
- Couldn’t identify reason for improvement
Effectiveness Research

Current BL Research Cases (2014)

Global Examples of BL in practice

Includes literature review on BL focusing on learning effectiveness, student and faculty satisfaction, access, and cost effectiveness.
What does effective BL look like?
Which item doesn’t belong?

1. Computer
2. Paint Brush
3. Television
Technology itself is not bad or good ...

technology = tool
value = how you use it
What makes a learning experience engaging?
Think of interaction with . . .

. . . peers and instructors

How is the student engaging inside and outside of class?

. . . Content
Purpose of BL . . .

. . . is NOT to eliminate the human interaction

. . . IS to maximize the potential of the learner-human and the learner-content interaction.
What are some of the challenges that prevent EVERY LEARNER from engaging in your classes?
Challenges to Engagement (Six Ps)

- Pacing
- Participation (active learning)
- Personal Interaction
- Preparation
- Place (Authenticity)
- Personalization
Learner preparation through online quizzes

Online quizzes – flipping classroom – Accounting (watch)
Flipping classroom for more active learning

Mastery & Personalizing - Video Link

Personal Interaction for struggling students

Problem solving in class - Video Link

Student Perspectives - Video Link
Have you had an experience like this . . .

Bethany & Math Homework
Blended Math Instruction – K-12

Student - Video Link

Teacher - Video Link
Each student's ability to understand and apply the material varies. The more students in a class, the more difficult it becomes to scaffold individual student learning.

Pre-class self-paced instruction with feedback – Chem Tutor (watch video)(link to Chem Tutor)(example module with practice/feedback)
Differing Ability Levels

Differentiating - Video Link
Because instruction is confined to a specific space and time, authentic learning activities and assessments can be difficult to design for the classroom. Simulated environments can provide access learning experiences that are more authentic than lecture-based instruction.

Above: BYU’s Virtual ChemLab (link to video)

Above: BYU’s Virtual Audiometer (link to video) (link to CTL demo)
Even in smaller traditional classes, it can be difficult for the instructor to set aside time for personal one-on-one interaction and feedback with students.

Personalized Video Feedback - Animation Class (watch)
Time constraints in a physical classroom may make it difficult for everyone to participate or contribute to a discussion.

### Class Discussions

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<tr>
<th>Strengths</th>
<th>Computer-mediated environment (Asynchronous text-based discussion)</th>
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<tr>
<td>Flexibility</td>
<td>Students can contribute to the discussion at the time and place that is most convenient to them.</td>
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<tr>
<td>Participation</td>
<td>100% students can participate because time and place constraints are removed.</td>
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<td>Depth of Reflection</td>
<td>Learners have time to more carefully consider and provide evidence for their claims and provide deeper more thoughtful reflections. (Mikulecky, 1998; Benbunan-Fich &amp; Hiltz, 1999)</td>
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<tr>
<th>Weaknesses</th>
<th>F2F environment (In-class discussion)</th>
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<td>Spontaneity</td>
<td>Human Connection: it is easier to bond and develop a social presence in a F2F environment. This makes it easier to develop trust etc.</td>
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<tr>
<td>Procrastination</td>
<td>Spontaneity: Doesn’t encourage the generation of rapid chains of associated ideas and serendipitous discoveries (Mikulecky, 1998)</td>
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<tr>
<td>Human Connection</td>
<td>Participation: Can’t always have everyone participate, especially if there are dominating personalities.</td>
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<td></td>
<td>Procrastination: There may be a tendency towards procrastination (Benbunan-Fich &amp; Hiltz, 1999)</td>
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Especially in larger traditional classes, it is often difficult to match your instructional pace with your individual students' ability to learn the material.

Student self-pacing – Intro to Accounting (watch)
Scheduling Collaboration

Effective collaboration can be a catalyst for learning in a course. Sometimes instructors avoid collaboration because it is difficult to manage this when schedules conflict.

Group Feedback - Psychology Class (watch)
1. Help learners to be more active (both face-to-face and online).
2. Be creative – do what works for you and the students.
We need to figure out how

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

Questions?
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