Blended Learning: What Does This Trend in Higher Education Mean to WPI?

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What is Blended Learning?

- Some face-to-face learning is replaced by online learning, making it possible to reduce the amount of time spent in class

- Combines the best elements of traditional face-to-face instruction with the best elements of distance education
What is Blended Learning?

Blended courses have some face-to-face classroom activities replaced by instructor-guided online learning.
Defining Elements of Blended Learning

• Courses integrate online with traditional face-to-face class activities in a *planned, pedagogically valuable* manner in which a portion of face-to-face time is replaced by online activity.
Dimensions of the Blend

• Self-paced and live learning
• Offline and online learning
• Structured and unstructured learning
• Lectures and labs
• Work and learning
The Blended Learning Trend

• “the single greatest unrecognized trend in higher education today.
  - Graham B. Spanier, Penn State

• “the sleeping giant that will transform higher education pedagogically, culturally, and institutionally.”
  - Sloan-C, June 2005

• “It’s a blended world. Students, faculty, all of us live in a face-to-face world and in an online world.”
  - Carol Twigg, RPI’s NCAT
What problem(s) is BL trying to solve?

• Potential outcomes include:
  – Blending improves the quality of learning outcomes
  – Blending improves access to programs and resources
  – Blending offers cost efficiencies such as optimum use of physical space.
BL fits with how students learn today

- Most learning activity for students takes place outside the classroom
- Social interaction is a growing part of learning
- Technology is natural
- Learning can occur out of sequence
- Students construct content rather than just consume it
Benefits for Faculty

• Experiment with new, technology-enhanced pedagogies
• Professional development opportunity
• Increased time flexibility
• Leads to research, publications, and presentations
• Spend more time guiding and interacting with students
Benefits for Students

• Convenience
• Flexibility
• Builds technology and information literacy
• Promotes active learning and increased student control of learning
• Spend more time working both individually and collaboratively
• Maintains social aspects of a classroom
• Accommodates different learning styles
Benefits for Institutions

- An opportunity to systematically improve teaching and learning
- Make more efficient use of resources (classrooms and faculty time)
- Appeal to new groups of students
- Retention of existing students
Issues/Challenges

• Requires course redesign
• Faculty and student time management issues
• “Course and a half” potential
• Informing students
• Technology support
• Incentives
• Definition of credit hours/contact hours
Who is Blending?

• Formal pilots and programs
  – RPI (National Center for Academic Transformation)
  – RIT
  – University of Central Florida
  – University of Wisconsin, Milwaukee
  – Regis College ("Degree in Three" program)
  – UMass (Sloan Foundation grant)

• Ad hoc blending
Blended Learning Outcomes

• Students in blended courses achieve better grades than students in traditional and online classes. (UCF)
• Lower attrition than completely online classes and comparable attrition with traditional classes. (UCF)
• Students claim to have more interaction with other students and comparable interaction with instructors (RIT)
Types of Blends

• Course-level
• Program-level
• Institutional-level
Learning 2.0

• User generated content
• Collaboration and “all about the learner”
• “all about people”
• It’s not about the technology
Example Of a BL Program Structure

Student Experience

- Face-to-Face Campus Sessions
- Self Directed Electronic Content
- Web-based Interaction

Cohort Experience

Peer, Alumni and Corporate Network

Program & Tech Support

Faculty
# The Five Pillars

<table>
<thead>
<tr>
<th>Quality principles</th>
<th>For Higher Education</th>
<th>For Corporations</th>
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</thead>
<tbody>
<tr>
<td>Learning effectiveness</td>
<td>Learning effectiveness, new knowledge, applied theory, continuous feedback from stakeholders</td>
<td>Productivity, improved operations</td>
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<tr>
<td>Cost effectiveness and Institutional commitment</td>
<td>Cost effectiveness, brand recognition, scalability, public service and influence, prestige, funding</td>
<td>Cost Savings, brand, market capture</td>
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<tr>
<td>Access</td>
<td>Wider access including international communities, greater research and development opportunities, faster response to new fields of study, capacity enrollment</td>
<td>Market Growth, distributed team work</td>
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<tr>
<td>Faculty (employee) satisfaction</td>
<td>New populations of students and colleagues, greater satisfaction with teaching and learning</td>
<td>Competition, competitive intelligence, understanding</td>
</tr>
<tr>
<td>Student (customer) satisfaction</td>
<td>Learner and teacher satisfaction and loyalty, career opportunities including OJT, internships, and mentorships Recruitment and retention</td>
<td>Recruitment and retention</td>
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Source: Sloan-C, 2005
Enablers for Blended Learning

• The conditions in which an initiative is undertaken
  – Cultural, Environmental, Business

• The resources available to support blended learning
  – Do we have the delivery expertise?
  – Do we have the development expertise?
  – Do we have the budget?

• The target audience

• The characteristics of the content
  – How should it be reinforced?
  – Is group interaction necessary?
  – Will the content need to be updated frequently?
  – How long will it take to teach this material?
Obstacles to Effective Blended Learning

• Teaching the content online just as you would teach it in the classroom
• Lack of planning
  – Learning objectives, budget, timelines
• No identified champions
• Lack of measurement metrics
• Lack of support resources
Trends and Predictions

1. Mobile Blended Learning
   - Increasing use of mobile and handheld will create rich and exciting new avenues for blended learning.

2. Greater Visualization, Individualization, and Hands-on Learning
   - Blended learning environments will increasingly become individualized; in particular, emphasizing visual and hands-on activities.

3. Self-Determined Blended Learning
   - Blended learning will foster greater student responsibility for learning. Decisions about the type and format of blended learning will be made by students instead of instructors or instructional designers.

4. Increased Connectedness, Community, and Collaboration
   - Blended learning will open new avenues for collaboration, community building, and global connectedness.

5. Increased Authenticity and On-Demand Learning
   - Blended learning will focus on authenticity and real world experiences to supplement, extend, enhance, and replace formal learning. As this occurs, blended learning will fuel advancements in the creation and use of online case-learning, scenarios, simulations and role play, and problem-based learning.

Source: Bonk, C.J., Handbook of Blended Learning, 2005
Trends and Predictions

6. Linking Work and Learning
   - As blended learning proliferates, the lines between workplace learning and formal learning will increasingly blur. Higher education degrees will have credits from the workplace and even credit for work performed.

7. Changed Calendaring
   - The calendar system or time scheduling of learning will be less appropriate and predefinable.

8. Blended Learning Course Designations
   - Courses and programs will be increasingly designated as blended learning paths or options.

9. Changed Instructor Roles
   - The role of an instructor or trainer in a blended environment will shift to one of mentor, coach, and counselor.

10. The Emergence of Blended Learning Specialists
    - There will emerge specialist teaching certificates, degree programs, and resources or portals related to blended learning courses and programs.

Source: Bonk, C.J., Handbook of Blended Learning, 2005
Closing Thoughts

• Hype or Reality?

• Where is WPI relative to higher ed. benchmarks / competition?

• Do we need a BL strategy?