You are looking at the microscope.
Online Gym Class

- Online gym class concepts
- Images of gym-related technology and apps

Set your Daily Goal

- Normal Day: 2,000 calories
- Active Day: 3,000 calories
- High-Energy Day: 5,000 calories

My Dashboard

- Calories burned: 2816
- Calories eaten: 0

Intraday calories: 246

My Stats

- My Body's Weight: 271
The Mixxer - a free educational website for language exchanges via Skype

The Mixxer is a free educational site for language learners hosted by Dickinson College. The Mixxer is designed to connect language learners around the world so that everyone is both student and teacher.
That’s SO 1992...

- What’s the best way to lecture & assess my (9, 90, 900) students in class?
  - Sincerely, 1992

- What’s the best way to do what I normally do in the classroom online?
  - Sincerely, 2002

- What’s the best way to learn?
  - Sincerely, 2012
Online Education: At Best
Online Education: At Worst

COURSE INTRODUCTION

Module structure

The module is composed of two distinct elements. The first two-thirds of the module is comprised of fairly traditional teaching methods, albeit using e-learning rather than classroom facilities. You will receive lectures, reading materials, discussion topics and knowledge quizzes. Each week we will introduce new themes in both the fields of research methods and statistics.

In week one of the module you will meet with face-to-face with the course tutors and your fellow students to facilitate the e-learning process and to break down some barriers. You will also have an opportunity to familiarise yourself with WebCT a little bit more. Finally, we would like you to say ‘hello’ to your colleagues in the discussion forum to say that you have arrived and to share your initial experiences of the module.

In week two the lectures begin. The first is on epistemology and evidence-based practice in social work followed by an introduction to statistics.

Week three focuses on cross-sectional surveys and there are accompanying lectures introducing odds ratios and confidence intervals.

Week four introduced the randomised-controlled trial methodology and chi-squared statistics.

This is followed in week five by lectures on cohort studies, relative risk and inference.

Week six brings you lectures on case-controlled studies, t-tests and an introduction to multivariate analysis.

The final week of lectures is in week 7 when we will be exploring systematic reviews and qualitative research.

In addition to the lectures, each week there will be a learning module like this with the full text of the lecture and links to relevant websites or papers. There will also be a discussion thread for each week to provide you with the opportunity to ask any questions about the content and to stimulate some discussion in the group.

Week 9 is a second group meeting to provide an opportunity for students to ask any questions that hadn’t so far been answered. It will also be a revision session and preparing for the final third of the term.
Dr. Jeff D Borden
Dr. Jeff D Borden
Data
By The Numbers

6.1 Million / 97%

620,000 / 66%
e-VOLVING EDUCATION

• “By 2019, 50% of all high school classes will be taken online.”

• Disrupting Class, Clayton Christensen, McGraw-Hill © 2008
Technology = Data

How Target Figured Out A Teen Girl Was Pregnant Before Her Father Did

Every time you go shopping, you share intimate details about your consumption patterns with retailers. And many of those retailers are studying those details to figure out what you like, what you need, and which
Actionable Data

Avg. Student Activity/Section at Day 10 (hrs)

Dropped Students

Completed Students

ACC | BUS | CIS | ECO | FIN | HUM | LEG | MAT | MKT | POL | PSY | SOC
---|---|---|---|---|---|---|---|---|---|---|---
3.1 | 2.2 | 1.8 | 2.4 | 2.8 | 2.7 | 2.7 | 4.2 | 2.0 | 3.1 | 1.5 | 2.3

Avg. = 5.0

Avg. = 2.5
## Actionable Data

<table>
<thead>
<tr>
<th>Name</th>
<th>ENG102.6</th>
<th>ENGL101.01</th>
<th>MBA642.01</th>
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<tbody>
<tr>
<td>Benning, Ken</td>
<td>4/4</td>
<td>4/4</td>
<td>3.5/4</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>88%</td>
</tr>
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<td>Brown, Catherine</td>
<td>3.5/4</td>
<td>4/4</td>
<td>3.5/4</td>
</tr>
<tr>
<td></td>
<td>88%</td>
<td>100%</td>
<td>88%</td>
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<tr>
<td>Dunning, Jennifer</td>
<td>1/4</td>
<td>1/4</td>
<td>1.5/4</td>
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<tr>
<td></td>
<td>25%</td>
<td>25%</td>
<td>38%</td>
</tr>
<tr>
<td>Johnson, David</td>
<td>3.75/4</td>
<td>4/4</td>
<td>3.5/4</td>
</tr>
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<td></td>
<td>94%</td>
<td>100%</td>
<td>88%</td>
</tr>
<tr>
<td>Smith, Lisa</td>
<td>2.5/4</td>
<td>4/4</td>
<td>2.5/4</td>
</tr>
<tr>
<td></td>
<td>62%</td>
<td>100%</td>
<td>62%</td>
</tr>
</tbody>
</table>
Actionable Data

Student Mastery by Learning Outcome

Mastery = 85%

Allen, Vance
Archibald, Paul
Arvizu, Joel
Bergad, Andy
Borden, Jeff
Bordonaro, Steve
Chadwick, Scot
Crowson, TJ
Ekedahl, David
Fishencord, Matt
Garry, Maureen
Hale, Ryan
Harpster, Marc
Green, Anthony
McLish, Kendrick
Ponese, Lou
Switzer, Ken
Tonjes, Larry
Trevino, Katie
Usher, Kristen

LO6
LO7
Does Online Class Size Matter?

Student Success (~10K students)

% who Completed or Passed (>69%)

Completion Rate Small: 83.5
Pass Rate Small: 80.8
Completion Rate Med: 81
Pass Rate Med: 81.1
Completion Rate Large: 85.3
Pass Rate Large: 85.2

Dr. Jeff D Borden

Pearson
Course Path
Social Interaction
Collaboration Graphs
Personalized Learning

Learning pathways vary for each student
Inventories

How Important is Grit in Student Achievement?

October 2, 2012 | 11:57 AM | By MindShift

When it comes to high achievement, grit may be as essential as intelligence.

By Emily Hanford, American RadioWorks

Emotional intelligence and academic success: examining the transition from high school to university

James D.A. Parker, Laura J. Summerfeldt, Marjorie J. Hogan, Sarah A. Majeski

Department of Psychology, Trent University, Peterborough, Ontario, Canada K9J 7B8

http://dx.doi.org/10.1016/S0191-8869(03)00076-X, How to Cite or Link Using DOI

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Dr. Robert Hare / Kevin Huttan: 0-3 Score

- I rarely plan ahead. I’m a spur-of-the-moment kind of person
- Cheating on your partner is OK so long as you don’t get caught
- If something better comes along it’s OK to cancel a longstanding appointment
- Seeing an animal injured or in pain doesn’t bother me in the slightest
- Driving fast cars, riding roller coasters, and skydiving, appeal to me
- It doesn’t matter to me if I have to step on other people to get what I want
- I’m very persuasive. I have a talent for getting other people to do what I want
- I’d be good in a dangerous job because I can make my mind up quickly
- I find it easy to keep myself together in situations when others are cracking under pressure
- If you’re able to con someone, that’s their problem. They deserve
Are You A Psychopath?

- 0-10: Low
- 11-15: Below average
- 16-20: Average
- 21-25: High
- 26-30: Very high
The Best Surgeons?
Learning Analytics
Best Way?

Darfur is Dying

Help stop the crisis in Darfur
START YOUR EXPERIENCE

Projected Forgetting Curve

Something New in Shock-thriller Education

Mooc Hysteria
Thank You

Dr. Jeff D Borden
jeffb@ecollege.com
Seeing the student.

Seeing what they are doing.

Knowing who they are.
How Can You Ensure Exam Integrity?

- Test Centers
- Live Online Proctoring
- Record and Review
- Authentication Only
- Lockdown Browsers Only
200+ Partners
Including these partners from Florida

UF University of Florida
West Florida
FIU Florida International University
Seminole State College of Florida
Saint Leo University
Miami Dade College
Florida State College at Jacksonville
Valencia Community College
Hodges University
Florida Virtual School
The University of Tampa
Pensacola State College
Let's See a Demo!
Questions?
Learning Studios: Play in the Sandbox Before Building Your Castle
Teachers teach
Students are taught
Focus on providing good information
Instead of stimulating good questions
Rather than student as a sponge
Quite unlike student as a bank
Instructors knowledge should elicit student understanding.
Encourage participation and interaction
Students engage and learn
Students explore together and ask questions
Thus developing lifelong interest as learners
“Flipping the classroom”
Active Learning Classrooms
Inside Active Learning Classrooms

TILE Teaching Strategies

General TILE Questions

What is TILE? - Show/Hide

The TILE project at MIT and the University of Minnesota, together with other institutions, will create new learning spaces that will address the needs of students and educators.

Further reading:

- Trends in Learning Space Design

SCALE-UP

Student-Centered Active Learning Environment with Upside-down Pedagogies

How would you like to teach (or learn) in a classroom:

Like this one at MIT?

The purpose of this website is to share designs for state-of-the-art learning studios, teaching methods, and curricular packages that are based on decades of research.

For a quick introduction, visit our Frequently Asked Questions page, or take a look at this 3-minute video or view a sample of these short videos created by adopters:

Minnesota, Iowa, Virginia Tech, Old Dominion, Western High School

As a viewer, you can view classroom designs and find contact information for schools and teachers. And if you’re an educator looking to create your own classroom, you can use the tools here to plan your own, or else find classroom designs available for purchase. (For more information, please visit the SCALE-UP website.)

Active Learning Classrooms (2012)

from Andy Underwood-Buttmann

TEAL classroom supporting team engagement

TEAL classroom layout, top view
But what about distance students?
Student Viewing Experience Improved

• If the instructor is interesting
• If the content is interesting
• If the instructor moves around the room
• If there are changes in tone and animation
• If it is “Edutainment”
• If a response is possible (clicker, polling, etc)
Still little is required
Cone of Learning (Edgar Dale)

After 2 weeks we tend to remember...

<table>
<thead>
<tr>
<th>Nature of Involvement</th>
<th>Passive</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal Receiving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hearing Words</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Looking at Pictures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watching a Movie</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Looking at an Exhibit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watching a Demonstration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeing it done on location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participating in a Discussion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giving a Talk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doing a Dramatic Presentation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simulating the Real Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doing the Real Thing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Active Learning From a Distance

What if remote students could ...

– Ask questions?
– Work in teams?
– Have real presence?
– Discuss and present?
– Debate and interact?
Active Learning Studio Classroom Design
Goals

• Increase access
• Influence teaching practices
• Use innovative and engaging instructional methods
• Improve teaching effectiveness
• Increase student knowledge retention
What is the Impact Of Physical Space On Virtual Space?

• How does space influence teaching?
• What are the teaching practices of instructors using the space
  – Instructor focus versus student focus
  – Content delivery versus content construction
• How are students learning within and outside the space?
• What is the student connection to peers and instructors?
Learning Spaces Research Program℠
Research Constructs

Student & Faculty Experience

- Comfort
- Convenience
- Support for Learning

- Method
  - Technology & Tools
  - Flexibility
  - Effectiveness

- Style
  - Technology & Tools
  - Flexibility
  - Effectiveness

- Communication
  - Collaboration
  - Interaction
  - Sense of Community

Basic Human Needs  Teaching  Learning  Engagement
The Power of 3,000
## Proof of Concept

<table>
<thead>
<tr>
<th>Collaboration / Communication Student</th>
<th>Typical Classroom</th>
<th>Learning Studio</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the classroom, I am comfortable asking questions and contributing to the classroom discussion</td>
<td>68%</td>
<td>77%</td>
<td>+9%</td>
</tr>
<tr>
<td>The classroom is effective for group work</td>
<td>48%</td>
<td>86%</td>
<td>+38%</td>
</tr>
<tr>
<td>The classroom helps students effectively communicate with faculty during class time</td>
<td>63%</td>
<td>75%</td>
<td>+12%</td>
</tr>
</tbody>
</table>

(Percentages who responded with "strongly agree" or "agree")
Implementing Active Learning

• Start small and find low cost options
  – Furniture
  – Software
• Seek gift or grant funding
• Phase in development
• Faculty development and support
Phases of Implementation
Phase 1: Renovation

- Room remodel
- Fewer chairs
- Update carpet, paint
- Changing teaching strategies (easing in)
  - Instructor as facilitator
  - Team-based activities
Phase 2: Getting Started

• Round tables and teams
• Team computers connected
• Dual projectors/whiteboards
• Schoolvue/Doceri
• Team-based learning
• All students in-room
Phase 3: Full AV System

• Crestron Digital Media
• Inputs
  – Instructor console
  – Team computers
  – Student laptops
    2 VGA, 1 HDMI per team
  – Capture HD
• Any input to any output
Phase 4: Adding Remote Students

• In-room video
  – Four HD PTZ cameras
  – HD video switcher
  – Integrate to Crestron controls
• Remote student capability
  – Adobe Connect
  – Crestron Capture HD
Faculty Development and Support

- Team-based learning training and support
- “Active learning” faculty learning community
- Shared experience sessions
- In-room support
A dream is your creative vision for your life in the future. You must break out of your current comfort zone and become comfortable with the unfamiliar and the unknown.

Denis Waitley

We keep moving forward, opening new doors, and doing new things, because we're curious and curiosity keeps leading us down new paths.

Walt Disney

I have not failed. I've just found 10,000 ways that won't work.

Thomas Edison

http://flic.kr/p/axgiff
This Room Is Equipped With Edison Electric Light.

Do not attempt to light with match. Simply turn key on wall by the door.

The use of Electricity for lighting is in no way harmful to health, nor does it affect the soundness of sleep.
Contact

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Warrington College of Business Administration
University of Florida
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tawnya.means@ufl.edu