



Data-Driven Approaches to Higher Education

ALWAYS
LEARNING

Target Knows You're Pregnant

Course Author

Course Home

- Syllabus
- Introductions
- Virtual Office
- Instructor Bio
- FAQ's
- Basic Speech Information
- Webcam Video Help*
- YouTube
- Camera Help
- Speech Ideas
- Class YouTube Space
- Readiness Quiz

Week 1

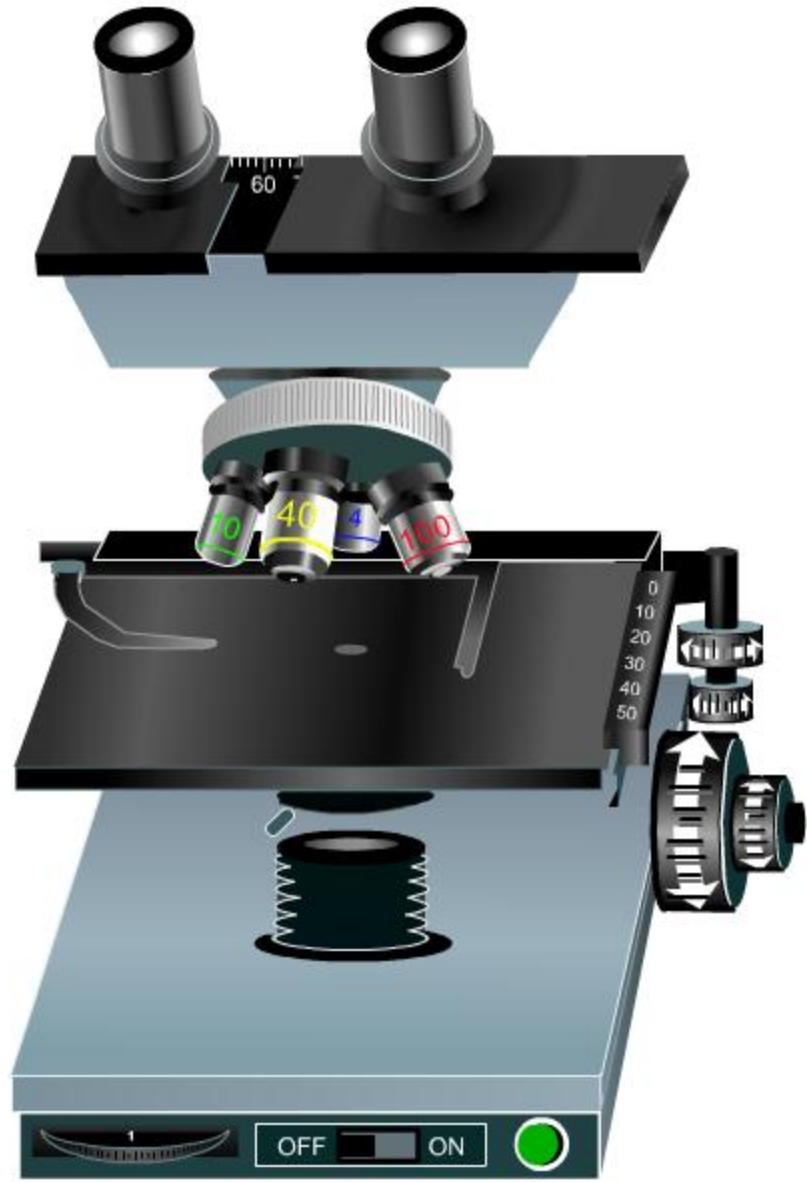
Week 2

- Weekly Tasks
- Assignment
- Lecture: Credibility
- Lecture: Thesis Development
- Lecture: Outlines
- Lecture: Transitions
- Informative Self-Report
- Discussion
- Reading:



You are **Looking at the microscope**

- switch views
- checklist
- getting started



Online Gym Class



The screenshot shows the Fitbit website dashboard for a user named Josh. The dashboard includes sections for logging food, activity, and weight, a calorie tracker showing 2816 calories burned (129% of goal) and 0 calories eaten, an intraday calorie bar chart, and a 'My Stats' section showing a weight of 271 lbs. The user's profile information includes: Male, 31, 5'10", Gilbert, AZ, US, joined Jan 02, 2010, synced 8 minutes ago, and full battery level.

The screenshot shows the Nike+ website's 'Set your Daily Goal' page. It features three goal options: 'Normal Day' (2,000 NikeFuel), 'Active Day' (3,000 NikeFuel), and 'High-Energy Day' (5,000 NikeFuel). A 'NEXT: JOIN NIKE+' button is at the bottom.



Course Author

Week 2: Credibility & Outlines (Oct 12 - Oct 18)

[Home](#) [View Blogs](#) [FAQ](#)

All Groups

The Mixer - Language Exchange Community for Everyone

The Mixer - a free educational website for language exchanges via Skype

Like 1,278 people like this. Be the first of your friends.

Tweet



The Mixer is a free educational site for language learners hosted by Dickinson College. The Mixer is designed to connect language learners around the world so that everyone is both student and teacher.



Find a language partner



Talk to them via Skype



Write a blog and receive corrections and feedback.

Free Learning
www.downes.ca

User login

[Login/Register](#)

Follow The Mixer on:

Facebook

Twitter

Online Members

Send message: 沐沐crystal
Native Language: Chinese-Mandarin
Language Sought: English
French

Send message: xin
Native Language: Chinese-Mandarin
Language Sought:

Course Home

Syllabus

Introductions

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Readiness Quiz

Week 1

Week 2

Weekly Tasks

Assignment

Lecture: Credibility

Lecture: Thesis

Development

Lecture: Outlines

Lecture: Transitions

Informative Self-

Report

Discussion

Reading:

Navigation icons



Course Author

Week 2: Credibility & Outlines (Oct 12 - Oct 18)

Course Home

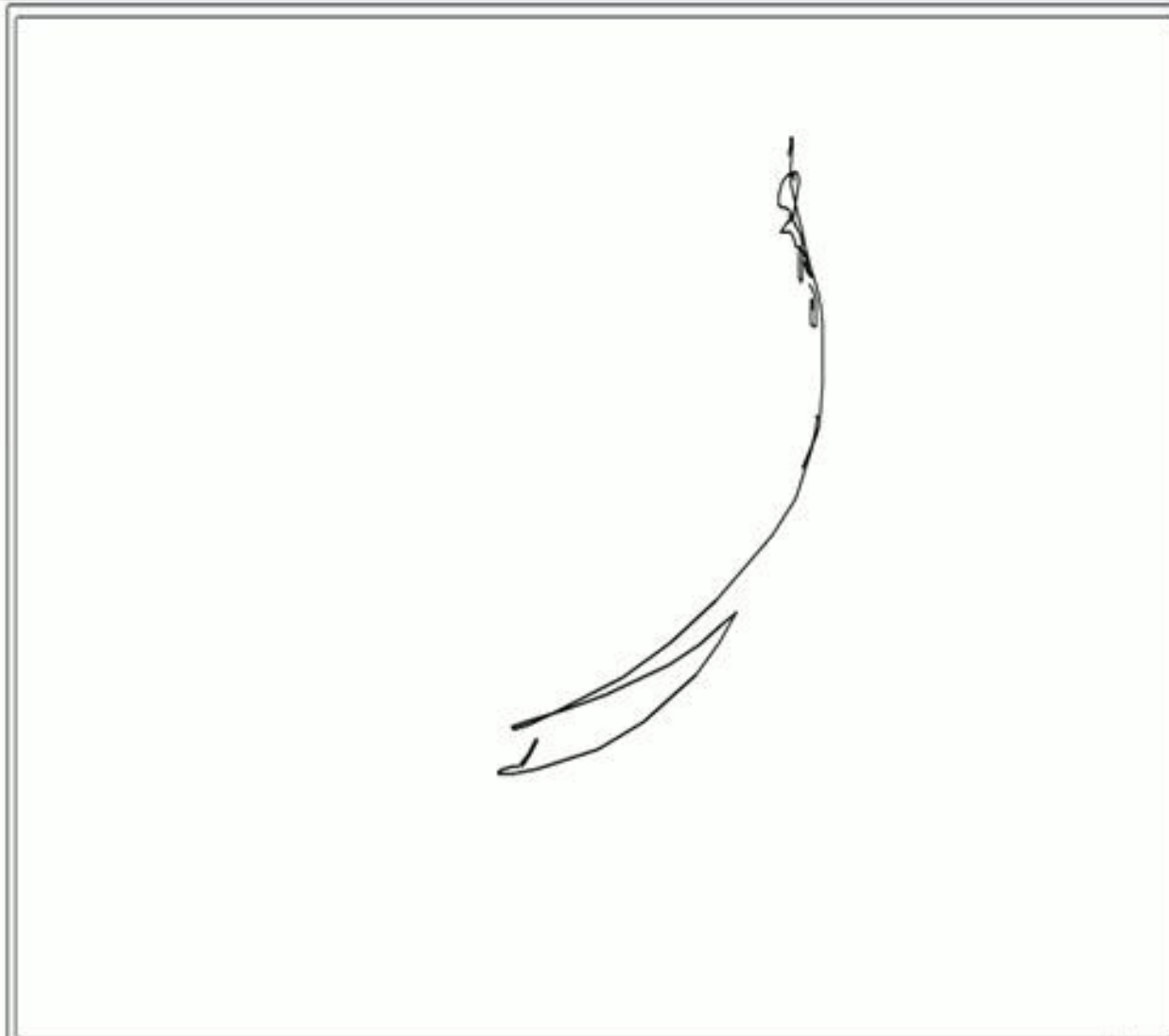
- Syllabus
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Week 1

Week 2

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- Reading:

play



Navigation controls including a play button, a progress bar, and zoom options (x1, x2, x4, x8, x16).

- Flash Chards 2 - FCMXNET -

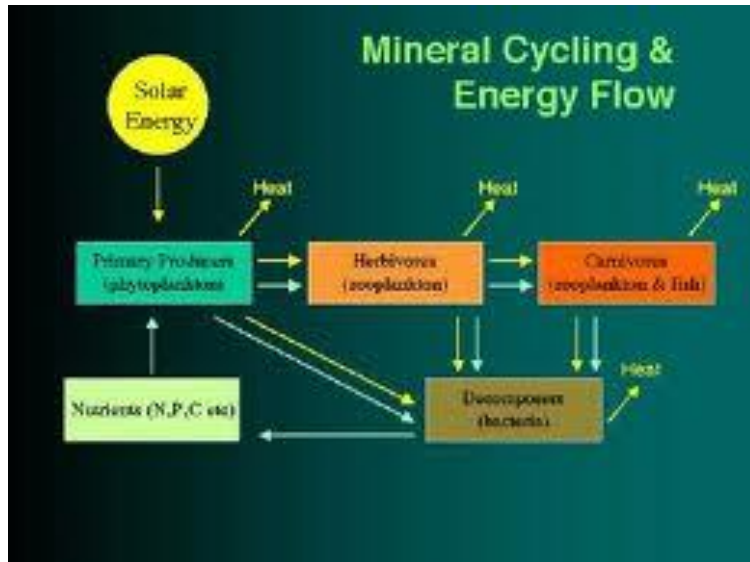
High

That's SO 1992...

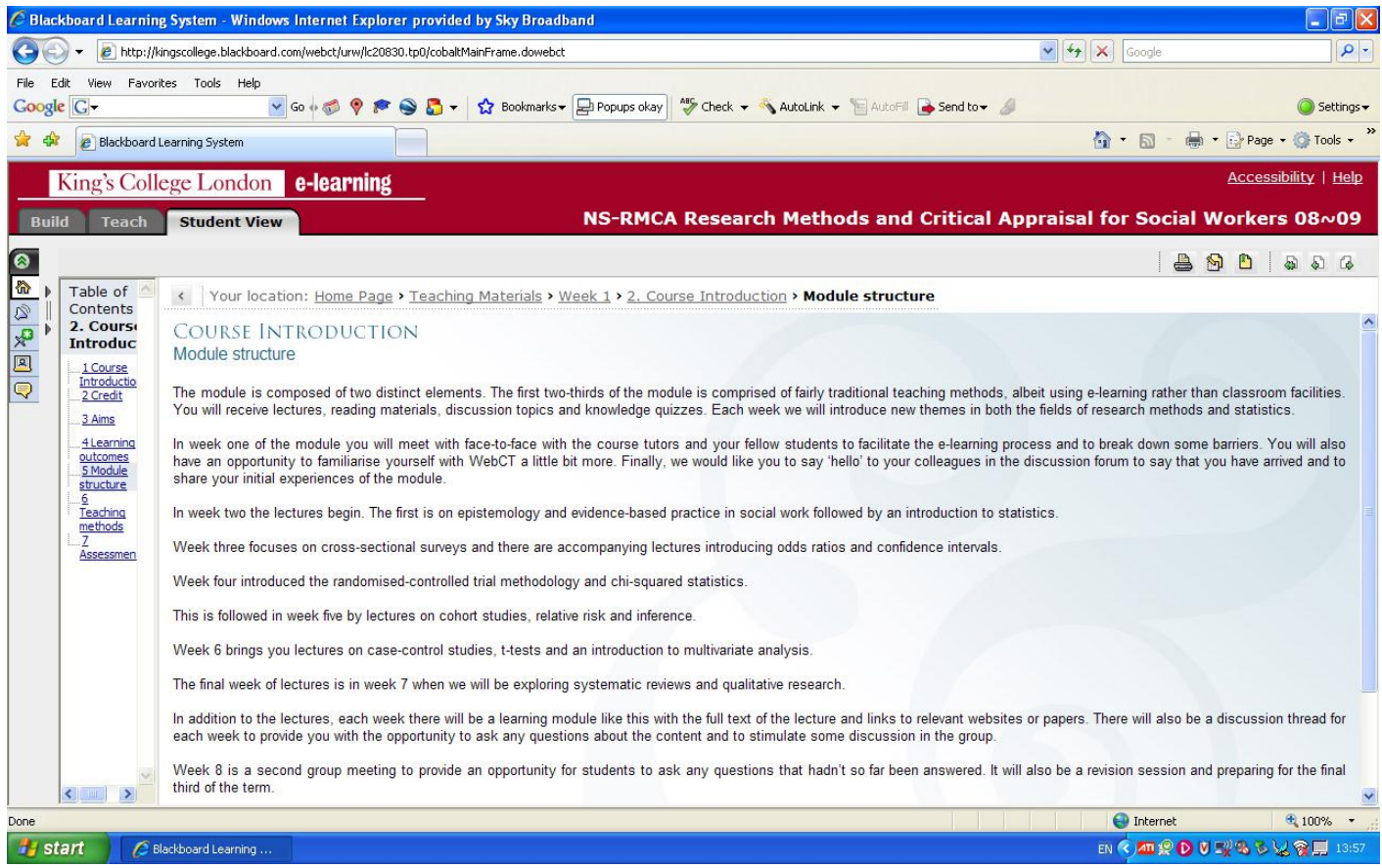
- What's the best way to lecture & assess my (9, 90, 900) students in class?
 - Sincerely, 1992
- What's the best way to do what I r in the classroom online?
 - Sincerely, 2002
- What's the best way to le
 - Sincerely, 2012



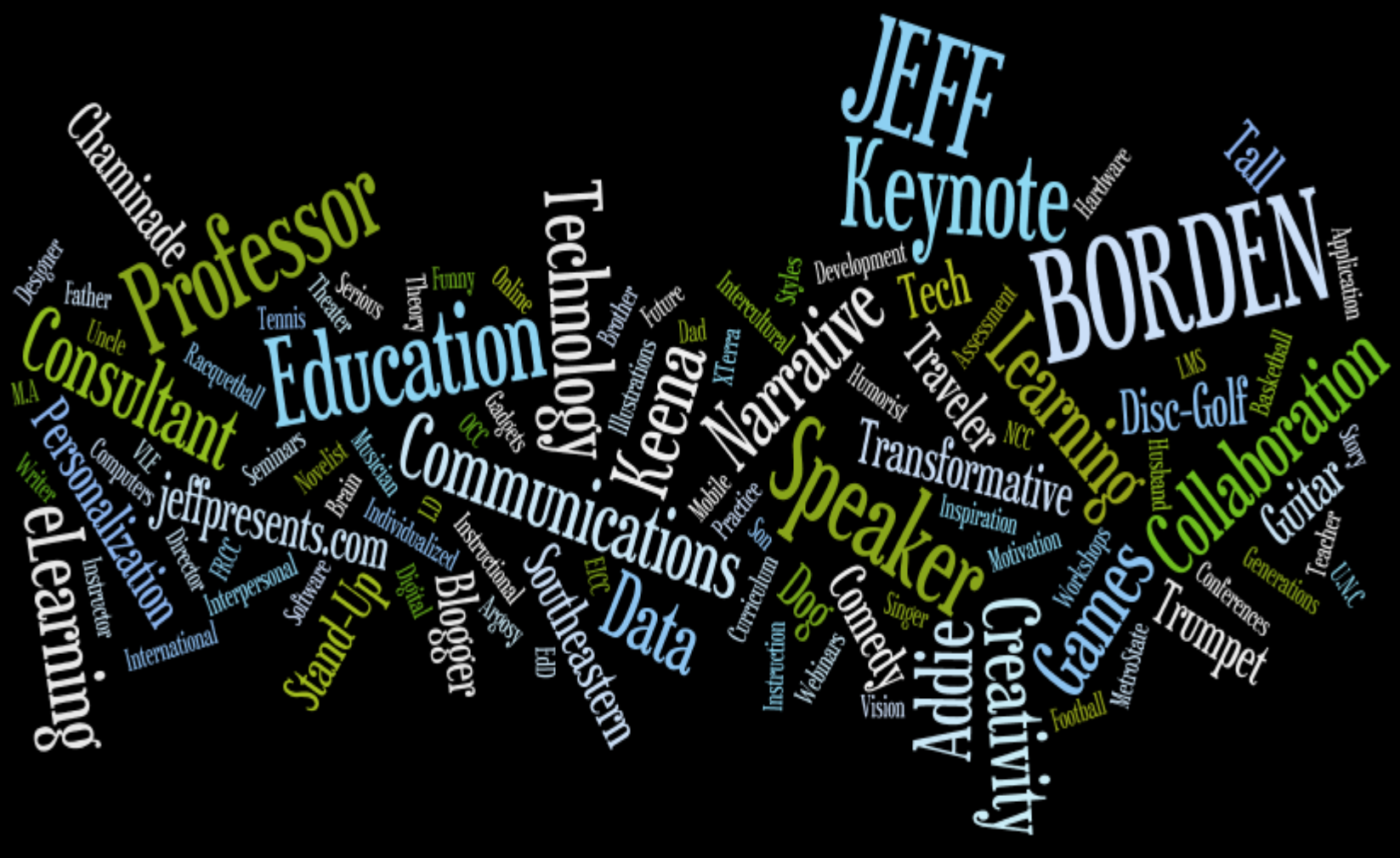
Online Education: At Best



Online Education: At Worst



Dr. Jeff D Borden



Dr. Jeff D Borden



Dr. Jeff D Borden



Data



By The Numbers

6.1 Million / 97%



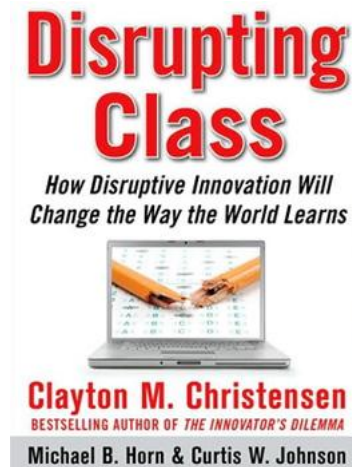
620,000 / 66%



e-VOLVING EDUCATION

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

• *Disrupting Class*, Clayton Christensen, McGraw-Hill © 2008



Technology = Data

Forbes | **New Posts** (+20 posts this hour) | **Most Popular** (America's Dirtiest Cities) | **Lists** (30 Under 30) | **Video** (Newly-Powerful People) | Search companies, people

Kashmir Hill, Forbes Staff
Welcome to The Not-So Private Parts where technology & privacy collide
[+ Follow](#) (1,001) [Follow](#) 162k


30.6k Share | 13.4k Tweet | 5.5k Share | 350 Submit | 2.6k +1 | 1.9k reddit

TECH | 2/16/2012 @ 11:02AM | 1,888,784 views

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


202 comments, 167 called-out | [+ Comment Now](#) | [+ Follow Comments](#)



ANALYTICS

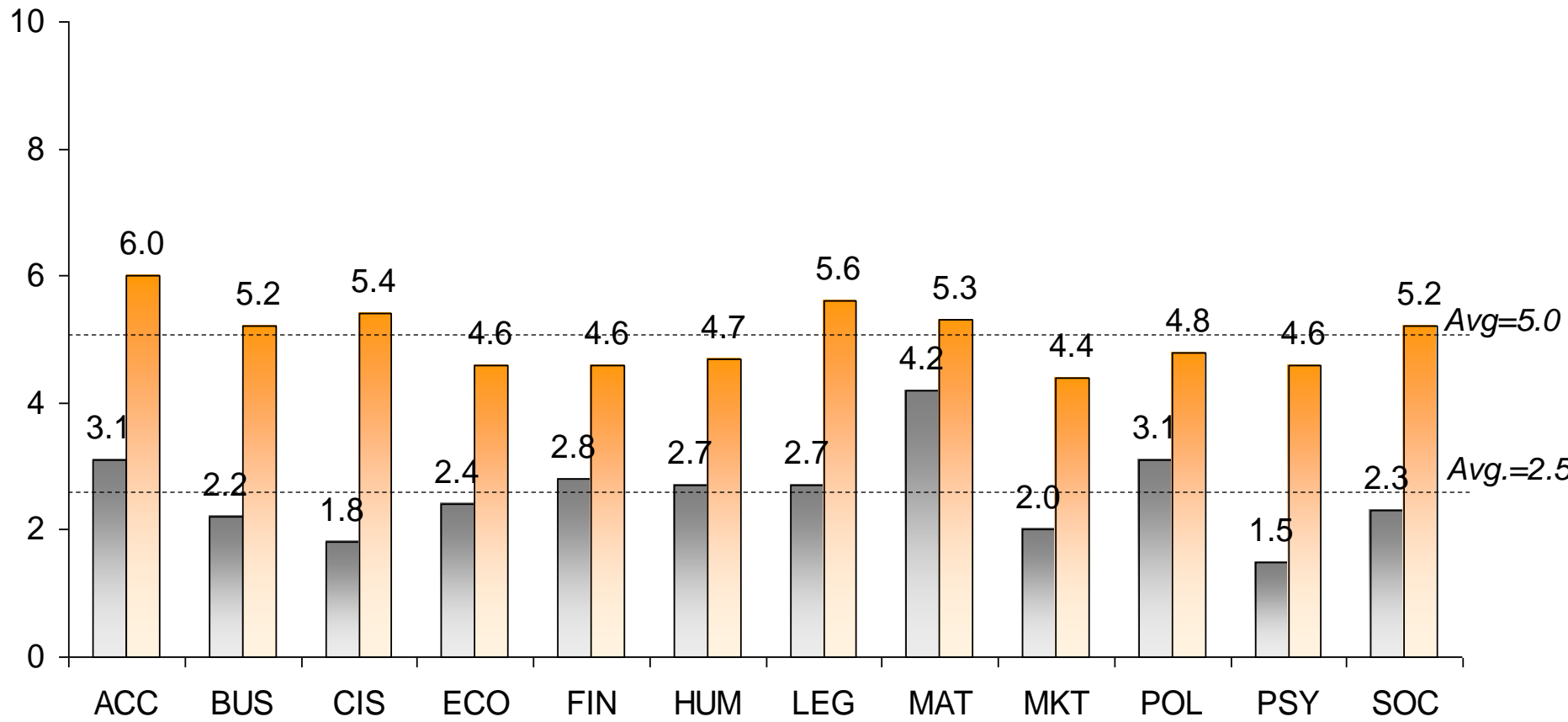
5 stages of analytic evolution lead to smarter decisions.





Actionable Data


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



Actionable Data

Details by Outcome

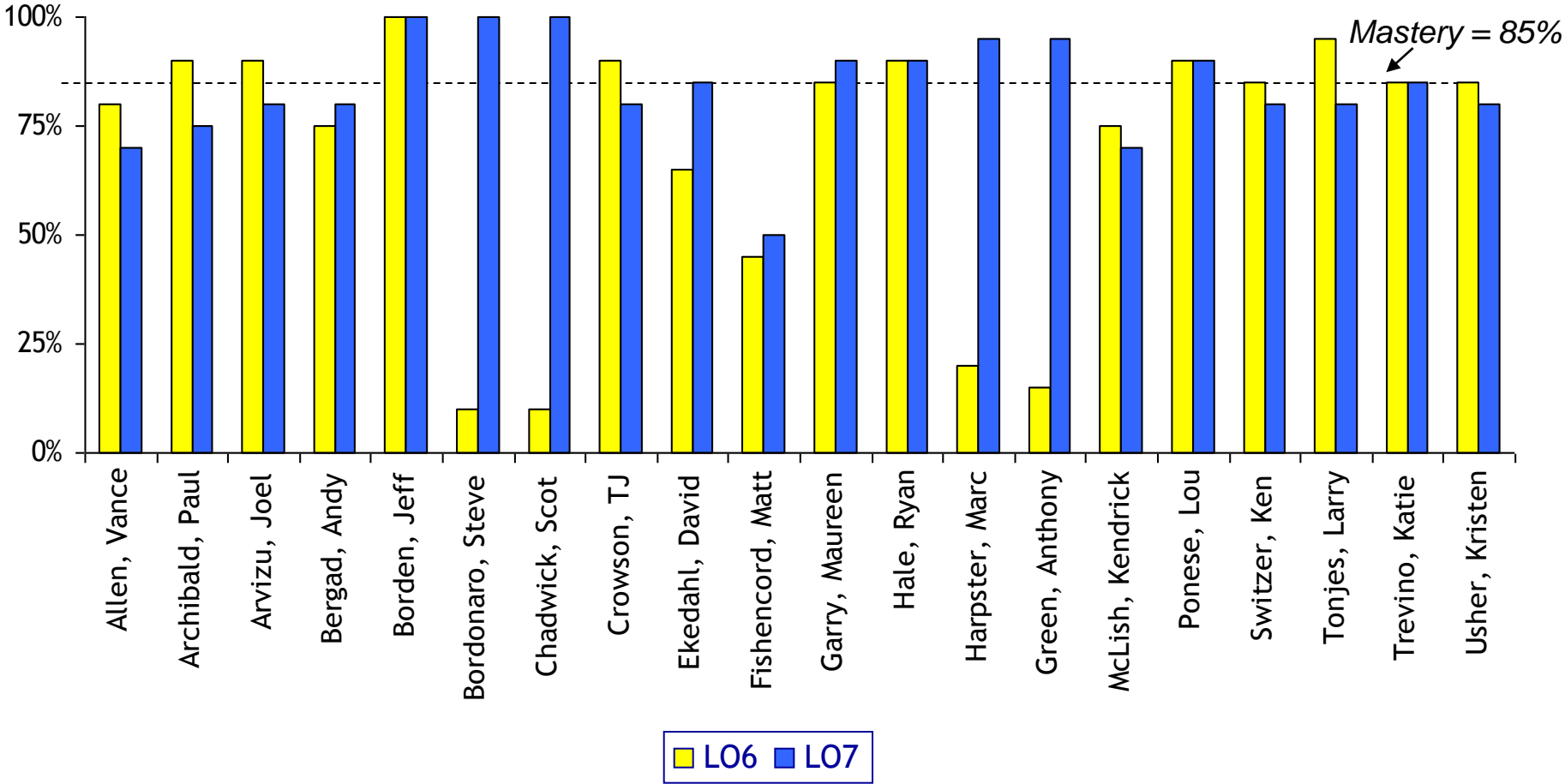
Details by Student

 [Export Assessment Summary](#)

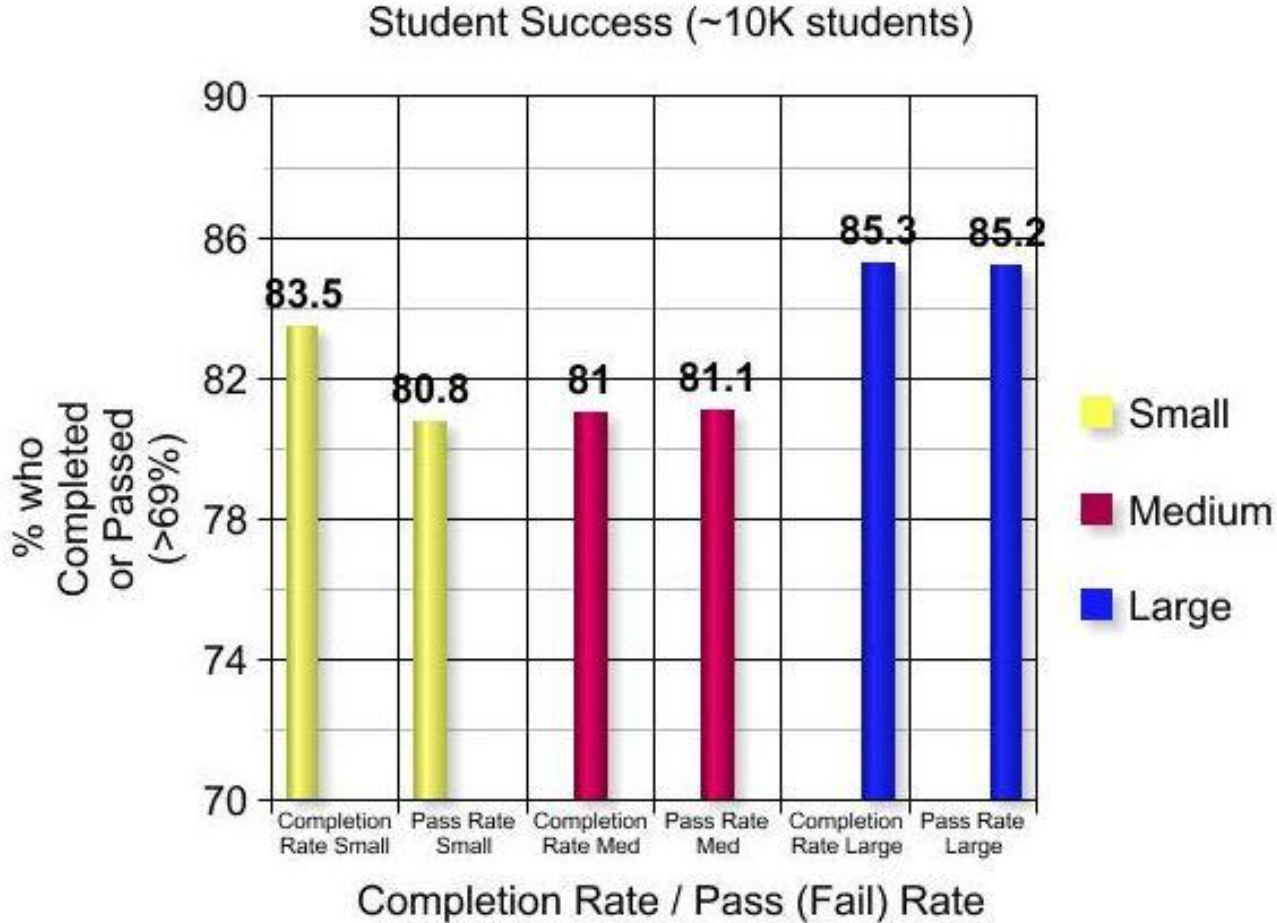
Name	ENG102.6.	ENGL101.01.	MBA642.01.
Benning, Ken	4/4 100%	4/4 100%	3.5/4 88%
Brown, Catherine	3.5/4 88%	4/4 100%	3.5/4 88%
Dunning, Jennifer	1/4 25%	1/4 25%	1.5/4 38%
Johnson, David	3.75/4 94%	4/4 100%	3.5/4 88%
Smith, Lisa	2.5/4 62%	4/4 100%	2.5/4 62%

Actionable Data

Student Mastery by Learning Outcome

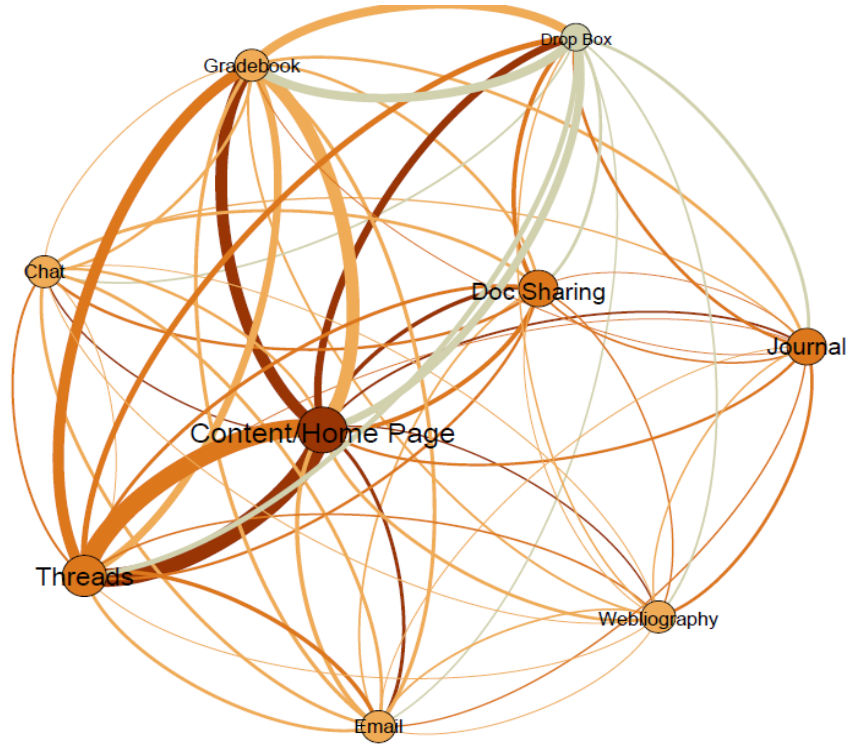
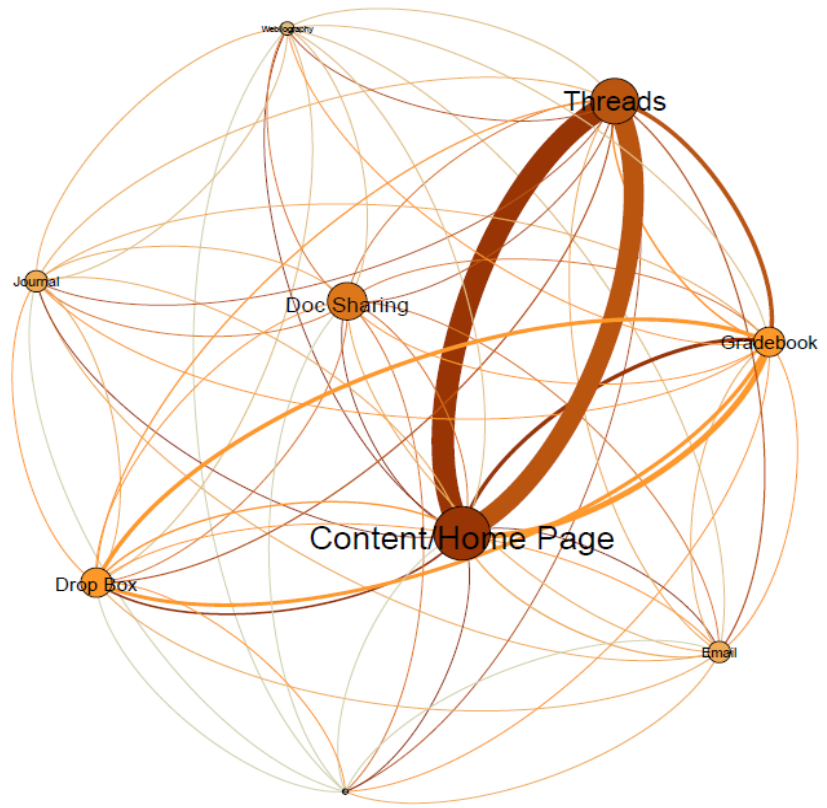


Does Online Class Size Matter?

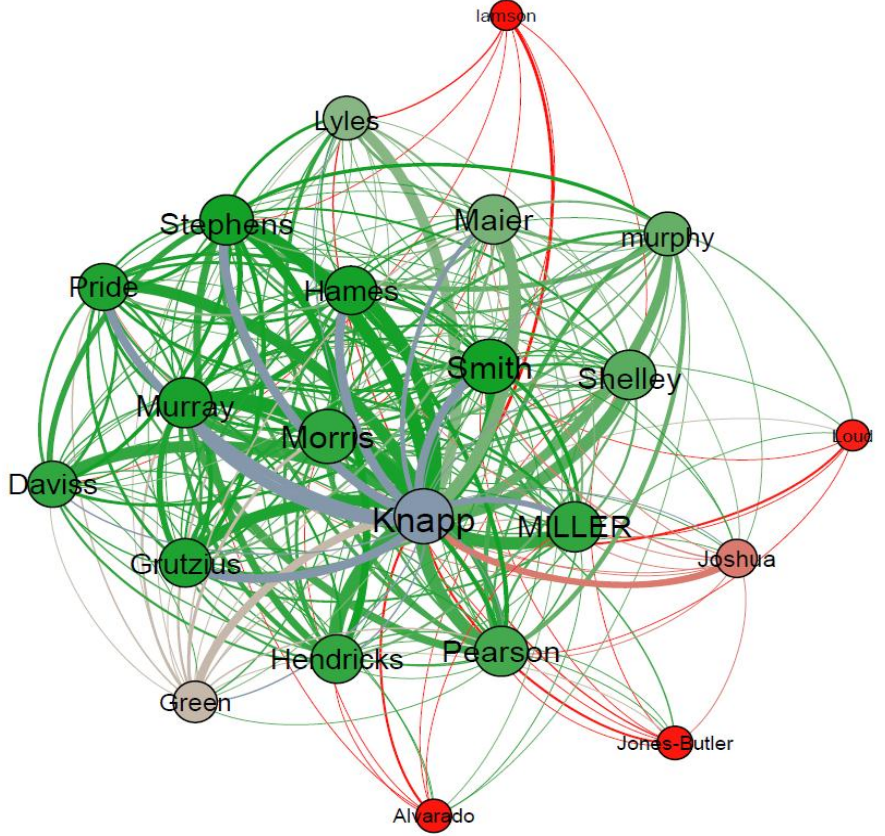
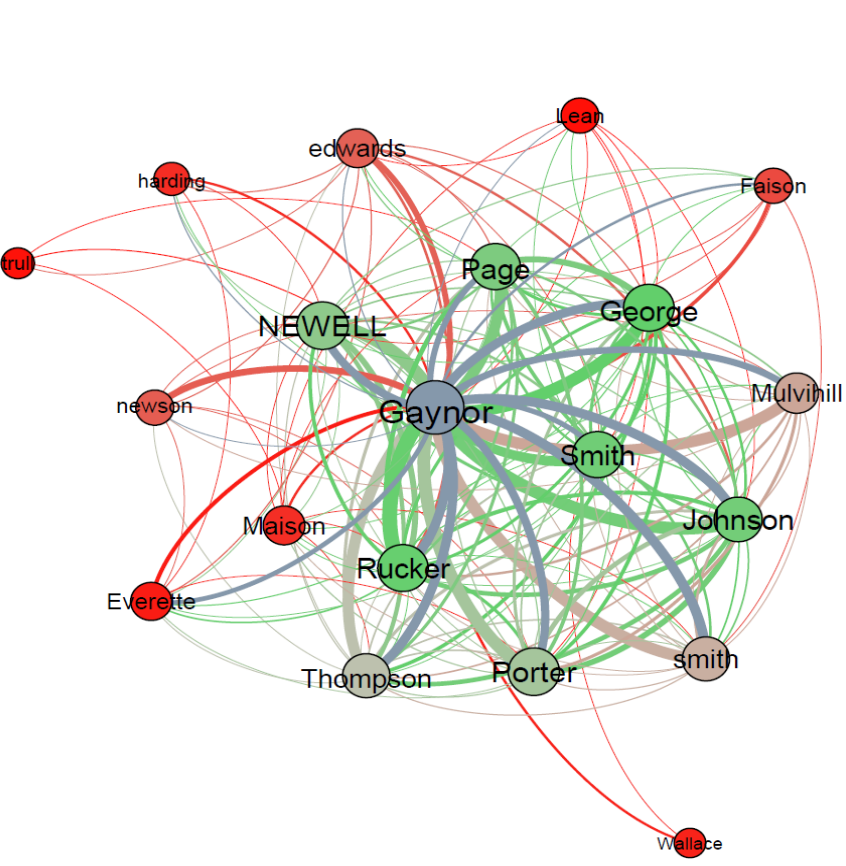


Dr. Jeff D Borden

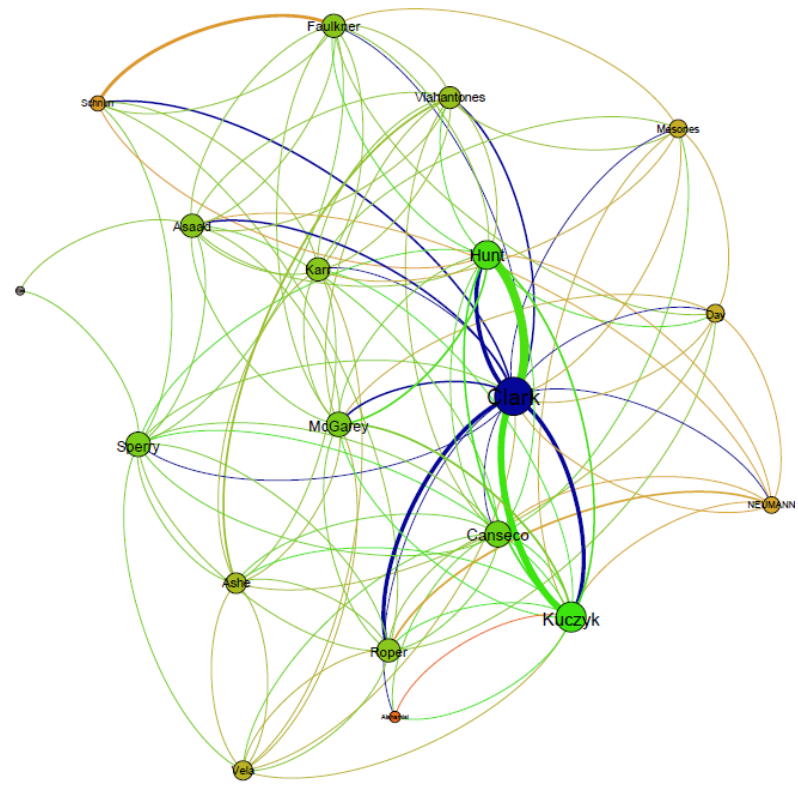
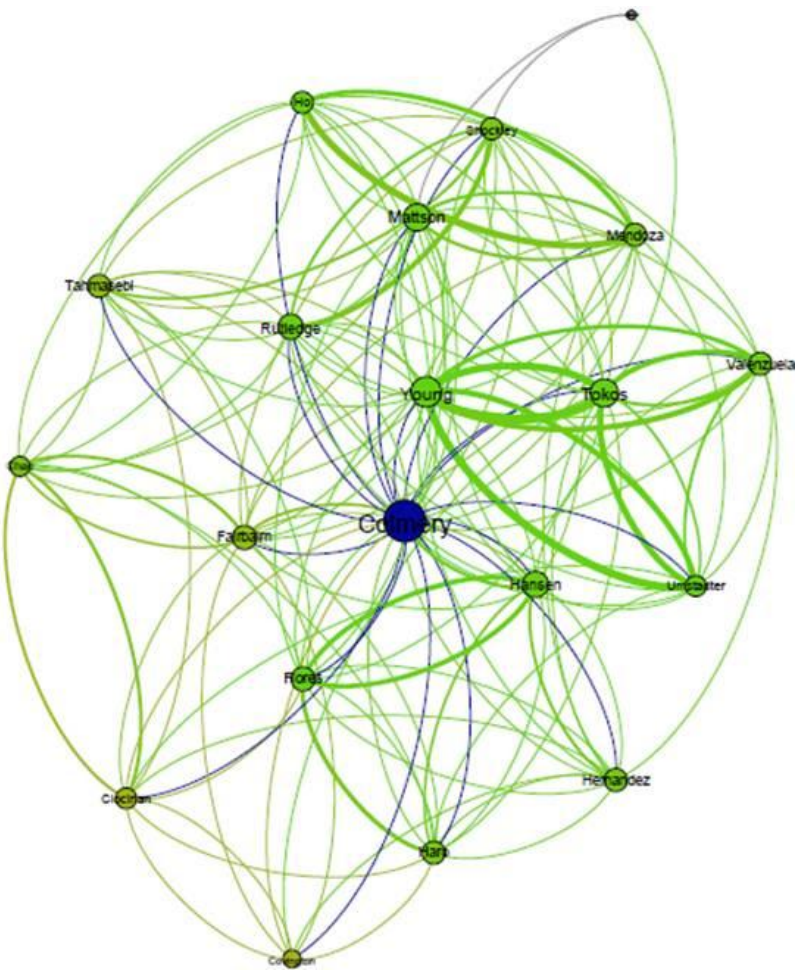
Course Path



Social Interaction

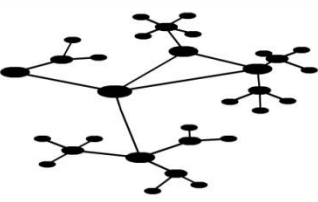


Collaboration Graphs

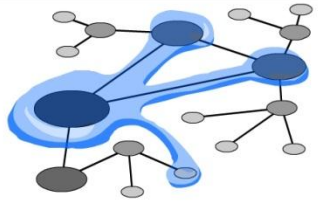




KNOWLEDGE MAP

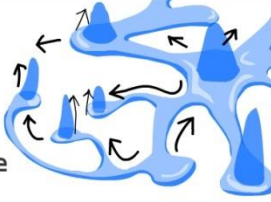


DISCUSSION



TOPIC SPREAD & SWELL

- (3) Expand
- (2) Elaborate
- (1) Explain
- (0) Participate



KNOWLEDGE ACTIVITY

- (4) innovation
 - (3) application
 - (2) transfer
 - (1) absorption
-

CHALLENGE

Y/N Challenges something in a post, course, or other resource.

QUESTION

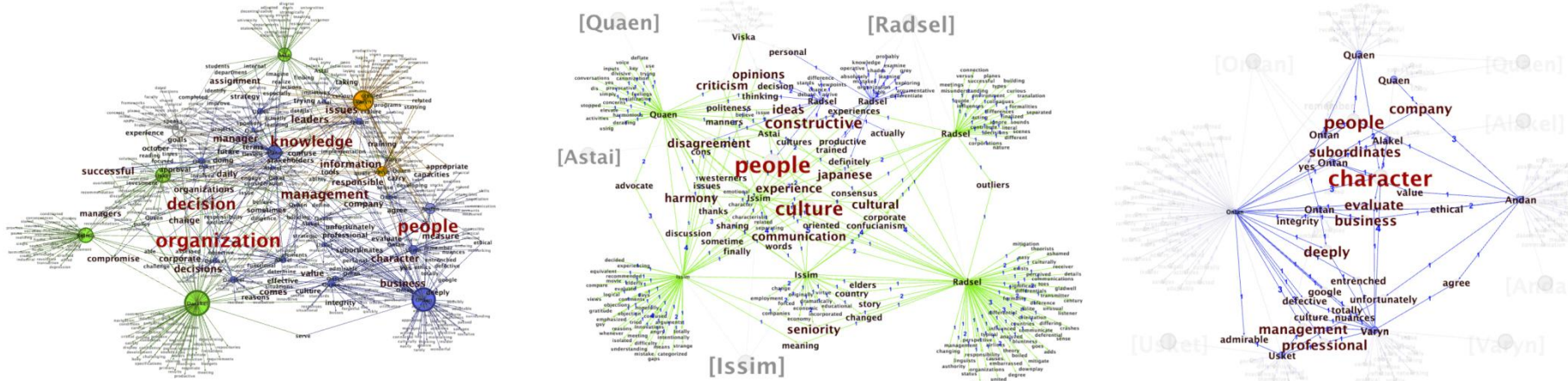
Y/N Asks a question or prompts in a new direction.

EXTERNAL CITATION

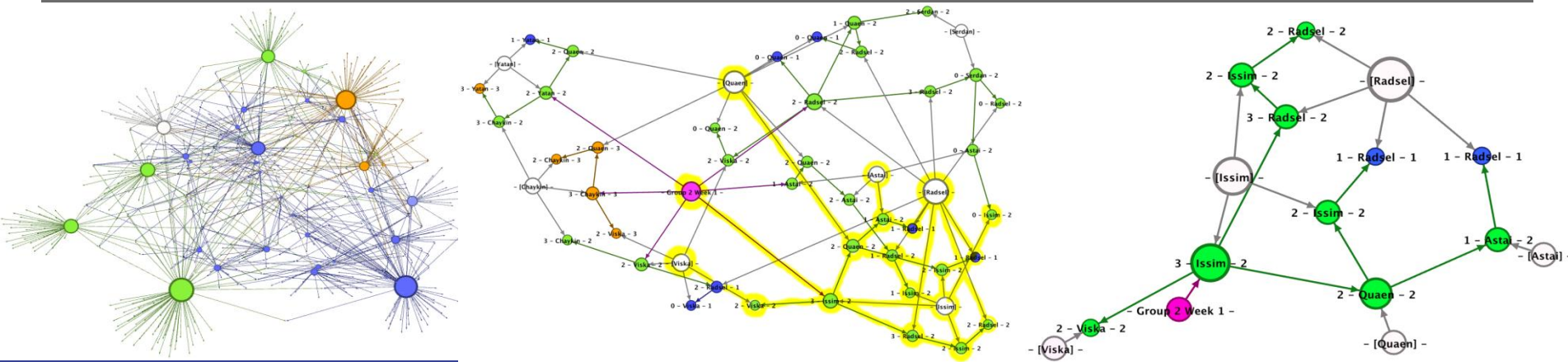
Y/N Cites outside source as evidence or to make a point.

PERSONAL CITATION

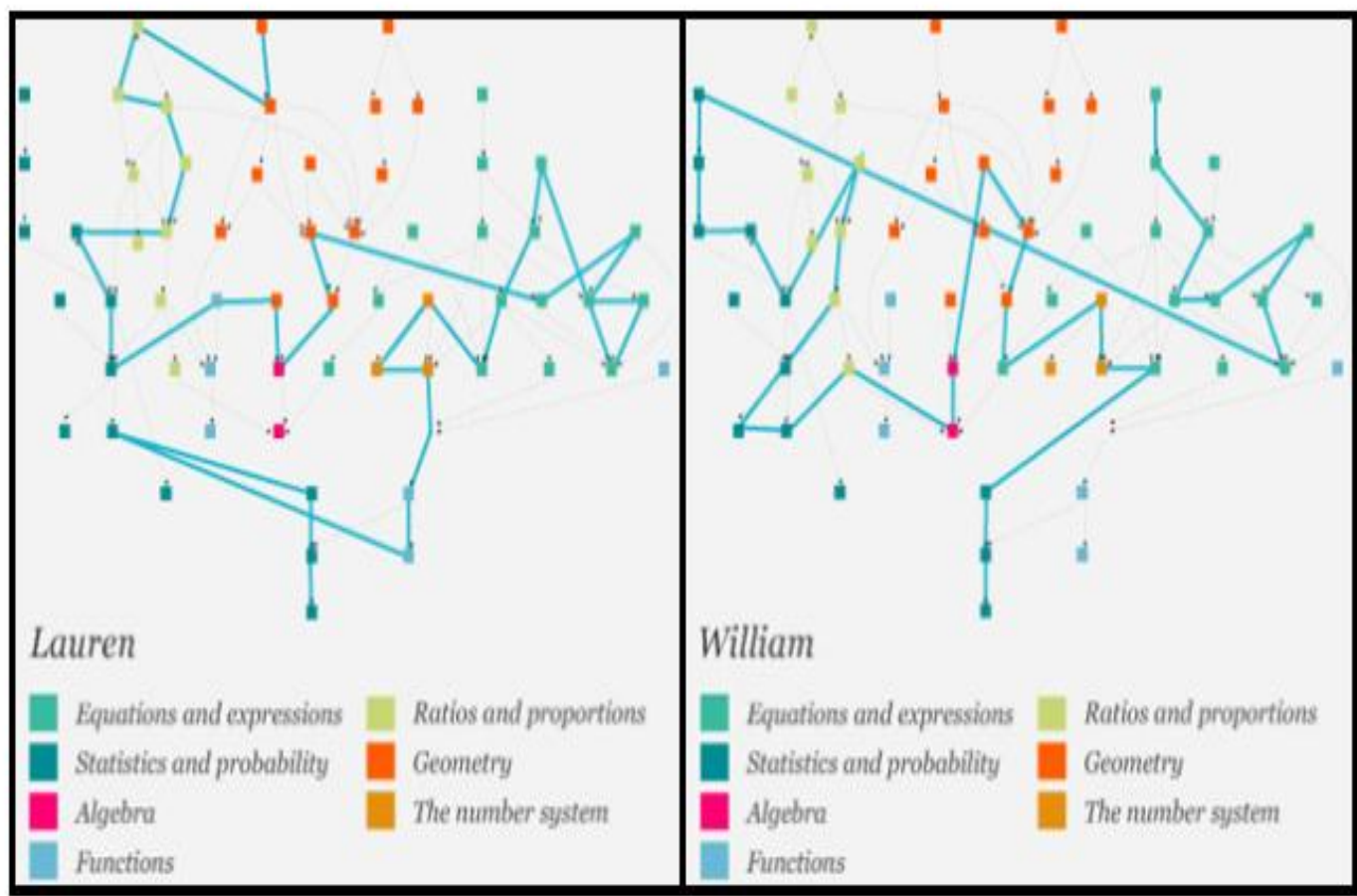
Y/N Uses a personal story or experience to make a point.



Entities	Relations	KnAc	Topic Spread
<ul style="list-style-type: none"> ● Prompt ○ Person ○ Concept Posts 	<p>Prompt ● hasRoot ○ Concept</p> <p>Person ○ wrote ● Post</p> <p>Post ● mentions ○ Concept</p> <p>Post ● hasResponse ● Post</p>	<ul style="list-style-type: none"> ● Innovate ● Apply ● Transfer ● Absorb 	<ul style="list-style-type: none"> 0 Participate 1 Explain 2 Elaborate 3 Expand
Y/N Challenge	Y/N Question	Y/N Personal/External	Citation



Personalized Learning



Learning pathways vary for each student

Inventories

How Important is Grit in Student Achievement?

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

2 Comments Tweet 400 Like 256 Share 14 Email Post Print



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

By Emily Hanford, American RadioWorks





Personality and Individual Differences

Volume 36, Issue 1, January 2004, Pages 163–172



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

 Permissions & Reprints



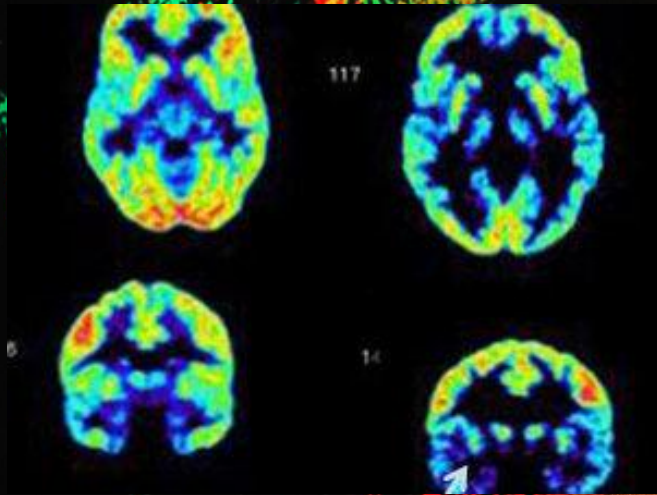
Dr. Robert Hare / Kevin Huttan: 0-3 Score

- 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

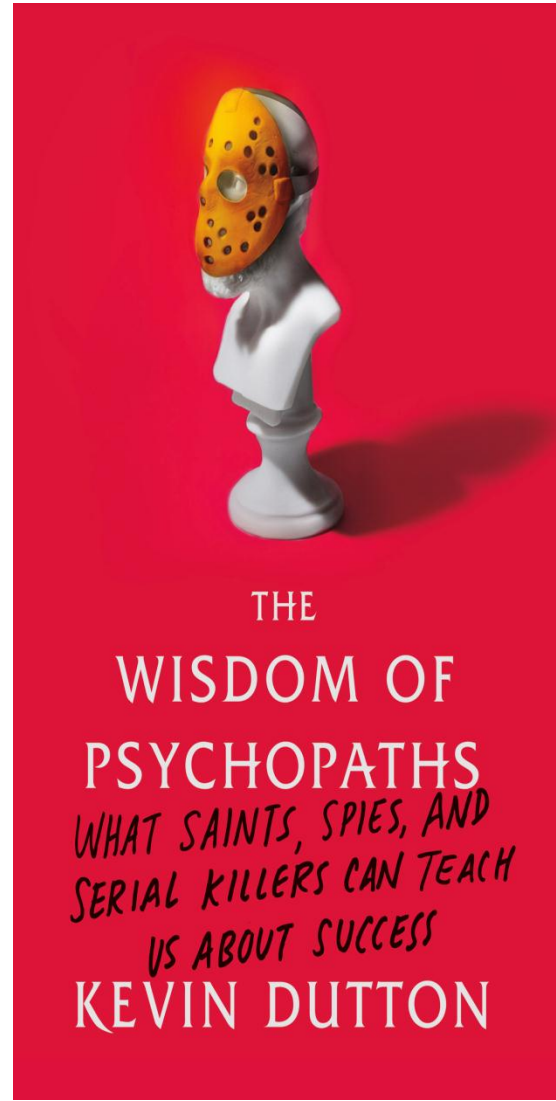
Are You A Psychopath?

- 0-10: Low
- 11-15: Below average
- 16-20: Average
- 21-25: High
- 26-30: Very high

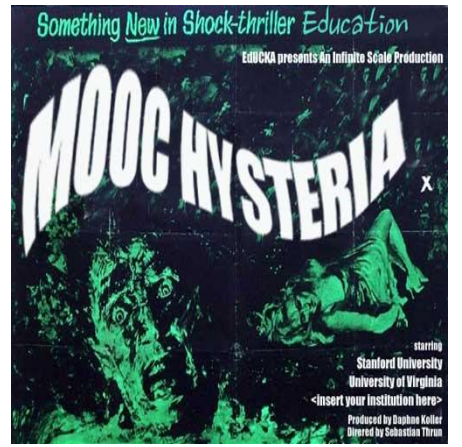
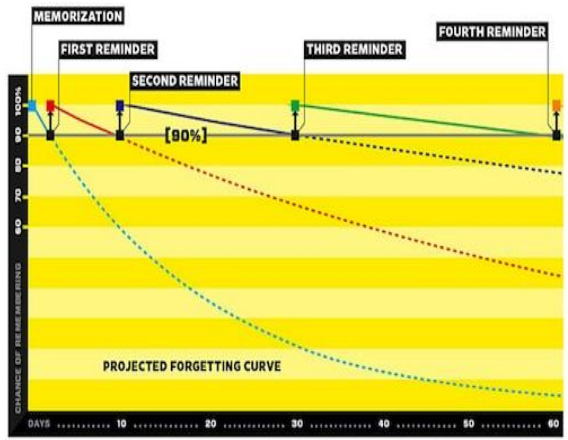
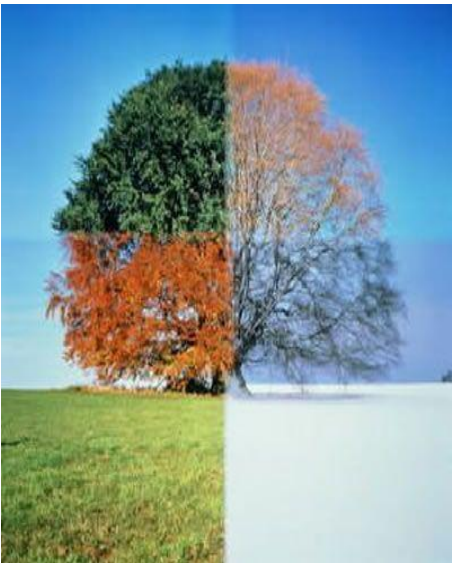
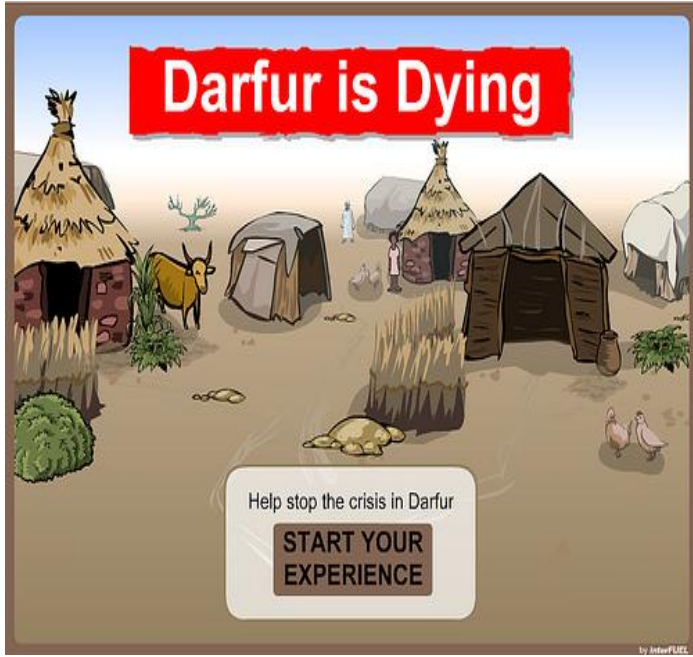
James Fallon



The Best Surgeons?



Best Way?





Thank You

Dr. Jeff D Borden

jeffb@ecollege.com



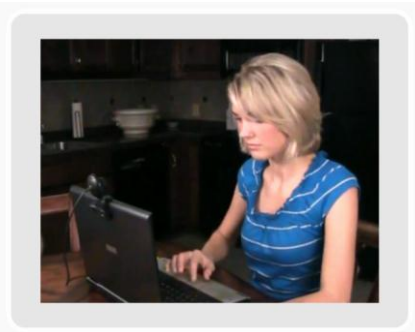
ProctorU

.....

ANDREW JACKSON

UNIVERSITY

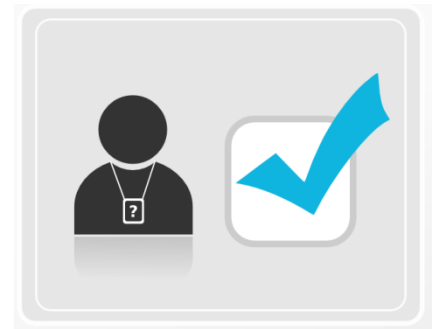




Seeing the student.



Seeing what they are doing.



Knowing who they are.

ProctorU

Real People.
Real Proctoring.



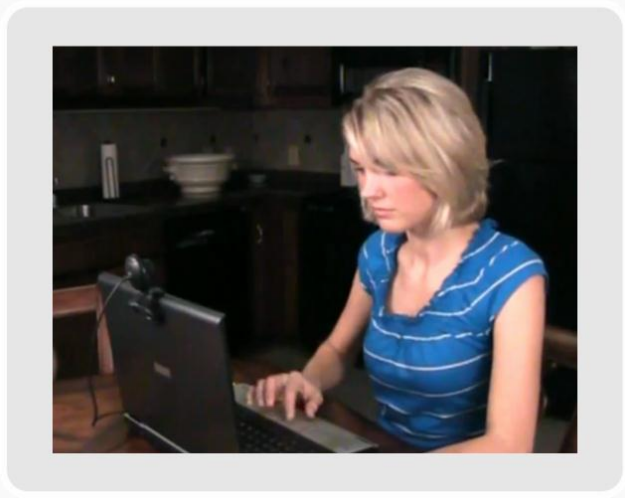


- Test Centers
- Live Online Proctoring
- Record and Review
- Authentication Only
- Lockdown Browsers Only

200+ Partners

Including these partners from Florida





Questions?



ProctorU



Learning Studios: Play in the Sandbox Before Building Your Castle







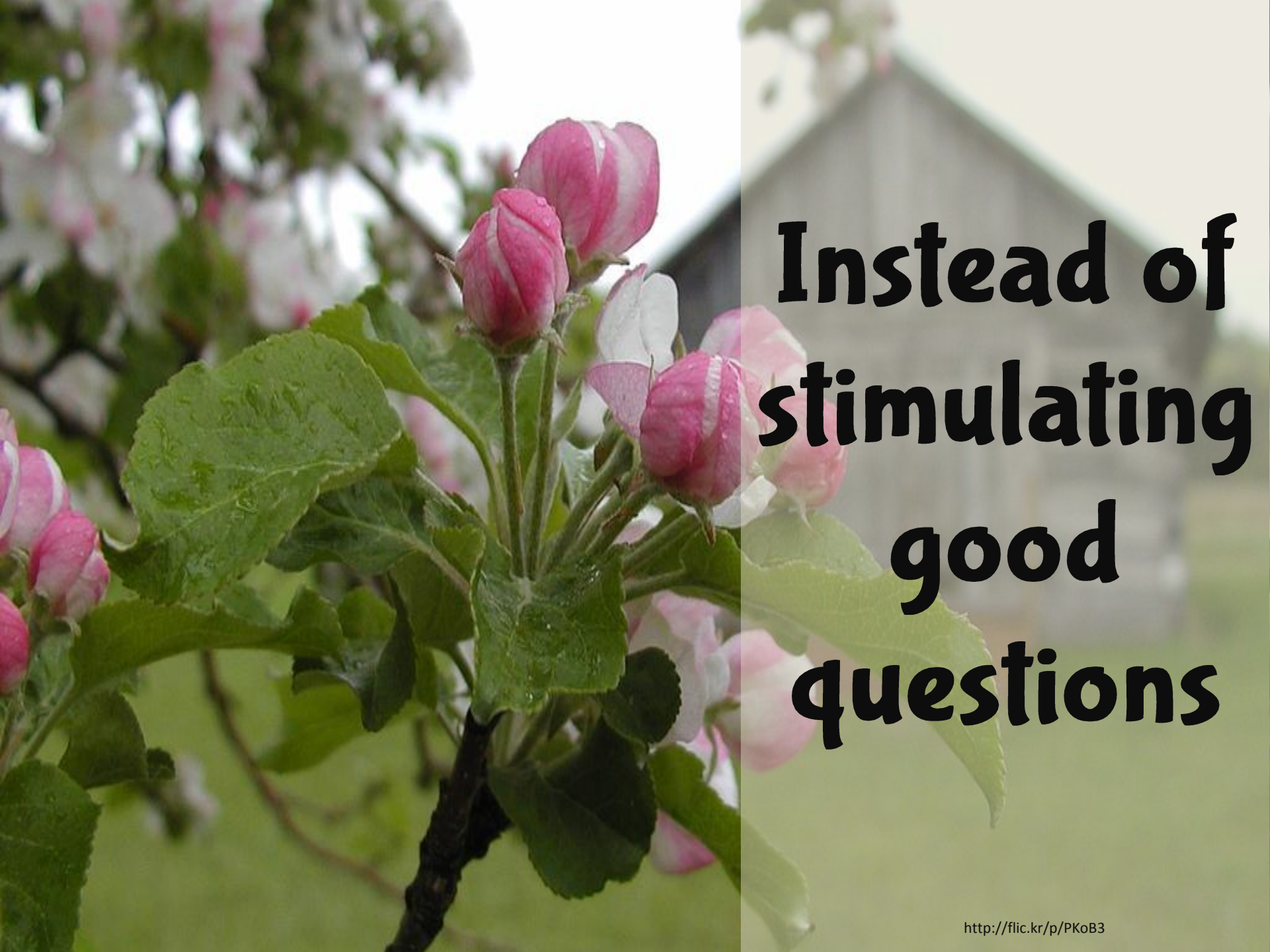
Teachers teach

**Students
are
taught**



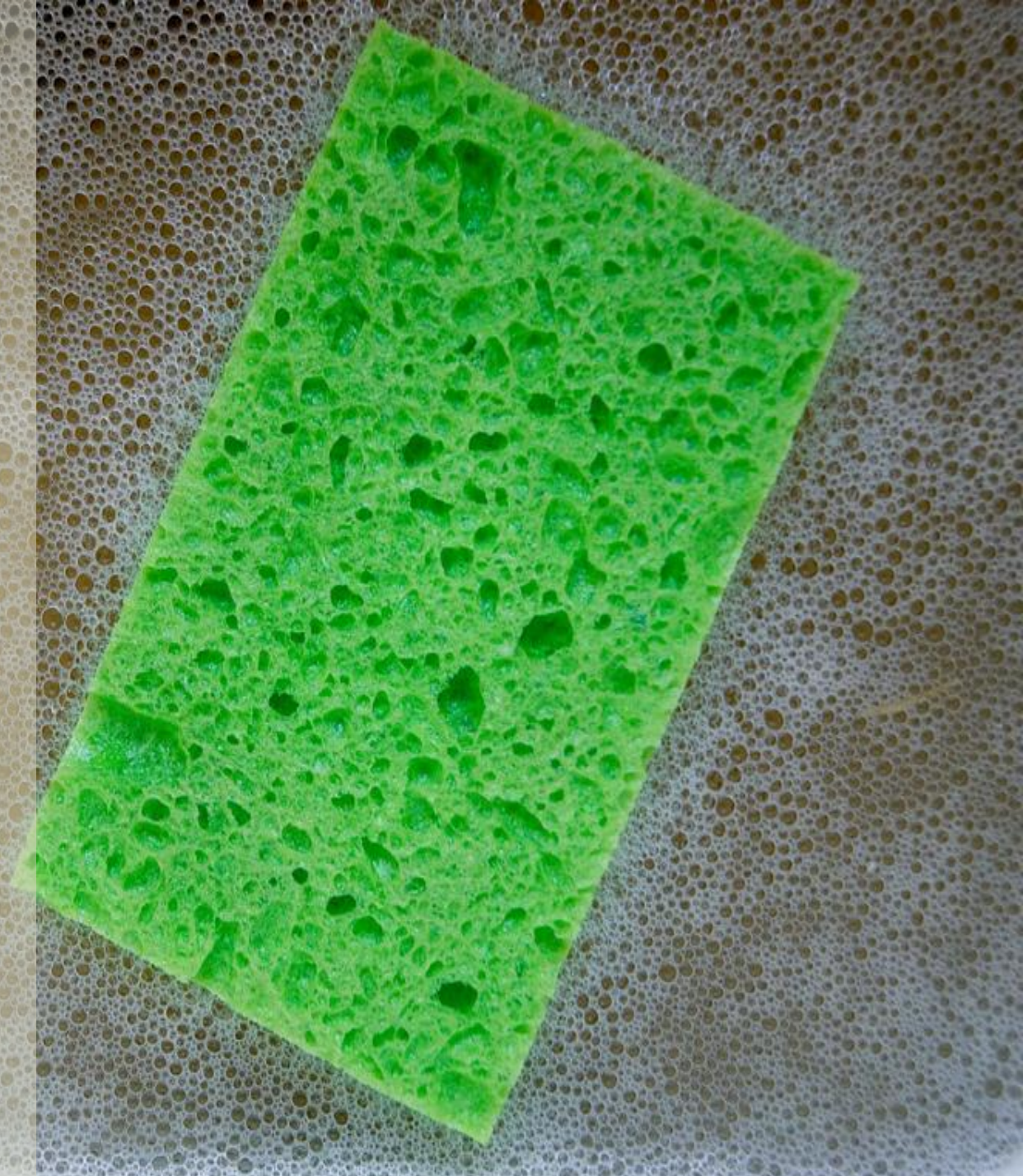



**Focus on
providing
good
information**



**Instead of
stimulating
good
questions**

**Rather
than
student
as a
sponge**





**Quite
unlike
student
as a
bank**

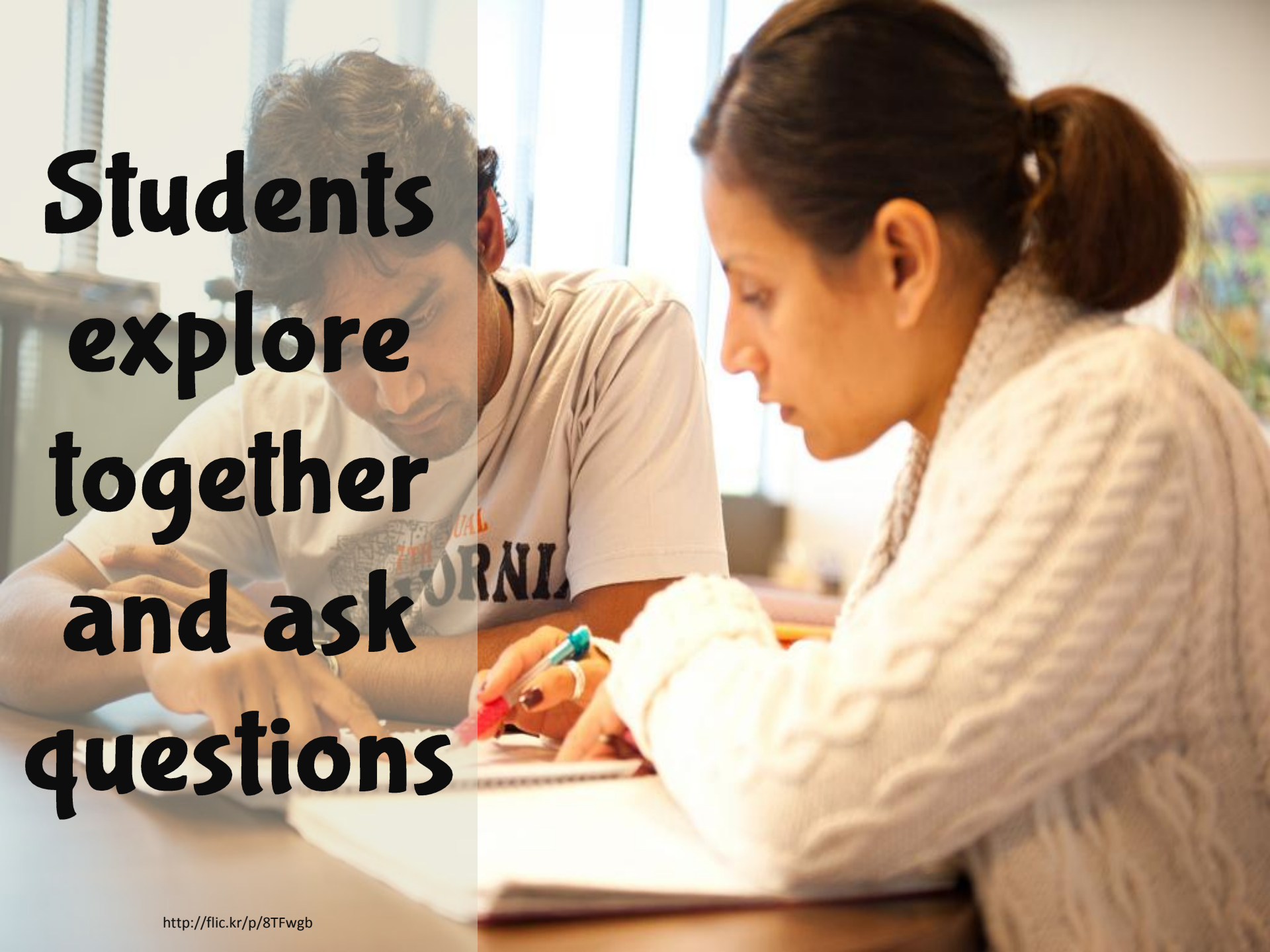
**Instructors
knowledge
should elicit
student
understanding**



Encourage participation and interaction



Students engage and learn



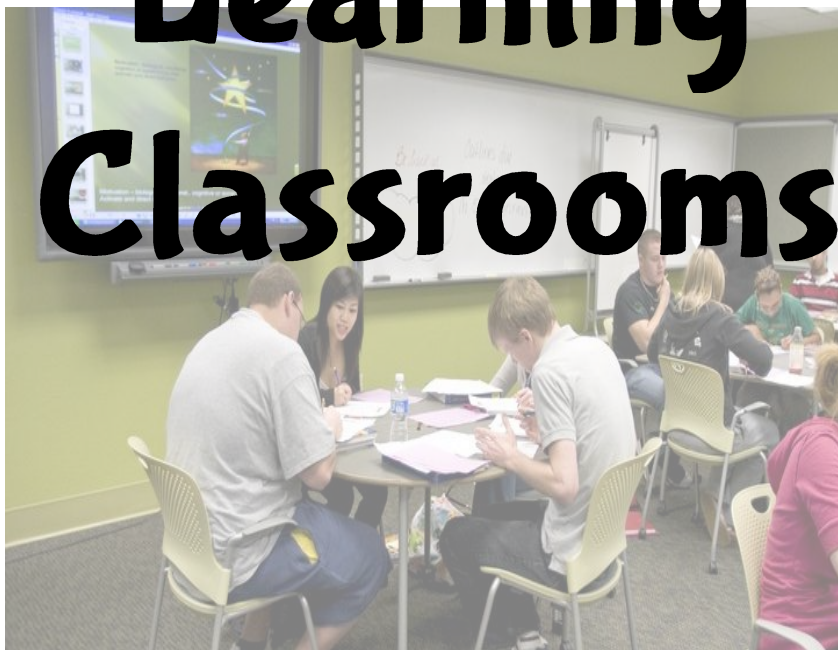
**Students
explore
together
and ask
questions**



**Thus
developing
lifelong
interest as
learners**

A close-up photograph of a person's hand using a metal spatula to flip several oval-shaped pancakes on a dark, well-used griddle. The pancakes are light-colored with small dark spots, likely chocolate chips. The background shows a window with a view of a snowy outdoor scene. The text "Flipping the classroom" is overlaid on the left side of the image.

**“Flipping
the
classroom”**



Active Learning Classrooms

Inside Active Learning Classrooms

Information Technology Services | THE UNIVERSITY OF IOWA

ITS Home
 Instruction Home
 About TILE
 TILE Home
 Organizational Structure
 Teaching & Learning Portal
 Teaching Strategies
 Virtual Tour
 Scale-Up
 Consulting & Support
 Center for Teaching
 SITA
 Classroom Technology Support

TILE Teaching Strategies

Overview Course Design Facilitating TILE Assessment

General TILE Questions

What is TILE? - Show/Hide

The TILE (Spaces to Transform, Interact, Learn, Engage) project will create new learning space structures that address a variety of teaching and learning needs on campus and help recruit and retain students.

These new student centered spaces will support a variety of models for teaching and learning, including self-paced learning, active learning, increased student engagement, collaborative teamwork, and increased interaction with faculty. In addition to the physical and technology enhancements to these spaces, a key component of the project will be to provide technical support and course design assistance to faculty to use these spaces for active and engaged learning.

TILE Project goals:

- Create spaces that support teaching and learning models that lead to increased student recruitment and retention
- Make the most effective use of learning spaces available as student enrollment increases and new classroom construction is limited

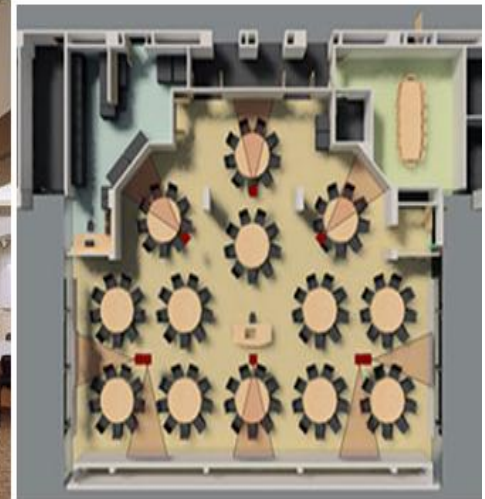
Further reading:

[Trends in Learning Space Design](#)

Brown, Malcolm and Philip Long. "Trends in Learning Space Design." *Learning Spaces*. Ed. Oblinger, Diana C. EDUCAUSE, 2006.
 (Reproduction of this article is given permission by EDUCAUSE)



TEAL classroom supporting team engagement



TEAL classroom layout, top view

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 instructional materials that are based on more than a decade of discipline-based education research.

For a quick introduction, visit our [Frequently-Asked-Questions](#) page, or take a look at this [5 minute video](#) or view some of these short video clips created by adopters:

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

As a visitor to the site, you can view classroom designs and find contact information for scores of colleges and a growing number of high schools that are offering highly interactive, collaborative, guided-inquiry-based instruction.

Active Learning Classrooms (2012)
 from Andy Underwood-Bultmann PLUS

Promotor from SARS-2 gene
 Capsicum annuum
 MCS
 Origin of replication

06:22

HD vimeo



**But what
about
distance
students?**



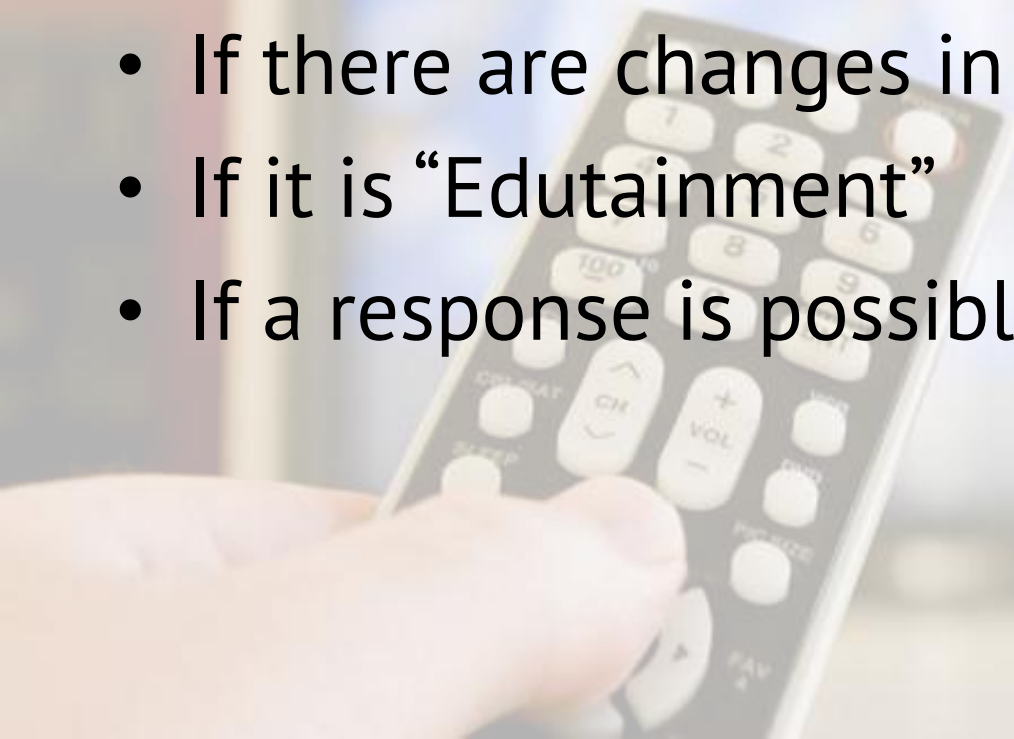
<http://flic.kr/p/8aAiRz>



<http://flic.kr/p/7aKo4z>

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)



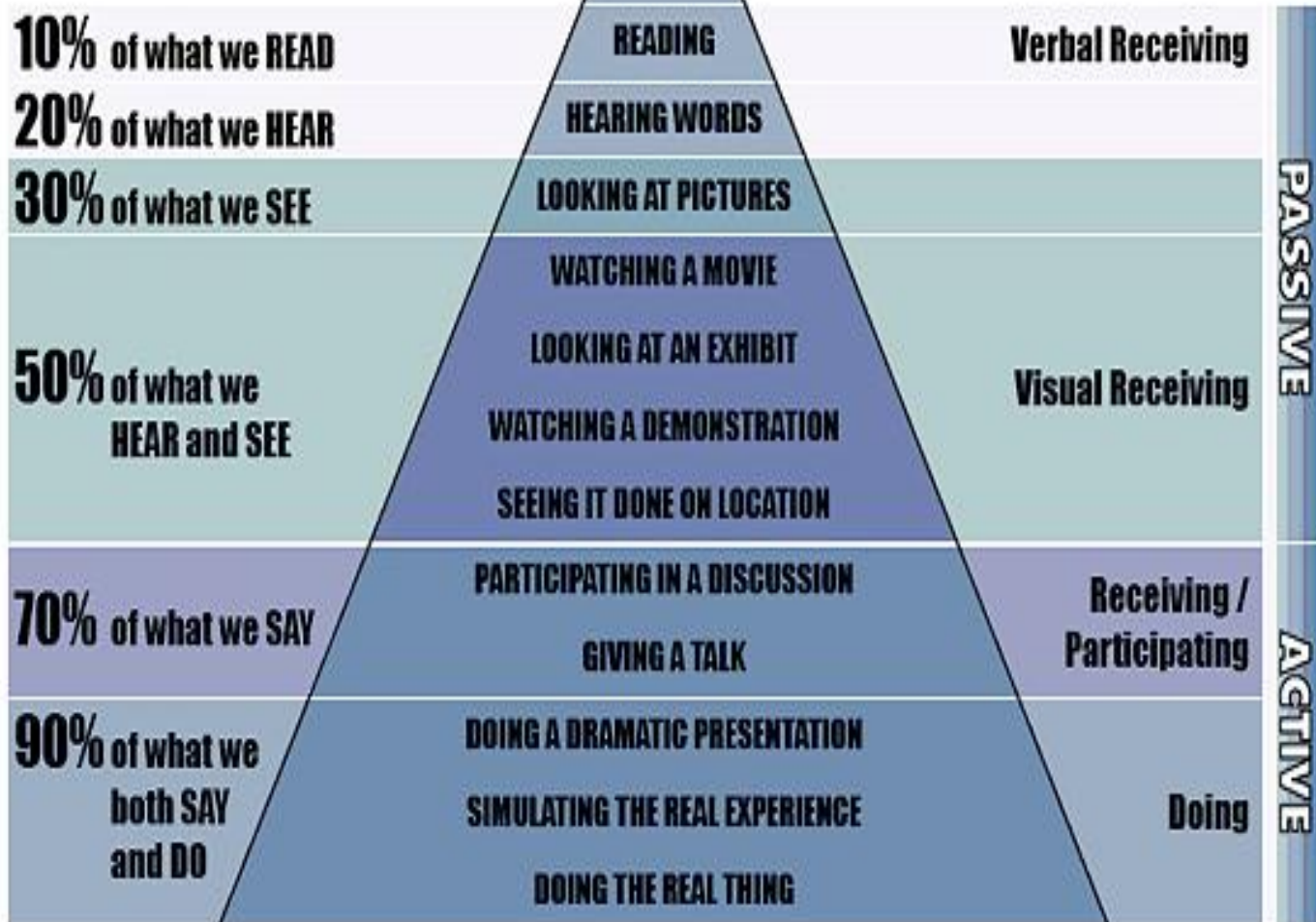
**Still
little is
required**



Cone of Learning (Edgar Dale)

*After 2 weeks
we tend to remember...*

*Nature of
Involvement*

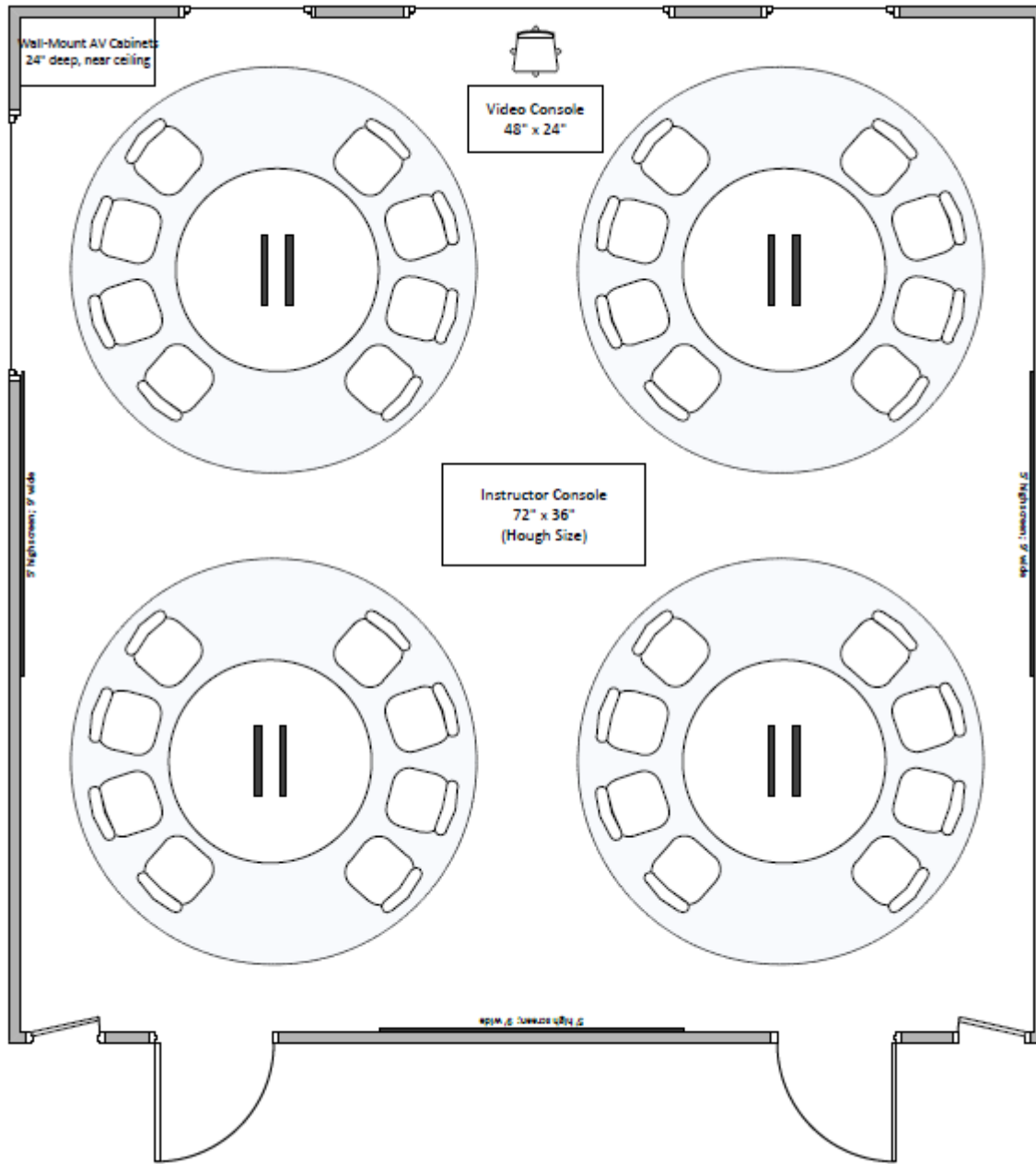


Active Learning From a Distance

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?

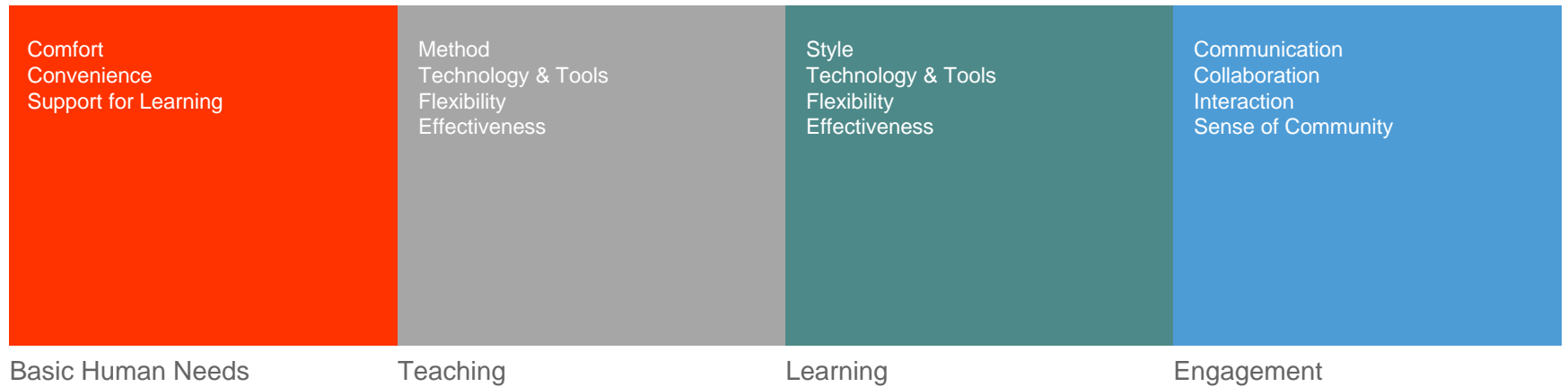
- How does space influence teaching?
- What are the teaching practices of instructors using the space
 - Instructor focus versus student focus
 - Content delivery versus content construction
- How are students learning within and outside the space?
- What is the student connection to peers and instructors?

Learning Spaces Research ProgramSM



Research Constructs

Student & Faculty Experience



The Power of 3,000



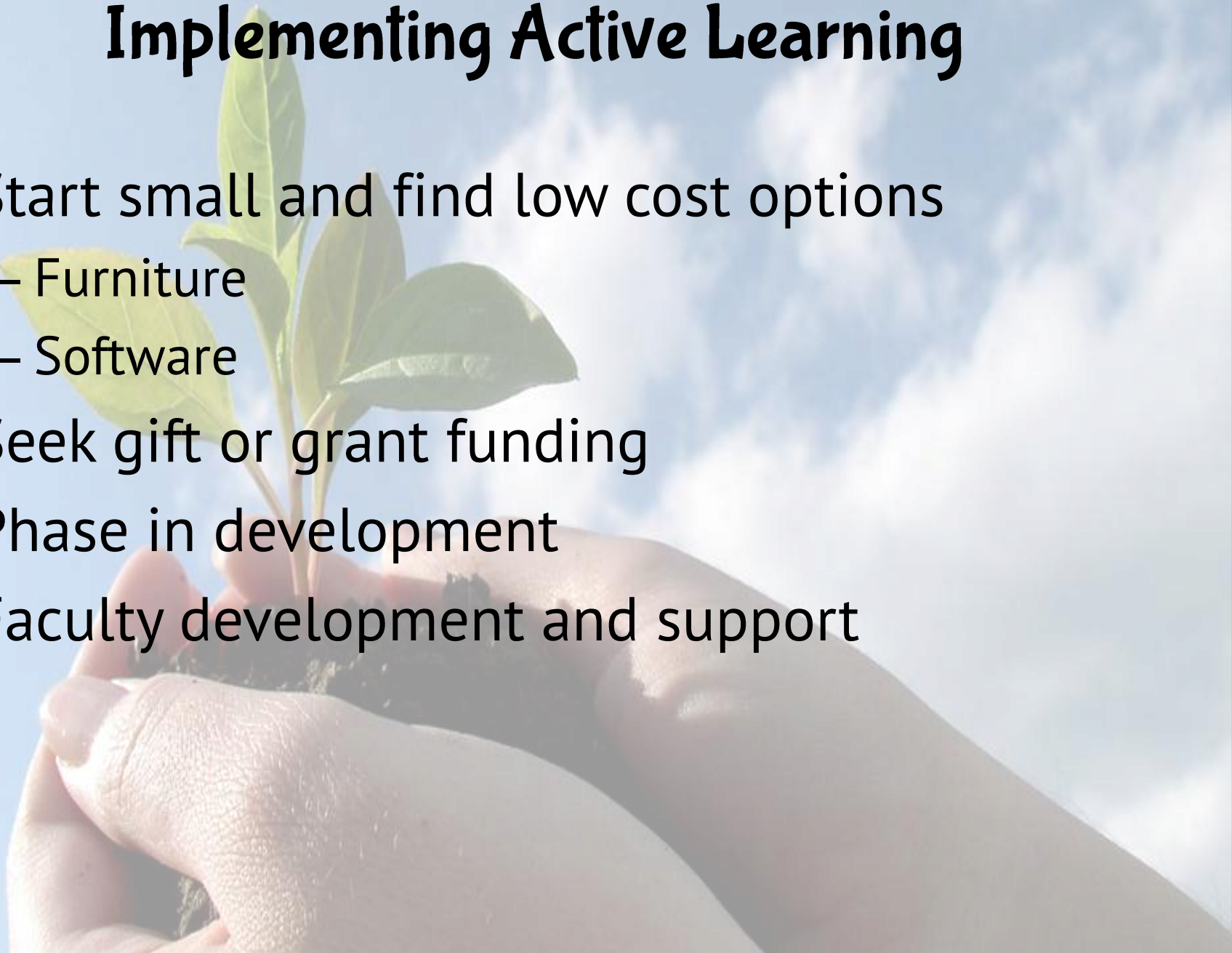
Proof of Concept

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

(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

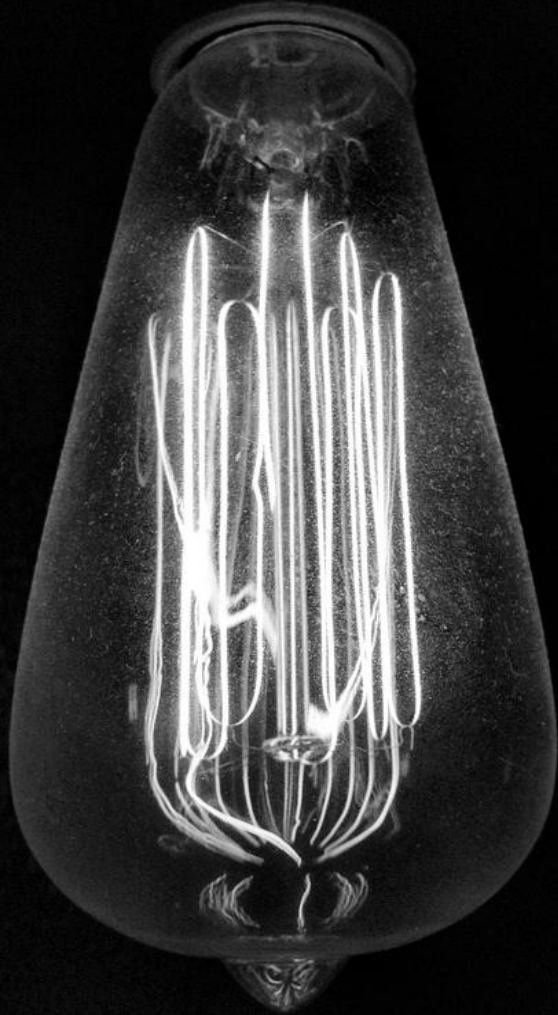
- In-room video
 - Four HD PTZ cameras
 - HD video switcher
 - Integrate to Crestron controls
- Remote student capability
 - Adobe Connect
 - Crestron Capture HD



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

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



Dr. Tawnya Means

Center for Teaching, Learning and Assessment
Warrington College of Business Administration

University of Florida

352-273-3237

tawnya.means@ufl.edu