

**ACE<sup>®</sup>2018**  
100TH ANNUAL MEETING • WASHINGTON, DC

# Innovation-Driven Approaches to Teaching Effectiveness

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*ACE; Wilmington University*

 #ACE2018DC

@marnibstein

@LaurenInDaField

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@SteveTaylorEdu



# Session Format

*Introductory remarks followed by three 20-minute quick hit discussions.*

**WGU:** Teaching effectiveness within a CBE context

**CMU:** Overcoming barriers to adoption of technology-enhanced learning

**ACUE:** Evidence-based teaching practices to improve instruction



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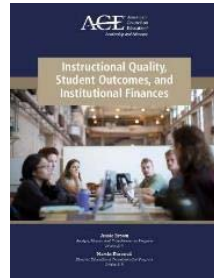
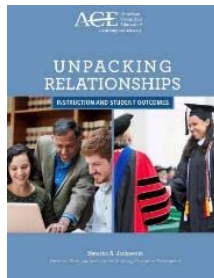
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## Instructional Quality: A lever to improve institutional efficiency

- Effective teaching → better student outcomes → cut costs, increase revenue
- Instruction can have the greatest impact on students
- More on ACE's efforts at [www.acenet.edu/EffectiveTeaching](http://www.acenet.edu/EffectiveTeaching)



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# A DATA-DRIVEN MODEL FOR FACULTY DEVELOPMENT

MARNI BAKER STEIN, PROVOST



**WGU**

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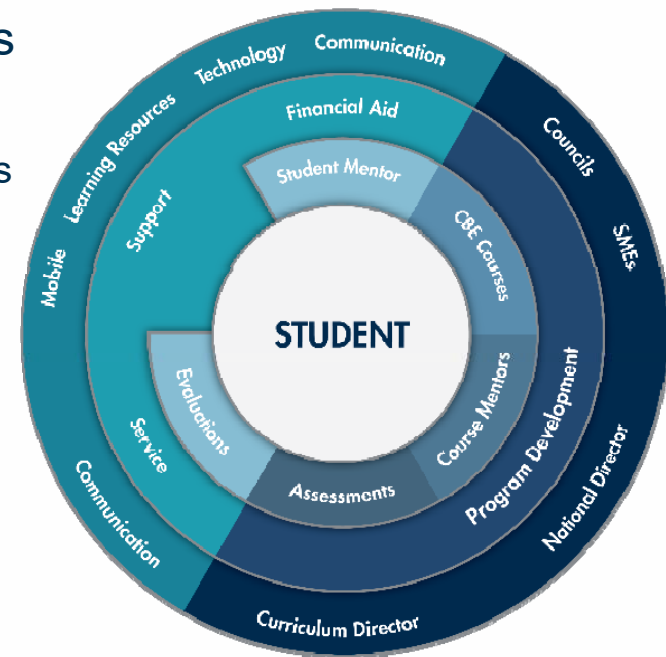
## WGU BACKGROUND

- Est. 1997 by a bi-partisan group of governors
- **94,000+** students
- **102,000** graduates in **50 states**
- Four colleges in high-demand fields
  - Business
  - K-12 teacher education
  - Information technology
  - Health, including nursing
- Online and competency-based



# WGU'S STUDENT-CENTRIC MODEL

- Focus on programs; not individual courses
  - Personalized assessment traverse
  - Validated competencies align to workforce needs
  - Long-term view of the learner lifecycle
  
- Track ongoing student progress, performance and engagement
  - Granular, real-time data drives interventions
  - Insight-driven continuous improvement
  - of all faculty and support roles across the WGU community of care



## THE “DISAGGREGATED” WGU FACULTY MODEL

### **Program Faculty**

- One-to-one support for students across their program journey

### **Course Faculty**

- Personalized instructional interventions
- Lead discussions and study groups; explore big ideas and critical concepts

### **Evaluation Faculty**

- Evaluate and validate student competency; individualized feedback

### **Curriculum and Assessment Faculty**

- Curate/develop instructional materials
- Design and continuously improve assessments



Training Category	Sample Training Topics
Methodology of Mentoring	Characteristics of a Mentor; Emotional Intelligence; Decisive Mentoring; Academic Coaching; Active Listening; Goal Setting; Proactive Interventions; Managing Time; Difficult Conversations; Strengths Mindset; WGU Leadership Principles
Mentoring Essentials	Student Journey (Enrollment, Admissions, Orientation, Student Services, Well Connect, Career Services); Academic Services
Technology	Hardware (Computers, phones, equipment, setting up home office); Software (WGU systems and portals, Outlook, ININ, Skype/Teams, MentorForce, Student Handbook, IT Service Desk, Taskstream, Concur, ADP, TimeTrade, Panopto, etc.).
WGU Policy	Assessments, Student Communication Protocols, FERPA, ADA, Student Notes, Accreditation
Product Knowledge	Course resources, Course of Study, Degree Plans, introduction to the mentor's specific program and/or course

## NEW FACULTY TRAINING & DEVELOPMENT

- Prepare Instructors, Mentors, and Faculty Managers
- Effective student and peer engagement techniques
- Four weeks of rigorous training
- Synchronous and asynchronous learning

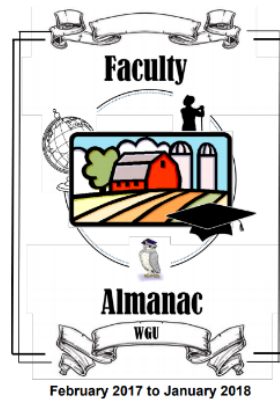
## STRUCTURE

- **One week intensive, on-site in Salt Lake City**
- **Three weeks of virtual training**
  - 2 hours/day synchronous training sessions
  - 2 hours/day interactions with a faculty mentor (team member) and manager
- **6-8 additional hours of structured practice**
  - Targeted Learning Management System and associated resources





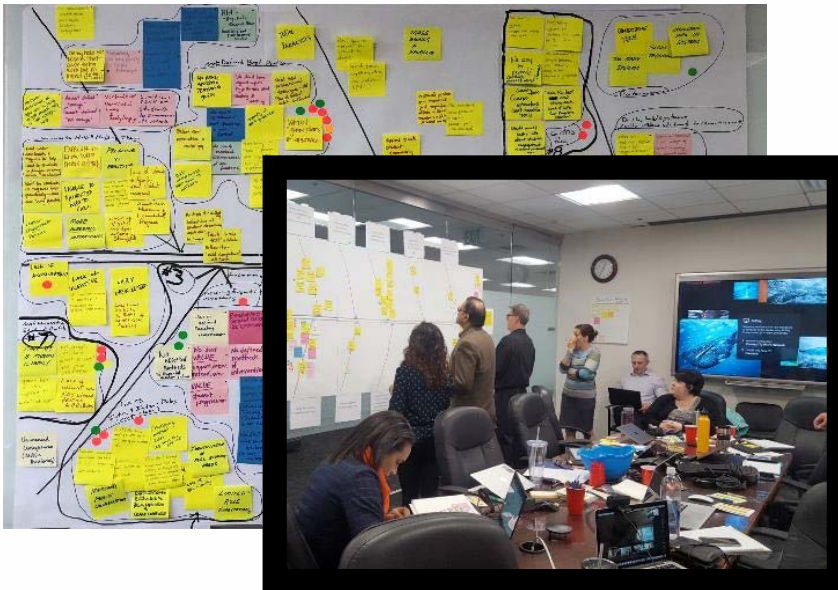
# CONTINUOUS LEARNING – A REGULAR CYCLE OF REVIEW TO BUILD PRACTICE



WGU Bi-Weekly Ops Review  
01/29/18



# CONTINUOUS LEARNING – ACTIVATING CROSS FUNCTIONAL SOLVER TEAMS



## Problem: Improve Course Completion Rates

- Faculty Leaders
- Program Experience Leaders
- Learning Experience Leaders
- Curriculum, Design & Development Leaders
- Evaluation Leaders
- Ed Tech-Product Management Leaders



## CONTINUOUS LEARNING – DEFINING LOW-LEVEL PERFORMANCE METRICS



**Accurate.** Results reflect performance



**Fair.** Consistent evaluation/validation against valid, criterion referenced standards



**Helpful.** Feedback propels students through personalization, motivation and anticipation of future challenge and strength



**Quick.** With due consideration to other tenets, rapid and transparent communications and results to support learner pacing and completion goals.



## FREE THE DATA



- Increase access to the data-scientist in all of us
- Empower the frontline
- Guide the development and continual improvement of performance standards and metrics laser focused on student success.
- Tools that enable faculty and staff to:
  - more nimbly respond to environmental demands
  - make decisions guided by real-time data



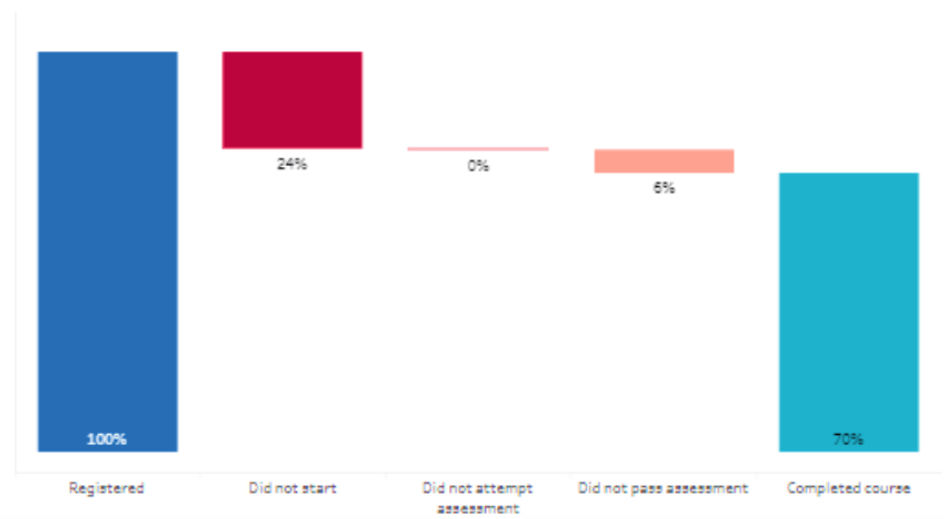
# FREE THE DATA – DRIVING ACTION, INSIGHT, STRATEGY

## Course Health Dashboard

Date range  
 January 2015   January 2018

Course  
 AGC1 - Foundations of College Mathematics

### Course Completion



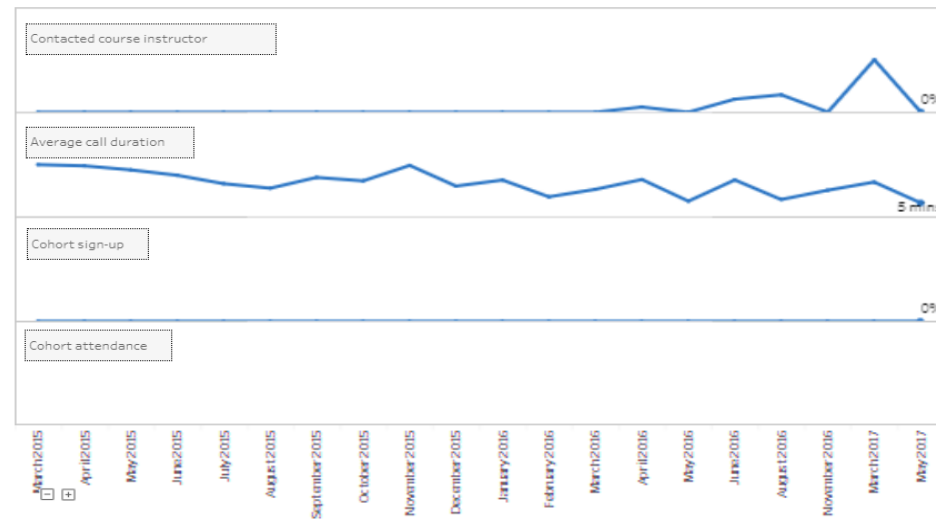
# FREE THE DATA – DRIVING ACTION, INSIGHT, STRATEGY

## Course Health Dashboard

Date range: January 2015 to January 2018

Course: AGC1 - Foundations of College Mathematics

### Faculty Utilization



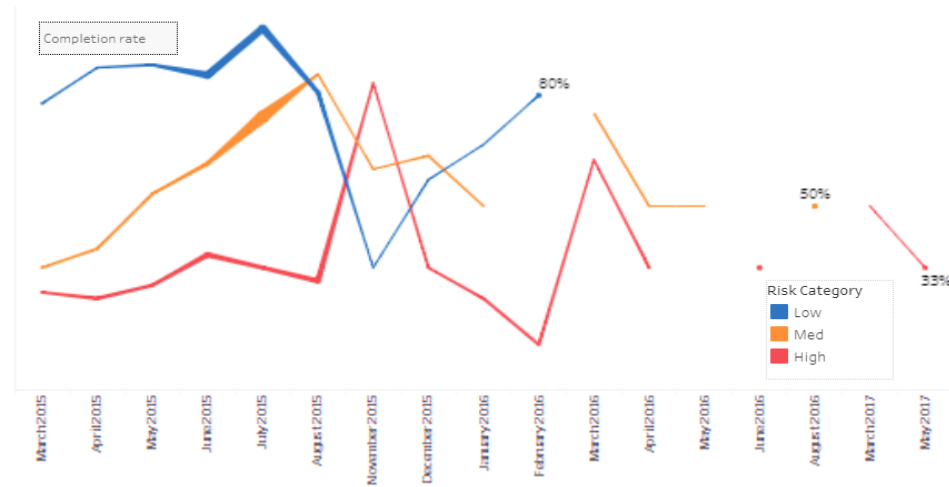
# FREE THE DATA – DRIVING ACTION, INSIGHT, STRATEGY

## Course Health Dashboard

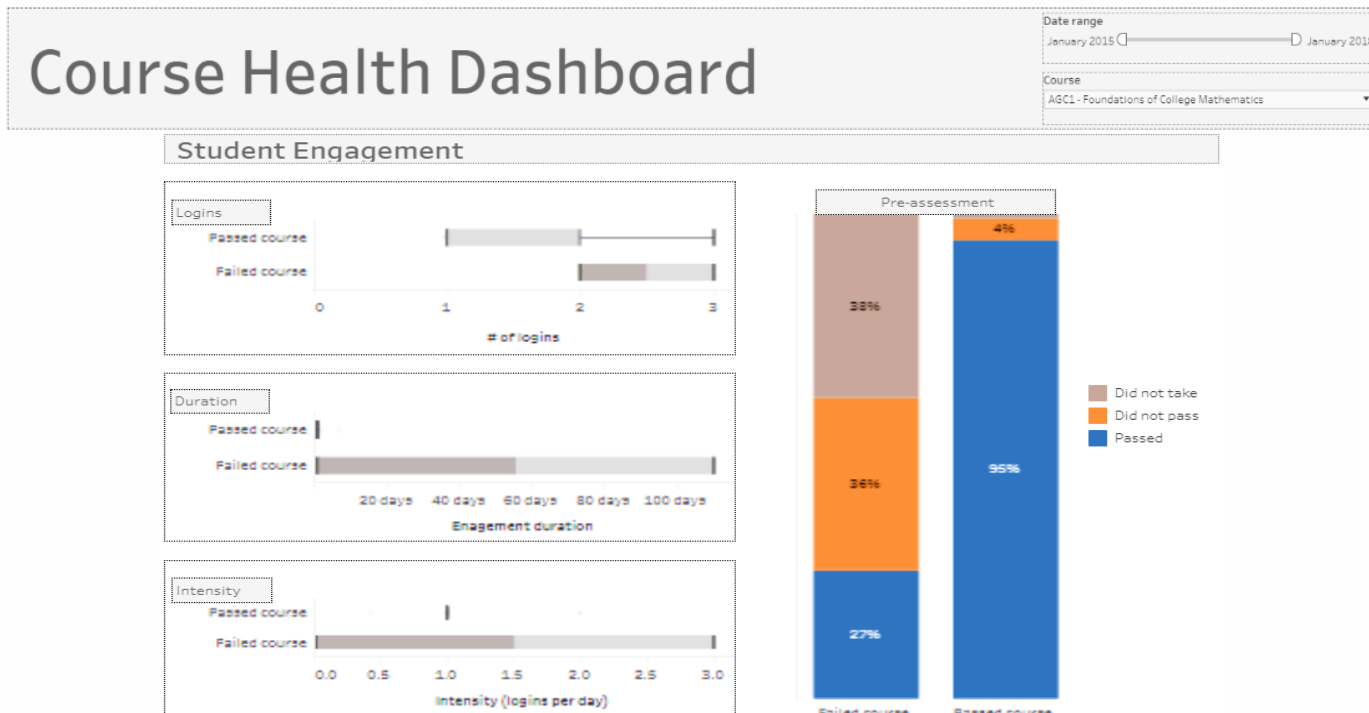
Date range  
 January 2015  —  January 2018

Course  
 AGC1 - Foundations of College Mathematics

### Risk Level



# FREE THE DATA – DRIVING ACTION, INSIGHT, STRATEGY





# FREE THE DATA – DRIVING ACTION, INSIGHT, STRATEGY

## Course Health Dashboard

Date range: January 2015  to January 2018

Course: AGC1 - Foundations of College Mathematics

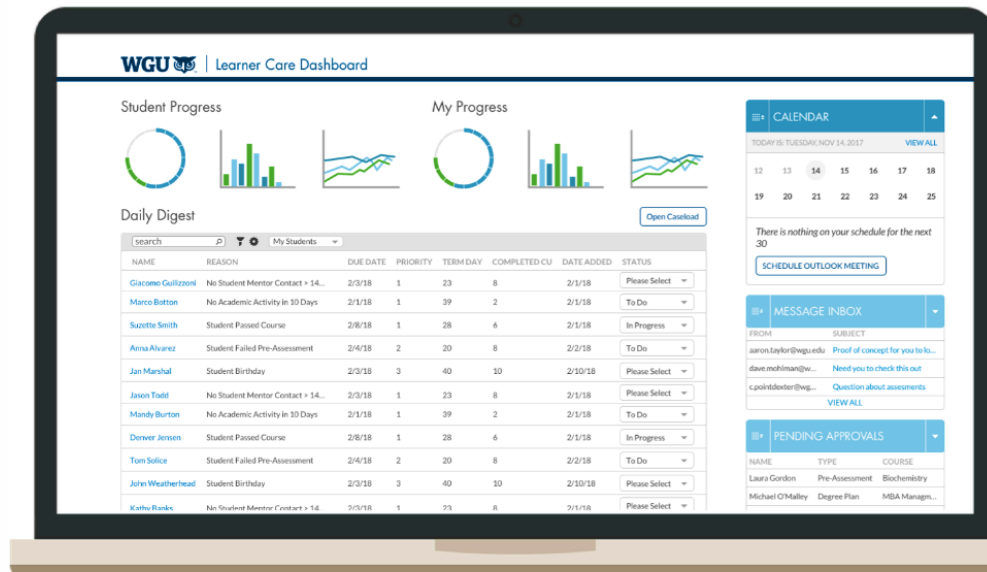
Student Demographics

	N	%	Outcomes			Engagement				Utilization			
			Did not start	Non-attempt rate	Completion rate	# of logins	Duration	Intensity	Tasks/assignments	Success score	Contacted CI	Contribution	Collaborative
<b>Gender</b>	1,957	100%	24%	23%	77%	2	12 days	1.2	88%	43%	0%	15 mins	0%
Female	1,087	55%	25%	26%	85%	1	17 days	1.0	89%	40%	0%	16 mins	0%
Male	870	45%	22%	24%	72%	2	2 days	1.6	87%	46%	0%	12 mins	0%
<b>Age group</b>	82.0	4%	10%	10%	89%					94%	58%	0%	0%
Traditional College A.	82.0	4%	10%	10%	89%					94%	58%	0%	0%
Millennial	828.0	42%	22%	22%	72%	1	1 day	1.0	89%	42%	1%	12 mins	0%
Gen X	828.0	42%	27%	28%	85%	2	2 days	1.6	87%	42%	0%	15 mins	0%
Baby Boomer	195.0	10%	non	non	82%	2	29 days	0.8	80%	44%	0%	20 mins	0%
High	1,183	60%	Age Group: Gen X Did not start: 27%	non	75%	2	2 days	1.2	89%	48%	0%	15 mins	0%
Low	688	35%			80%				88%	34%	0%	14 mins	0%
<b>Household income</b>	8	0%	79%	79%	83%					24%	28%	0%	0%
Declined	8	0%	79%	79%	83%					24%	28%	0%	0%
Unemployed	130	7%	20%	20%	88%	3	55 days	1.8	91%	40%	0%	13 mins	0%
<b>Marital status</b>	227	12%	22%	21%	20%	1	2 days	1.0	80%	30%	1%	14 mins	0%
Single	227	12%	22%	21%	20%	1	2 days	1.0	80%	30%	1%	14 mins	0%
Married	1,059	54%	21%	22%	78%	2	18 days	1.2	89%	44%	0%	15 mins	0%
Divorced	200	10%	27%	27%	80%	1	1 day	1.0	80%	43%	1%	13 mins	0%
Separated	93	5%	37%	37%	44%				87%	28%	0%	15 mins	0%
Widowed	7	0%	14%	14%	71%				100%	40%	0%	8 mins	0%
<b>Military standing</b>	76	4%	21%	21%	79%				88%	46%	0%	9 mins	0%
Active Duty	76	4%	21%	21%	79%				88%	46%	0%	9 mins	0%
Veteran	183	9%	27%	26%	83%	2	1 day	1.8	87%	44%	1%	13 mins	0%
Military Spouse or De.	11	1%	18%	18%	72%				91%	43%	0%	13 mins	0%
Not Applicable	1,627	84%	24%	25%	70%	2	18 days	0.9	88%	42%	0%	15 mins	0%
<b>Diverse student</b>	775	40%	25%	25%	85%	2	17 days	1.3	88%	41%	0%	15 mins	0%
Yes	775	40%	25%	25%	85%	2	17 days	1.3	88%	41%	0%	15 mins	0%
No	1,184	60%	23%	24%	71%	2	4 days	0.7	88%	42%	0%	14 mins	0%
<b>Underrepresented</b>	520	27%	39%	39%	89%	2	1 day	1.8	83%	34%	0%	15 mins	0%
Yes	520	27%	39%	39%	89%	2	1 day	1.8	83%	34%	0%	15 mins	0%
No	1,439	73%	20%	20%	70%	2	12 days	1.1	90%	47%	0%	14 mins	0%
<b>Employment status</b>	1,252	64%	23%	23%	70%	2	2 days	1.1	85%	43%	0%	14 mins	0%
Full-time	1,252	64%	23%	23%	70%	2	2 days	1.1	85%	43%	0%	14 mins	0%
Part-time	222	11%	24%	24%	74%	2	2 days	1.0	87%	37%	0%	15 mins	0%
Unemployed	209	11%	35%	35%	59%	3	1 day	2.0	85%	32%	0%	16 mins	0%
Not Reported	115	6%	10%	10%	87%	2	110 days	0.0	85%	80%	0%	11 mins	0%
<b>Student tenure</b>	1,047	54%	14%	14%	82%	2	14 days	1.2	91%	37%	0%	17 mins	0%
Continuing	882	45%	8%	8%	84%				88%	33%	1%	14 mins	0%
First-time	165	8%	28%	10%	11%				92%	79%	0%	17 mins	0%
<b>Race category</b>	207.0	11%	35%	27%	88%				83%	46%	0%	12 mins	0%
Black	207.0	11%	35%	27%	88%				83%	46%	0%	12 mins	0%
High	200.0	10%	9%	9%	20%				77%	14%	2%	12 mins	0%



# FREE THE DATA – DRIVING ACTION, INSIGHT, STRATEGY

## LEARNER CARE DASHBOARD



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# QUESTIONS?

THANK YOU!



**WGU**

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**Carnegie Mellon University**  
The Simon Initiative

## A Commitment to Teaching Effectiveness in a Technology-Enabled Environment

Joel Smith and Lauren Herckis Carnegie Mellon University  
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[www.cmu.edu/simon](http://www.cmu.edu/simon)

*The research question:*

*To identify the actual barriers and facilitators to **implementing** educational technologies and best practices in teaching.*

*"When asked about obstacles to successful innovation in American Higher Ed, respondents most frequently cited barriers grounded in **institutional culture and structures**"*

Alamuddin, R., Kurzweil, M., & Rossman, D. (2016, February 22). *Higher Ed Insights: Results of the Fall 2015 Survey*. Retrieved from <http://sr.ithaka.org?p=277015>.

## Mixed-methods anthropological approach

- Meetings and classes as ethnographic encounters
- Survey
- Documents, presentations, whiteboards, and other artifacts
- Interviews with faculty, students, and administrators



Carnegie Mellon University

## Formative learning experiences shape teaching practice

*“I remember very distinctly I had a professor when I was an undergrad who – a math professor. I was a math undergrad. And I really enjoyed his lecturing style, and I really paid very close attention. And then I thought to myself at the time, ‘**If I ever become to the point where I have to teach, this is how I want to teach.**’ This is what really works.’ And I saw other lecturing styles, but just thought, ‘Nope. This is not really working for me.’ Or, ‘I’m not learning very well from this material.’ Or, ‘If I taught, I wouldn’t want to teach this way.’ So it goes way back to whenever, in 1975 or something like that.”*

Carnegie Mellon University



## Skepticism (of alternatives)

*“You could generate a version of a 45-minute lecture that I would give that would embed the clips, which would basically be me giving the lecture, and then you click here to see the different examples, which could even be footnoted, and you could link it to other sources, and you could – it's not that that might not be useful. But **I don't think it's a substitute** for the actual face-to-face classroom experience. I don't.”*

## Skepticism (of the research)

*“There are journals dedicated to it. There's communities out there. There's a lot of stuff on the Web. There are a number of people who have written books. Yeah, just resources everywhere of people who tried different things. Many of them actually try to do this in a rigorous sort of scientific way where they'll teach two sections using different techniques and measure the results. **I'm always a little skeptical** of the data there.”*

Carnegie Mellon University

## Skepticism (of applicability)

*“I just don’t think that’s how it’s done in my discipline. I never saw anyone teach like that.”*

*“I have a doctorate in curriculum and instruction. Don’t you think that means that I know more about those things than you do?”*

# When Expectations Compete

*“We are going to ask them to use the same syllabus. We know it works, and they all agreed on it.”*

*“If you don’t tinker with the class, it gets really boring. You’ve got to switch things up.”*

*“If forced to adopt an online interactive textbook, **I can ignore it** at will – my own teaching style is a little like the Socratic method; I ask questions and we have conversations. They are not wedded to a textbook.”*

# Competing Metrics of Success

*“How can you know if you’re achieving your learning goals without good assessments?”*

*“You know when you’re doing it right because you can see it on their faces.”*

## Faculty Identity and Institutional Goals

- Teaching is central to faculty identity
- Practice is developed through lived experiences, often by trial and error
- Personal relationships and personal models play a big role
- Administrators, technologists, and accreditors are motivated to generalize; faculty to specialize

# An implementation strategy

- Develop an early stage in implementation planning to have conversations about “the elements of quality instruction” that will reveal the type(s) of instructional sentiments of all individuals involved.
- Use these results to inform decisions about
  - Whether the chosen innovation is viable given the participants' mental models of "quality instruction"
  - Strategies which resonate with the instructional values at play

# Institutional policy

- Three different (and often competing) definitions of quality instruction and its importance
  - Individual faculty's view
  - Institutional mission or strategic statement
  - Quality instruction as assessed by the institution
- Policy should be to create an alignment among these three



Thanks to:

**Carnegie Mellon's Simon Initiative and  
The Carnegie Corporation of New York**

Richard Scheines, Dean, Dietrich College of Humanities & Social Sciences  
Norman Bier, Director of OLI and Executive Director of the Simon Initiative  
Carnegie Mellon University  
American Council on Education

**And YOU for being here!**

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Carnegie Mellon University

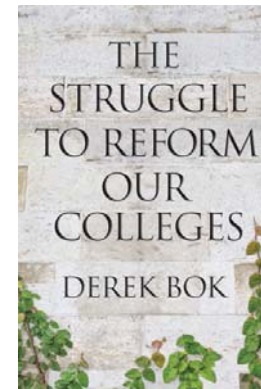
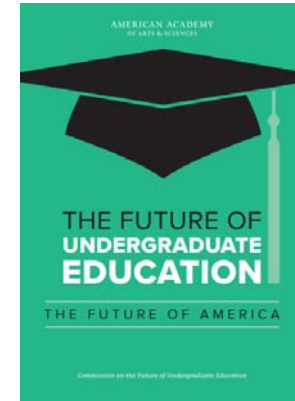
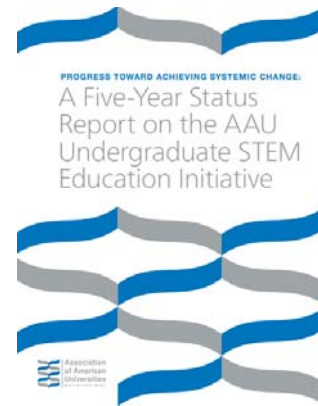
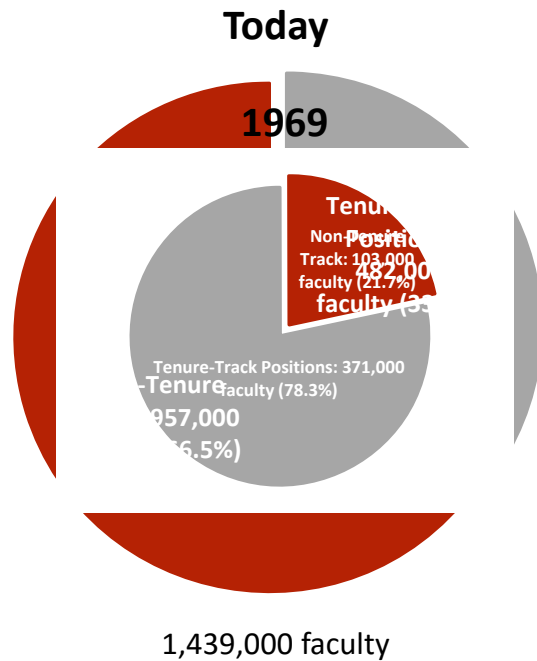


## Excellence in Every Class

March 11, 2018

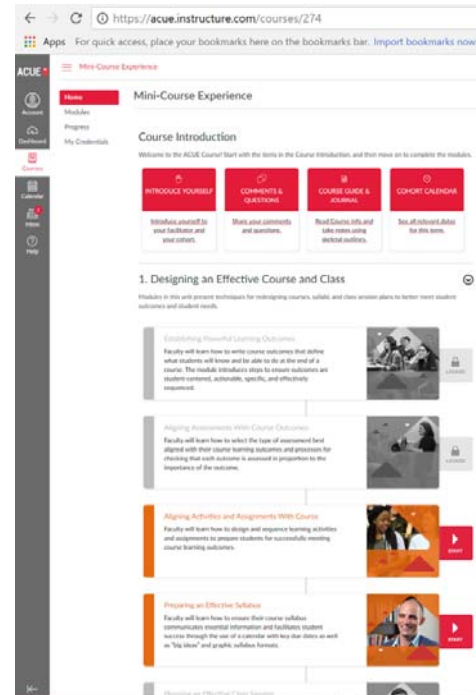


## A question of scale and preparation

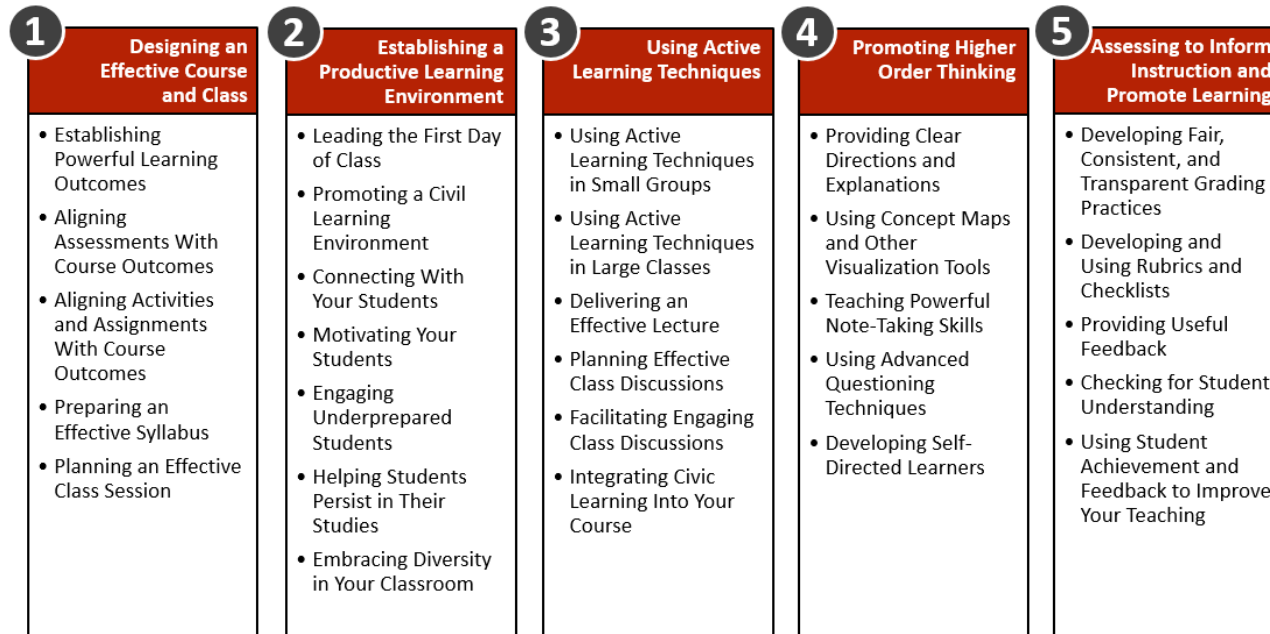


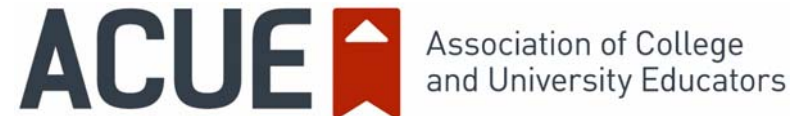
## Core principles

- Comprehensive
- Research-based
- Show and Tell
- “Peer-to-peer”
- Collaborative
- Facilitated
- Implementation *required*
- Reflection *required*
- Scalable



## Core teaching competencies





*All students deserve an **extraordinary education** and  
faculty play a critical role in their success.*

*We **credential** educators in the use of evidence-based teaching practices  
that drive **student engagement, retention, and learning.***

**Courses** in effective teaching practices  
**Certificates** in effective college instruction  
**Community** of professional practice



Endorsed by the American Council on Education



***What are we finding?***

**Faculty are enthusiastic:**

**96%** find recommended practices relevant

**57** Avg. # of approaches learned for first time

**75** Avg. # of approaches learned more about

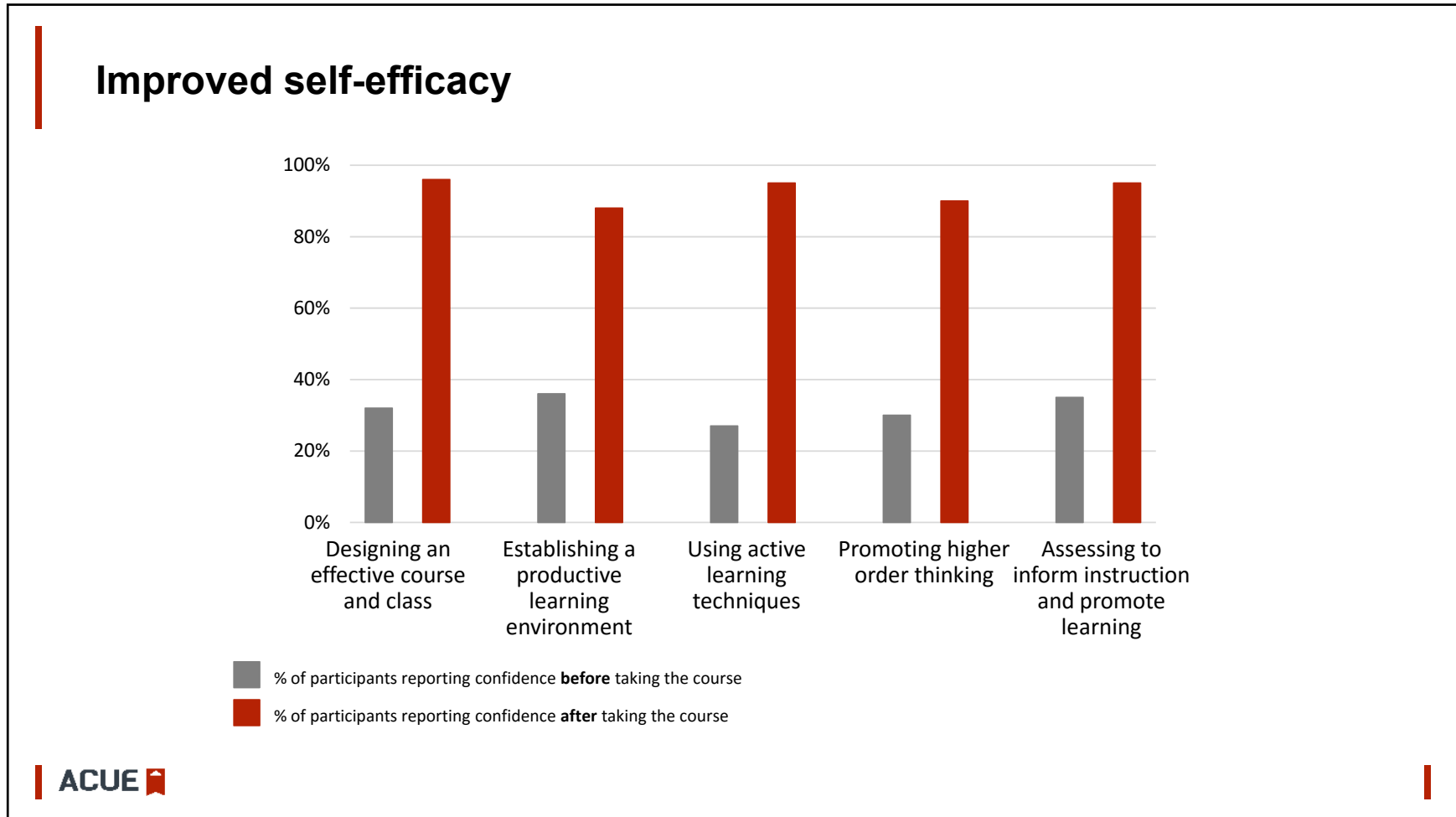
N= 4,738 responses



**Confidence matters:**

***Those with “a strong sense of efficacy deploy their attention and effort to the demands of the situation and are spurred by obstacles to greater effort.”***

—Albert Bandura



Strengthened teaching:

**25**

**Avg. # of evidence-based practices *implemented* by ACUE credentialed faculty**

**50**

**Avg. # of practices ACUE credentialed faculty plan to use to *refine* teaching**

**Logic model:**

***Changes in faculty behaviors  
precede changes in student  
outcomes.***

**Engagement matters:**

***“The early HIPs literature and more recent findings confirm what educators have long believed about learning—that engagement matters—for learning, persistence, and equity.”***

—George Kuh, 2018

## Miami Dade College/Johns Hopkins Study:



- Longitudinal study of 50+ faculty; 6,000+ student course evals
- Replicated over 2 cohorts
- Key findings:
  - Students noted **stronger teaching on 14 out of 15 metrics**
  - Course evaluations **improved 0.20 points**
  - Higher than college averages; **statistically sig.**
  - **94%** of faculty reported improved knowledge and skill
  - **97%** of faculty would recommend course to peers
  - Requirement to implement and reflect noted as **“best part” of experience**

***“Great teaching—a long-sought priority of  
higher education—is within our grasp.”***

—Eduardo Padron  
President Miami Dade College and ACUE Advisor

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# Questions

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