Promoting Innovation Through Blended Learning and Fully Online Courses

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Sue Bauer

• Instructional Designer/Faculty
  • University of Central Florida
  • Naval Post Graduate
  • Canvas (MOOC)

• Areas of Interest
  • Emerging Technology Adoption
  • Mobile Learning/Teaching
  • Project Management in Higher Education
Agenda

• Introductions/Expectations/Caveats
• Session Overview
• Re-envision F2F/Online Training
• Pedagogy and Technology
• Resources/Barrier Awareness
• Implementing Innovation
• Copyright/Accessibility Awareness
• Quality Assurance
• Wrap-up/Q&A
Introductions, Expectations, and Caveats
Online Learning @ UCF

500% growth in blended courses

Fully Online Courses
Blended Learning Courses
Fall 2012 Student Headcount

Total Student Headcount is 59,767 (including medical)

Note: Circle size is proportional but the overlapping regions are not and are for demonstration purposes only.
## Blended Learning at UCF

<table>
<thead>
<tr>
<th>Blended Learning</th>
<th>2014-2015 Academic Year</th>
<th>Totals since 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sections</td>
<td>1,106</td>
<td>9,401</td>
</tr>
<tr>
<td>Registrations</td>
<td>44,764</td>
<td>332,010</td>
</tr>
<tr>
<td>Student Credit Hours (SCH)</td>
<td>125,288</td>
<td>966,021</td>
</tr>
</tbody>
</table>
## Course Evaluation Ratings

\[ N = 672,185 \]

<table>
<thead>
<tr>
<th>Course Modality</th>
<th>% Overall “Excellent”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blended</td>
<td>51.2%</td>
</tr>
<tr>
<td>Fully Online</td>
<td>48.3%</td>
</tr>
<tr>
<td>Face to Face</td>
<td>48.2%</td>
</tr>
<tr>
<td>Lecture Capture (with classroom)</td>
<td>43.4%</td>
</tr>
<tr>
<td>Lecture Capture (no classroom)</td>
<td>41.6%</td>
</tr>
</tbody>
</table>
Student Satisfaction in Fully Online and Blended Courses

- Fully online (N = 1,526)
  - Very Satisfied: 39%
  - Satisfied: 41%
  - Neutral: 38%
  - Unsatisfied: 9%
  - Very Unsatisfied: 3%

- Blended (N = 485)
  - Very Satisfied: 44%
  - Satisfied: 11%
  - Neutral: 9%
  - Unsatisfied: 5%
  - Very Unsatisfied: 1%
Student success

<table>
<thead>
<tr>
<th></th>
<th>F2F (n=647,390)</th>
<th>Blended (n=73,629)</th>
<th>Fully Online (n=189,208)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer 12</td>
<td>90 94 89</td>
<td>87 90 87</td>
<td>87 91 89</td>
</tr>
<tr>
<td>Fall 12</td>
<td>88 92 90</td>
<td>91 94 90</td>
<td>88 90 89</td>
</tr>
<tr>
<td>Spring 13</td>
<td>91 94 90</td>
<td>87 91 89</td>
<td>88 90 89</td>
</tr>
<tr>
<td>Summer 13</td>
<td>91 94 90</td>
<td>87 91 89</td>
<td>88 90 89</td>
</tr>
<tr>
<td>Fall 13</td>
<td>88 90 89</td>
<td>88 90 89</td>
<td></td>
</tr>
<tr>
<td>Spring 14</td>
<td>88 90 89</td>
<td>88 90 89</td>
<td></td>
</tr>
</tbody>
</table>
Faculty Willingness to Teach Web/Blended Courses in the Future

Positive

Neutral or negative

Online n=71

81%

13%

2%

Definitely

Probably

Probably not

 Definitely not

Blended N=53

69%

16%

10%

6%

81%

13%

2%

4%
Session Expectations

- Please follow along.
- Participate!
- Complete Activities/Worksheets.
- Participate in Small Group activities.
- Contribute to Whole Class Wrap-up Sessions.
Blended “Caveats”

- No widely accepted definition of blended learning
- Blended = “best/worst of both worlds”
- Blended learning best conceptualized as f2f-enhanced web course
- Integration of f2f and online is perhaps the most elusive of concepts for blended instructors
- Materials shared here are targeted at those transitioning from f2f-only experience but may be applicable to those with prior online or blended experience
- No one-size-fits-all answers
Session Overview

Today we follow this general format:

- Presentation of Content
- Independent Work
- Small Group Discussion
- Whole Class Wrap-up
- Repeat...
Re-envision Training
Face-to-face and Online

Joint Special Operations University Mission...

to prepare Special Operations Forces (SOF) to shape the future strategic environment by providing specialized joint professional military education, developing SOF specific undergraduate and graduate level academic programs and by fostering special operations research, analysis and outreach in support of USSOCOM objectives.
“The formal professional military education process provides the starting point... in today’s dynamic environment such traditional education must be augmented by more adaptive and responsive learning activities, scalable to the SOF community’s needs and providing an array of challenging options that build individual expertise.”

Re-envision Training
Face-to-face and Online

Unfulfilled needs can be viewed as joint SOF education gaps and include:

• education not provided at the right time in a SOF member’s career (late-to-need);
• course offerings that do not address SOF needs; education that is often difficult to obtain; and
• formal curriculum that is slow to respond to emerging/dynamic SOF needs.
• increased interagency, international, conventional forces and civilian academic education opportunities.

Re-envision Training
Face-to-face and Online

Question 3 rated the importance of education attributes. Results showed that quality education ranked first followed by various types of personal interactions.

**Q.3 – Education Attributes**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Quality</td>
<td>5.6</td>
</tr>
<tr>
<td>2. Interaction w/Students</td>
<td>5.2</td>
</tr>
<tr>
<td>3. Interaction w/Services</td>
<td>5.2</td>
</tr>
<tr>
<td>4. Interaction w/InterAgency</td>
<td>5.1</td>
</tr>
<tr>
<td>5. Interaction w/Instructors</td>
<td>5.1</td>
</tr>
<tr>
<td>6. Guest Speakers</td>
<td>4.7</td>
</tr>
<tr>
<td>7. Interaction w/Intl Students</td>
<td>4.4</td>
</tr>
<tr>
<td>8. Course Length</td>
<td>4.2</td>
</tr>
<tr>
<td>9. Minimize TDY</td>
<td>4.1</td>
</tr>
<tr>
<td>10. College Credit</td>
<td>3.7</td>
</tr>
<tr>
<td>11. Low Cost</td>
<td>3.4</td>
</tr>
</tbody>
</table>

**Conclusion:** Quality Education with Personal Interactions are Most Important => Classroom/Seminar Type Education
Re-envision Training
Face-to-face and Online

Q.13 – Should JSOU Provide Web-Based Knowledge Resources?
All Groups

Scale of 1 to 6

Cumulative
USASOC
WARCOM
AFSOC
JSOC
SOCCTRENDS
GOFO
Enlisted
SOF
Non-SOF
USA
USN
USMC
USAF
CIV
Entry
Intermediate
Senior
Re-envision Training
Face-to-face and Online

What does this all mean? It is your mission to:
• Implement adaptive and responsive learning activities
• Provide education at the right time in a SOF member’s career.
• Offer courses that address SOF needs and education that is easy to obtain.
• Formal curriculum quick to respond to emerging/dynamic needs.
• Increase interagency, international, conventional forces and civilian academic education opportunities
Re-envision Training
Face-to-face and Online

Activity:
1. Complete the Envisioning Innovation file independently.
2. Share your response within your small group.
3. Participate with whole class activity wrap-up.

Next... Pedagogy and Technology.
Pedagogy and Technology

Goal:

To encourage faculty to adopt proven pedagogy using technology as a lever to engage students and/or reduce faculty workload.

Source: Northern Arizona University’s Faculty Technology Innovation Grant Program: http://nau.edu/Provost/Blended-Learning/Faculty-Technology-Innovation-Grant-Program/
Pedagogy and Technology

El Dorado vs. DC-9

Image sources:
- https://upload.wikimedia.org/wikipedia/commons/a/a8/DC-9_reduced-gravity_training_aircraft_-_going_up.jpg
Pedagogy and Technology

• ADDIE Model

Analyze
Design
Develop
Implement
Evaluate
Pedagogy and Technology

With purpose and context in mind, the designer can select, combine, and organize different elements of on-line and traditional instruction. Carman (2002) identifies five such elements calling them key “ingredients” (p. 2):

- Live events.
- Self-Paced Learning.
- Collaboration.
- Assessment.
- Support Materials.

Pedagogy and Technology

- **Live events.**
  - These are synchronous, instructor-led events.
  - Traditional lectures, video conferences, and synchronous chat sessions such as Blackboard Collaborate or Adobe Connect are examples.
Pedagogy and Technology

• **Self-Paced Learning.**
  • Experiences the learner completes individually on their own time such as an internet or mobile app based tutorial.
Pedagogy and Technology

• Collaboration.
  • Learners communicate and create with others. E-mail, threaded discussions, and wikis are all examples.
Pedagogy and Technology

- **Assessment.**
  - Measurements of whether or to what extent learning has taken place. Assessment is not limited to conventional tests, quizzes, and grades. Narrative feedback, portfolio evaluations and, importantly, a designer’s reflection about a blended learning environment’s effectiveness or usefulness are all forms of assessment.
Pedagogy and Technology

- **Support Materials.**
  - These include reference material, both physical and virtual, FAQ forums, and summaries. Anything that aids learning retention and transfer.
Pedagogy and Technology

Activity:
1. Informally complete the Pedagogy and Technology file.
2. Share your response within your small group.
3. Participate with whole class activity wrap-up.

Next... Resources/Barriers Awareness

Source: BlendKit2015
https://blended.online.ucf.edu/blendkit-course-diy-project-tasks/
Resources and Barriers

Awareness!
Preparedness!

To address identified resources and instructional problems/bottlenecks/barriers that can be solved through planning/technology.
Resources and Barriers

TPACK Knowledge
Integration of:

- content knowledge (CK),
- pedagogical knowledge (PK)
- technological knowledge (TK)

## Resources and Barriers

<table>
<thead>
<tr>
<th>First Order Barrier #1: Access to Technology</th>
<th>First Order Barrier #2: Availability of Technology</th>
<th>First Order Barrier #3: Funding for Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can the instructor physically access the technology?</td>
<td>Is the technology available to the instructor on demand, or will it take time to become available?</td>
<td>Is the funding available to purchase the technology?</td>
</tr>
<tr>
<td>Can the Students Physically access the technology?</td>
<td>Is the technology available to the students on demand, or will it take time to become available?</td>
<td>Is the funding available to purchase some of the technology?</td>
</tr>
<tr>
<td>Once accessibility has been established, then one can move to First Order Barrier #2</td>
<td>If accessibility and/or availability are not established, then one can move to First Order Barrier #3</td>
<td>Establishing an answer to #3 will help you estimate whether or not use of a specific technology is even a consideration for your class.</td>
</tr>
</tbody>
</table>
Resources and Barriers

Second Order Barriers

The following is a list of common Second Order Barriers:

• Technology is nothing more than a distractor. My students do not need another reason not to focus.
• The use of most technology reinforces bad writing skills.
• Technology makes it very easy to cheat.
• My current methods work. Why should I change them?
• Dissatisfaction with perceived lack of support
• Technology is unreliable
• Technology changes too fast.
• Too much trouble.
• Fear of changing current mindset.
• No/bad examples.
• Use of tech is mandated, but no extrinsic rewards for integrating.
• Time requirement to change pedagogy AND learn new technology.
• The university is undergoing changes
• Beliefs about the actual benefit of using technologies
Resources and Barriers
Second Order Barriers

**Steps to Getting past Second Order Barriers:**

- Develop a clear vision of what you would like your students to accomplish.
  - Outline how this technology can help you better accomplish your goals.
  - Give the vision the freedom of flexibility, and give yourself the freedom to make mistakes.
- Identify areas in your course where the technology might be useful.
- Seek out instructors who are using the technology for instruction and observe them.

(Modified from Ertmer, 1999)
Resources and Barriers
Second Order Barriers

• Check your resources before you implement your plan.
  • Make sure your students have the access they need to accomplish what you would like them to accomplish.
  • Practice- take some time to practice your plan, and remember: always have a plan B when using technology.
  • Make sure that you and your students know where to quickly find support if they hit a road block.

• Assess your current and future use of technology for instruction and find ways to critically reflect about your experiences.

• Discuss and collaborate with colleagues.
  • Find ways to discuss with others what is working and not working.
  • Explore the possibility of team teaching a topic with a colleague who is proficient at using selected technology for learning.
Resources and Barriers
Second Order Barriers

Anything new means change, and change is always met with resistance. The goal of an educator and an institution is to embrace change cautiously. Enjoy innovation and understand that innovation comes with its share of successes and failures. Set-up implementation with thoughtful planning and an understanding that success comes with sacrifice. This new will become the norm.

~Me
Resources and Barriers

Activity:
1. Informally complete the Resources and Barriers file.
2. Share your response within your small group.
3. Participate with whole class activity wrap-up.

Next... Break and them Implementing Innovation!
TAKE A BREAK!
Implementing Innovation
Implementing Innovation

Today we will highlight a few options for implementing innovations:

• Digital Badges
• Mobile
• Open Educational Resources (OER)
• Social Bookmarking
• Web conferencing
• Simulation
Implementing Innovation

Digital Badges

What is it?
• Micro-credentialing
• A way to engage students by recognizing their achievements at various stages in the learning process

Three basic parts:
• Issuer
• Earner
• Displayer

Top Digital Badge Sites:
• Credly.com
• Openbadges.org
• Basno.com
Implementing Innovation

Mobile Stats

• 62% of currently employed individuals use their smartphone for work purposes
• Mobile devices support both informal and formal learning
• This year, the number of available mobile devices is set to outnumber the total human population
• The sale of mobile devices is set to overtake the sale of PCs
• Mobile devices are quickly becoming the preferred method of accessing the internet
• The workforce is becoming more mobile and globally distributed
• Tech savvy-ness and the ability to find answers are becoming highly desirable entry-level skills

Why Implement Mobile?

• Learning Management System Apps
• Mobile Friendly Content
• Push notifications

Open Educational Resources (OER)

What are OERs?
• High-quality,
• Openly licensed,
• Online educational materials
• Offer an extraordinary opportunity for people everywhere to share, use, and reuse knowledge.

Open Educational Resources (OER) artifact examples:
• Library Resources
• Image Libraries
• Video Repositories

Note: Please see resource handout for available OER sites.
Implementing Innovation

Web Conferencing

What is it?
- Communication Tool
- A way to engage students with Student-to-student, Instructor-to-Students, and Student-to-other interactions.

Three basic parts:
- Facilitator/Guest Speakers
- Audience
- Delivery Platform

Top Conferencing Tools:
- Skype
- Google Hangouts
- Learning Management Systems (Bb, D2L, Canvas...)
Implementing Innovation

Simulation

What is it?
- “Virtually Real”
- Imitation/Representation of event/location/situation.
- A way to engage students with Student-to-student, Instructor-to-Students, and Student-to-real life type interactions.

Three basic parts:
- Delivery Platform
- Simulation
- Participant/Guide/Simulation

Top Simulations Software:
- Home grown simulation
- Second Life
- Many open source software
Implementing Innovation

Data Analytics

What is it?
• Collection of data addressing student accountability, efficiency, and effectiveness

Three basic parts:
• Data Platform
• Collection of Data
• Apply data to students, LMS, and institutional effectiveness

Top Simulations Software:
• Learning Management Systems
• Echo360
• Many others!
Implementing Innovation

**Activity:**
2. Share your response within your small group.
3. Participate with whole class activity wrap-up.

Next... Copyright/Accessibility Awareness
Copyright Awareness

• Don’t take! Cite.
• Know the Fair Use Doctrine
  • Purpose
  • Nature
  • Amount
  • Effect
• Identify
  • Source
  • Copyright holder/notice
  • Year
Accessibility Awareness

• Title II of the Americans with Disabilities Act of 1990
• Section 504 of the Rehabilitation Act of 1973

• What does this mean?
  • All content online and face-to-face must be made accessible to all students regardless of a disability.
Copyright/Accessibility Awareness

Activity:
1. Share your concerns/plan within your small group.
2. Participate with whole class activity wrap-up.

Next... Quality Assurance.
Quality Assurance

- Clear Instructions
- Checklist
- Student review
  - Pilot
  - Informal/formal feedback
- Peer/Colleague review
Quality Assurance

Activity:

1. Share your quality assurance plan within your small group.

2. Participate with whole class activity wrap-up.

Next... Wrap-up and Q&A.
Wrap-up

“Such initiatives transform our command into a continuous learning organization while increasing the impact on SOF readiness and the professional development of our people.”

Source:
QUESTIONS?
COMMENTS?
DISCUSSION?
Thanks!

Feel free to contact me:

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