Expanding Access and Equity

Spurring Innovation

Fostering Authentic Learning

Leveraging Data

Improving the Teaching Profession

Spreading Digital Fluency

#HorizonEdu
#NMChz

8/8/2018

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Questions, comments, and discussion
Adaptive Learning and OER at Scale
Balancing Cost & Quality

Jeremy Anderson
Deputy Chief of Academic & Administrative Technology
Week 3: Organizing Your Article

- Writing at Process
- Clear, Active, Specific: Writing for the Conversation
- Purpose: What Motivates a Writer
- Creating a Good Persuasive Essay
- Pitfalls of Plagiarism
- MLA vs. APA

OER/No cost vs. Adaptive
$176,000

Student savings AY17-18

71%

Students felt more engaged in their learning
"I feel it was like having the classroom in my home."

-Student

82%

Students perceived improved learning
"I love the choice to receive the same material in a different way to make sure you are learning...

-Student

"The traditional classroom is more of a black box in terms of what students are actually struggling with... Whereas in adaptive courses, you're getting information on their learning every step of the way.

-Faculty Member"
Questions, comments, and discussion

Eileen De Courcy
Humber College Institute of Technology and Advanced Learning
Toronto, Ontario
30,000+ Full-time students

Three campuses
600+ Full-time faculty
1,500 Part-time faculty

Credentials – Apprenticeships, Certificates, Diplomas, Advanced Diploma, Four year Bachelor Degrees, Graduate Certificates
Preparing Students

Technical Skills
Communication Skills
Resiliency Skills

Mass Casualty Incident (MCI)
Current Approach

Table Top Exercise
Full Scale Simulation

Twitter source: @peel_paramedics
Youtube source: https://www.youtube.com/watch?v=gymMqsyS3mY
At the same time...

The Lab
Students as content creators

Implementation

- pilot-testing with 8 second-year students
- 41 first-year students completed the simulation
Data Collection

For each student, we have gathered the following data:

- Actual and perceived performance
- Biometric data
- Student interviews
- Written reflections

Preliminary Indicators

“You never have a good MCI. They’re always chaos because no one practices them regularly because you can’t -- This would allow us to do it regularly, which would be incredible.”

“I think it definitely is, especially with, I think the exposure to a lot of the traumatic injuries. It’s something that we hardly get to experience in practicing in the lab, so I think being graphically exposed to that through this, I think it could really give people a feel for how they might react in real life to maybe something that’s, "Oh, it's a lot of blood." Things like that.”
Stress Management

Implications for Higher Education
2 Considerations

Students creating content  Skill Development/Mastery

Player Results

<table>
<thead>
<tr>
<th>Victim</th>
<th>Tag Colour</th>
</tr>
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<tbody>
<tr>
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<tr>
<td>眼睛</td>
<td>眼睛</td>
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</tbody>
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Implication for HE

Questions, comments, and discussion
MAKING SPACE FOR INNOVATION

PATRICE LUDWIG AND SEÁN MCCARTHY

JMU X-LABS

JAMES MADISON UNIVERSITY

Located in the heart of the Shenandoah Valley in Virginia, 2 hours from Washington D.C.

An undergraduate-focused institution

21,000+ students
MAKING SPACES FOR INNOVATION AT JMU X-LABS

PRESENTATION OUTLINE

1. Introducing JMU X-Labs
2. How classes work at JMU X-Labs
3. Supporting Cultures of innovation
4. Building Cultures of Innovation
WE ARE GOOD ON CREATING THINGS

Lorem ipsum dolor sit amet, consectetur.

• Movable tables and chairs
• Teleconferencing equipment
• Wraparound smart projectors

THE MAIN ROOM

THE EQUIPMENT ROOM

• Laser cutters, 3D Printers
• Break-Out Rooms
• Storage
MEZZANINE

- Break-out space
- Space for large projects that continue after the semester ends

VR/AR ROOM

- Computing power for virtual and augmented reality projects
- Storage for VR/AR peripherals
AUTHENTIC LEARNING
Students experience real-world problems and work situations.

TRANS DISCIPLINARY LEARNING
Faculty and students from different disciplines create better solutions than a single disciplinary perspective.

COURSES AT JMU X-LABS
• Topic- or problem-based
• Team taught
• A “network” of concurrently-scheduled sections from different disciplines

HTTPS://JMUXLABS.ORG
DESIGN METHODS ARE THE “OPERATING SYSTEM” OF JMU X-LABS COURSES

METHODS SUCH AS DESIGN THINKING AND THE LEAN LAUNCHPAD SCAFFOLD STUDENTS’ RESEARCH AND PROTOTYPING EXPERIENCES.

COMMON TOPICS

COMMUNICATIONS
Students learn to communicate research process and findings to professors, clients, and the general public.

ETHICS
Projects are shaped by critical engagement with ethical considerations.
RESPONSIVE ADMINISTRATION

- Dedicated administration at the JMU X-Labs facilitates agile responses to emerging needs
- Disciplinary “agnostic” space facilitates effective transdisciplinary project development

UNMANNED SYSTEMS FOR VIRGINIA
A course in applied unmanned systems technologies

HTTPS://SITES.LIB.JMU.EDU/US4VA/

3 Partnerships ... with local, regional, and national organizations
6 Faculty ... from five disciplines and one from industry
58 students ... from eight majors and two universities
SUPPORTING A CULTURE OF INNOVATION AT JMU X-LABS

• Online collaboration and publication tools
• Teleconferencing capacity
• Classes based around emerging technologies
• Topic- or project-based courses

BUILDING CULTURES OF INNOVATION

INNOVATIVE MAKER SPACES EMBEDDED IN UNIVERSITIES CAN BE RESPONSIVE TO THE EMERGING NEEDS OF STUDENTS AND FACULTY AS THEY GRAPPLE WITH CHANGING WORK AND CIVIC CULTURES.
THANK YOU!

HTTPS://JMUXLABS.ORG

Questions, comments, and discussion