LOOKING FOR PEDAGOGY IN BLENDED COURSE DESIGN

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Program Overview

1. Introduction
2. Best Practices for Design
3. Pedagogical Practices
4. Preparing Students

[there will be breaks!]
POLL: Your Blended Initiative?

1. Institutional
2. College/School
3. Department
4. Program
5. Course
1. INTRODUCTION
<table>
<thead>
<tr>
<th>Meta-analysis</th>
<th>Best Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meta-analysis</td>
<td>Pedagogical Reports</td>
</tr>
<tr>
<td>Case Study (DBR)</td>
<td>Hybrid Academy</td>
</tr>
<tr>
<td>DBR: Orienting</td>
<td>BOL Learners</td>
</tr>
<tr>
<td>Content Analysis</td>
<td>Blended Models</td>
</tr>
</tbody>
</table>
**POLL: Your Definition of Blended?**

1. 10:20%
2. 20:40%
3. 30:80%
4. 50:50%
5. 60:75%
6. 75:90%

Other: Post in chat
Most Common Definitions

• Combined elements of **face-to-face** and **online courses**
• Provides a substantial portion (30-79%) of content **online**, typically relying on **discussions within a planned and pedagogically driven design**
• Pedagogy – “to lead” the learner
DISCUSSION: Two sides of blended

Appeal? VS. Challenges?
Workforce Blended/Hybrid Model

Two or more forms of distinct methods of instruction, such as:

✓ Classroom + online (traditional blended)
✓ Online + mentor or coach (e.g., independent study)
✓ Simulations with structured classes (e.g., Second Life™ and FTF)
✓ On-the-job training + informal learning (e.g., internships)
✓ Managerial coaching + eLearning (e.g., practicum)

(Maisie, 2002, p. 59)
Hyflex Model

Course

Online

100%

>99%

F2F

100%

>99%

Students make choice

(Beatty)
The Multimodal Model

Blending w/Purpose

Dialectic/Questioning - Discussion Forum

Synthesis/Evaluation - Assignment, Assessment

Social/Emotional - F2F

Collaboration/Student - Generated Content – wiki

Content – CMS, media, SM

Reflection – blog, journal

(Picciano, 2009)
### The Impact of Multimodal Learning in Comparison to Traditional, Unimodal Learning

Findings reported separately for Basic Skills and Higher Order Skills, and by the Inclusion or Absence of Interactivity.

#### Interactive Multimodal Learning

- Includes simulations, modeling, and real-world experiences; typically includes collaboration with peers, but could be an individual interacting with resource.

#### Basic Skills

- **II.** Increase for average student: +9
  - Percentile ranking on retention of basic skills.

#### Higher Order Skills

- **III.** Increase for average student: +32
  - Percentile ranking on higher order or transfer skills.

#### Non-Interactive Multimodal Learning

- Includes using text with illustrations, watching and listening to animations, listening to lecture with graphics on devices such as whiteboards, etc.; typically involves individualized learning, or whole-group work that includes listening, observing, or reading, but little to no interaction.

#### Basic Skills

- **I.** Increase for average student: +21
  - Percentile ranking on retention of basic skills.

#### Higher Order Skills

- **IV.** Increase for average student: +20
  - Percentile ranking on higher order or transfer skills.

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Community of Inquiry

Figure 1. Community of inquiry framework.

(Vaughn & Garrison, 2008)
2. BEST PRACTICES
DISCUSSION: Your Wicked Problems?

- No specified alternative solutions (must be discovered)
- Complex in nature
- Difficult to tell when solved
- Better and worse solutions (rather than right or wrong)

- May have moral, political, or professional dimensions
- Difficult to determine success

Shum, 1997
POLL: Starting Point for Design?

1. Syllabus
2. Course Objectives
3. Existing Course Materials
4. Other Blended Courses
5. An Instructional Designer
1. Course RE-Design

- Re-design avoids building a **course and a half**
- The process typically requires **three to six months** development
- **Objectives** written from the student perspective are the best starting point
- **F2F meetings** should require **active participation**
No direct translation
## Alignment & Peer Review

<table>
<thead>
<tr>
<th>Objective</th>
<th>Activity</th>
<th>Location</th>
<th>Assignment</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Given Pythagorean theory, learner will design a skateboard ramp for a designated area.</td>
<td>1. Read chapter</td>
<td>Outside of class</td>
<td>1. Develop proposal</td>
<td>1. Skateboard ramp design meets criteria.</td>
</tr>
<tr>
<td></td>
<td>2. Solve word problems</td>
<td>Outside of class</td>
<td>2. Complete Design</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Share ramp design proposal</td>
<td>In class</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Make a Blend

Top Recommendations:
1. Varied interactivity
2. Prompt feedback

- 1. Online tutorial
- 2. Online Discussion
- 3. Classroom Project
- 4. Peer Critique
- 5. Online Test
Varied Approaches

**Formal**
- Teacher-directed
  - Workshop
  - Lab
  - Coaching/Mentoring
  - Debate
  - Simulations
  - Cases/problems

**Informal**
- Learner-Centered
  - Team organization
  - Feedback
  - Peer critique
3. Class & Online Technology

Select tech to support learning

**Classroom**
1. Model/introduce online tech
2. Use work that is portable

**Online**
1. Bridge F2F meetings
2. Practice
3. Communicate
4. Intentional Assessment

**Online**
- Low stakes
- Supports learning
  - Quizzes
  - Assignments
  - Essays

**Face-2-Face**
- High stakes
- Final measure
  - Exams
  - Tests
  - Presentations
5. Course Implementation

- Communicate blended design, expectations, and process .... Clearly (see Syllabus Handout)
- Focus on learner accountability
- Periodically evaluate course
DISCUSSION: Your Best Practices?

• What is missing?
• What is incomplete?
• What have YOU learned?
BREAK
3. PEDAGOGICAL PRACTICES
## Subtle Differences

<table>
<thead>
<tr>
<th>BEST PRACTICES</th>
<th>PEDAGOGY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Focus on objectives</strong> to</td>
<td><strong>Focus on activity</strong> to</td>
</tr>
<tr>
<td>determine the blend</td>
<td>determine the blend</td>
</tr>
<tr>
<td><strong>Integration</strong> between F2F &amp;</td>
<td><strong>Report online, F2F priority</strong></td>
</tr>
<tr>
<td>online</td>
<td></td>
</tr>
<tr>
<td><strong>Varied</strong> interactivity</td>
<td><strong>Pedagogical template</strong> vs.</td>
</tr>
<tr>
<td></td>
<td><strong>routine</strong> activity</td>
</tr>
<tr>
<td>Active learning</td>
<td>Active learning</td>
</tr>
</tbody>
</table>
POLL: What influences design of blend?

1. Carnegie Classification
2. Mission
3. Discipline
4. Type of Course
5. Institutional Services
6. Instructor Experience
7. Other: Post in chat
Your students, course, program

Constraints & Affordances

Multiple Contexts | Multiple Solutions

Customization
What Happens Where & Why

1. 50/50 most prevalent
2. Flexible attendance
3. B-M-E least prevalent

<table>
<thead>
<tr>
<th>Active Online?</th>
<th>Active Offline?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Students work completely online to develop their component of a project, and then present it in the classroom setting.</td>
<td>• Students organize in the classroom setting and finalize their part in the online environment.</td>
</tr>
</tbody>
</table>
Is it really blended?

- In the face-to-face class, the professor would first introduce the topic for the week with a short lecture and then pose questions or a short case for students to apply the taught concepts.

- The week's topic and concepts were then carried onto the electronic discussion board where the professor poses questions for students to respond to, and for them to work with each other in clarifying each others' responses.

High Level Organization

Frontloading

• Students are prepared to discuss and work through course content in face-to-face class meetings. Content is presented online.

Backloading

• Face-to-face meetings are used to introduce content and place it in context for the online work that students will complete before the next class meeting.
POLL: Face-to-Face Meetings?

1. Clarifying muddy points
2. Peer-led discussions
3. Peer debriefing
4. Collaborative work
5. Reinforcing social presence
Dominant Online Activities

4. Group work
3. Assignment/Assessment for learning
2. Content Presentations
1. Discussion

EXAMPLE: Entrepreneurship Module
Active Learning Formats

**Product**
- Focus on practice through isolated or progressive activities

**Process**
- Assignments and activities support the development of a well-defined outcome that documents and illustrates the learner’s mastery of course content

**Project**
- Assignments and activities support an ongoing step-by-step set of activities and assignments with benchmarks so students know they have accomplished objectives
POLL: Which of the following tech choices support the blend?

1. Provide opportunities for practice
2. Support group work
3. Present content
4. Facilitate communication among peers
DISCUSSION: Discussions

→ Reinforce readings/presentations
→ Provide venue for teamwork
→ Clarify content (peer-to-peer)
→ Provide a documented communication venue
→ Provoke or support deeper understanding through questioning and problem solving
Layering

1. **Structural Dimensions** (where learning occurs and how it is connected)

2. **Dynamical Dimensions** (the shift from a focus on technology to learning which occurs over time)

(Derntl & Motschnig-Pitrik, 2004)
Case-based Layering

• Part 1. *Introduce case* (e.g., five roles and five teams not assigned a role) and basic concepts (covered in class).

• Part 2. *Elaborate on core content.* The instructor provides an opportunity for investigation (e.g., online in private group discussions).

• Part 3. *Mediate conflicts of investigation.* The instructor provides ways for students to consider areas of disagreement (e.g., role play in class but prepared online).

(Glazer, 2010)
1. “Knowledge points” are presented in class.
2. Instructor poses questions in class for students to test through text messages.
3. The instructor then provides real world problems related to knowledge points and students discuss through SMS.

(Wang, Novak, & Shen, 2008)
Layering as Game

- Phase 1 - Preliminary acquisition of some high-level knowledge in specific subject domains through teacher scaffolding in class.
- Phase 2 - Active participation as game characters participate in a virtual interactive environment to construct knowledge and skills through their near real-life game-play experiences.
- Phase 3 - Reflection and generalization of game-based learning through teachers’ debriefing. Students write a reflection after every experience and each group submits a debriefing report.

(Shang, Jong, Lee, & Lee, 2008, p. 348)
Online Processing

• Students view weekly online video lectures (narrated PowerPoint™).

• After viewing video, students pose questions about the content to a discussion area.

• After viewing an online lecture students complete an online survey to monitor the course itself.

• The instructor conducts weekly laboratories in part to clarify any misunderstanding and provide hands-on experience as appropriate.

(Ernst, 2008)
Streamlining

• **Revisit past learning.** The instructor reviews and reinforces what students have already learned.  
  **F2F**

• **Integrate current learning through multiple processes** (e.g., analysis, interpretation, translation for classmates, creating transparency).  
  **Online**

• **Foreshadow what comes next.** The instructor reviews upcoming content, thoughtful reading and summary, aimed at student and self-learning.  
  **F2F**

(Fulketh, 2009, p. 52)
General Layering Principles

1. Classroom time is meaningful, relevant, purposeful.

2. Online time is active, task-oriented, clear, and interactive (content, peers, and/or resources).

3. Accountability relates to objectives and expectations (their grade).
ACTIVITY: Where’s the blend?

• From the provided handout *Blended Cases*
• Select one case
• Consider course needs and possible options
• What pedagogical design can best serve the course? Consider backloading/frontloading, and layering strategies
BREAK
4. LEARNER PREPARATION
POLL: How do you prepare students?

1. Required F2F orientation session
2. Required online orientation session
3. Optional orientation (F2F or online)
4. Short course (One hour)
5. Ticket to class

Other: Post in chat
Is there a difference?

Oriented

VS.

Ready
Factors Contributing to Attrition

- **Course factors** are influences involving the course design (media, organization, activity) and relevance.

- **Environmental factors** include family, organizational, and technical support and may also include work scheduling and support.

- **Personal factors** include self-efficacy, self-determinism, autonomy, and time management skills. 

(Street, 2010)
## Perceptions about Retention

<table>
<thead>
<tr>
<th>Rank</th>
<th>Administrators</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Self-discipline</td>
<td>Self-motivation</td>
<td>Convenience/Flexibility</td>
</tr>
<tr>
<td>2</td>
<td>Responsiveness of instructor/Prompt feedback</td>
<td>Clearly-stated requirements</td>
<td>Time management</td>
</tr>
<tr>
<td>3</td>
<td>Self-motivation</td>
<td>Student-teacher interaction</td>
<td>Clearly-stated requirements</td>
</tr>
<tr>
<td>4</td>
<td>Computer access</td>
<td>Computer access</td>
<td>Independent learning/Responsibility</td>
</tr>
<tr>
<td>5</td>
<td>Basic computer skills</td>
<td>User-friendly format</td>
<td>Technical support</td>
</tr>
<tr>
<td>6</td>
<td>Clearly-stated requirements</td>
<td>Discipline</td>
<td>Course design</td>
</tr>
<tr>
<td>7</td>
<td>Reading ability</td>
<td>Computer Skills</td>
<td>Accessibility</td>
</tr>
<tr>
<td>8</td>
<td>Time management</td>
<td>Outside assistance</td>
<td>Personal contact</td>
</tr>
<tr>
<td>9</td>
<td>Instructors</td>
<td>Reliable server</td>
<td>Discussion/Interaction</td>
</tr>
<tr>
<td>10</td>
<td>Convenience/Flexibility</td>
<td>Times</td>
<td>User-friendly format</td>
</tr>
</tbody>
</table>

Predictors of Success

**Blended/online Learner**

1. Self-regulation
2. Self-management
3. Ability to be emotionally engaged
4. Adaptable identity
5. Realistic expectations of time & effort
6. High level of academic achievement
7. Comfort with eLearning
8. Technically savvy & adaptable

**Smarter Measures™**

1. Self-motivation
2. Time-management skills
3. Self-discipline
4. Persistence
5. Availability of time
6. On-screen reading rate and recall
7. Ability to use a laptop, printer, software, and the Internet
8. Typing speed and accuracy.
Skill Set for Learning

Social Learning
Discursive/Dialogic
Self/Group Evaluation
Reflection

(Dabbagh, 2007)
Changes in College Demographics

Between 2010 and 2011, international enrollment grew by 5%, a 32% increase from a decade ago.

More women are going to college than ever: Between 1970 and 2000, the number of bachelor's degrees awarded to women increased 107%.

Since 2000, women have represented 57% of those enrolled in college.

Women are earning nearly equal numbers of post-graduate and professional degrees.

More Americans are going to college:

<table>
<thead>
<tr>
<th>Year</th>
<th>% of 18 to 24-year olds enrolled in college:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>27%</td>
</tr>
<tr>
<td>2004</td>
<td>34.5%</td>
</tr>
<tr>
<td>2008</td>
<td>39.9%</td>
</tr>
</tbody>
</table>

More African Americans are heading to college than before:

<table>
<thead>
<tr>
<th>Year</th>
<th>% of African Americans in college:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976</td>
<td>9%</td>
</tr>
<tr>
<td>2009</td>
<td>14%</td>
</tr>
</tbody>
</table>

As are Hispanics:

<table>
<thead>
<tr>
<th>Year</th>
<th>% of Hispanic college students:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>47%</td>
</tr>
<tr>
<td>1992</td>
<td>70%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Degree</th>
<th>% of degrees earned by women:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master's Degrees</td>
<td>39.7%</td>
</tr>
<tr>
<td>Professional Degrees</td>
<td>5.7%</td>
</tr>
<tr>
<td>Doctoral Degrees</td>
<td>13.3%</td>
</tr>
<tr>
<td>Professional Degrees</td>
<td>48.9%</td>
</tr>
<tr>
<td>Doctoral Degrees</td>
<td>52.5%</td>
</tr>
</tbody>
</table>

Sources: nytimes.com | good.is | ilie.org | articles.lvpressonline.com | nces.ed.gov | news.ucdavis.edu | census.gov
DISCUSSION: Are your students prepared?
Orientation Formats

**Strategies**

- Smarter Measures™
- One-hour courses
- Short module (Student Passport to Elearning (SPEL))

**Typical Content**

- Operations of the course delivery method
- Learner deficits (as per success indicators)
- How to be more prepared
Function of an Orientation?

- Students identify what areas they might have problems;
- Faculty members understand what areas students struggle with;
- Designers design better and more engaging course content; and,
- The institution better understand the needs of faculty and students.

(Rocco, 2007)
Orientation Strategy Challenges

- Typically generic: One size fits all
- May eliminate the under-prepared
- Students dislike courses that are strongly text-based: Orientations are typically text-based
- Necessary extras are not addressed in most orientations: policies, services, instructor idiosyncrasies, course culture
MULTIPLE Paths to Success

√ Learning Scenarios
√ Self-paced
√ CMS delivered
√ Continuum of Responses
Organize the following statements from the most successful to the least successful way to complete assigned readings for the next class period’s discussion.

• Download the readings and read them as I have time and remember the things I think are important for the discussion
• Download the readings and skim through them before class and just go off of what others say during the discussion
• Download and complete readings when I have set aside time to read completely and take notes for the discussion
• Borrow someone else’s reading notes and skip the reading completely
Finally! An upper level elective that you have wanted to take for two years is available in the spring semester! Because the course is not offered often, three sections are offered and you have to decide which one to take. Don’t forget - you work part-time in the evenings you have to be careful about choosing the right section.

1. Section .001 meets on the **first scheduled class day** and the **last class day**. The rest of the course is offered through Blackboard where you will work by yourself and with others.

2. Section .002 is offered as a seminar in a small room on campus in the evenings. There will be a lot of discussion and **class attendance is mandatory**.

3. Section .003 **meets on campus every other week** with online activities between each class meeting.

Given your work schedule, which is probably the best for you?
1. (Section .001 (online) [Feedback: You have chosen the expert answer! Online courses meet 100% online; the professor and students are not in the same place. Hybrid courses meet a portion of the time online; the professor and students meet partly online and the rest of the time meet in the classroom. The online section allows you the most flexibility so you won’t have to miss work or class meetings.]

2. Section .003 (blended) [Feedback: You have chosen the competent answer! Hybrid courses meet a portion of the time online; the professor and meet partly online and the rest of the time meet in the classroom. It is likely you can manage your work schedule and not miss any classroom meetings]

3. Section .002 (classroom) [Feedback: You have chosen the novice answer! Face-to-face courses meet at all times where the professor and students are in the same place. Online courses meet 100% online; the instructor and students are not in the same place. Hybrid courses meet a portion of the time online; the instructor and students meet in the classroom and online. Classroom courses typically require attending class every week on campus and you know you will not be able to do this.]
Orientation Recommendations

• Make it real: Relate to student’s reality
• Make it relevant: Relate to requirement of course (labs, reading, writing, practice, field work, professional standards, etc.)
• Make it required: Even experienced students may be unprepared
• Consider just-in-time/just-in-need supports
DISCUSSION: “Just-in” Supports

• What strategies do you use to support learner ‘in the moment’?
  – Nudges?
  – Analytics?
  – On-demand services?

• What has proven effective in lowering attrition?
COMMENTS, QUESTIONS?
THANK YOU!

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Patricia.mcgee@utsa.edu