

9-1-2013

IMPACT: Pedagogical Leadership

Donalee Attardo

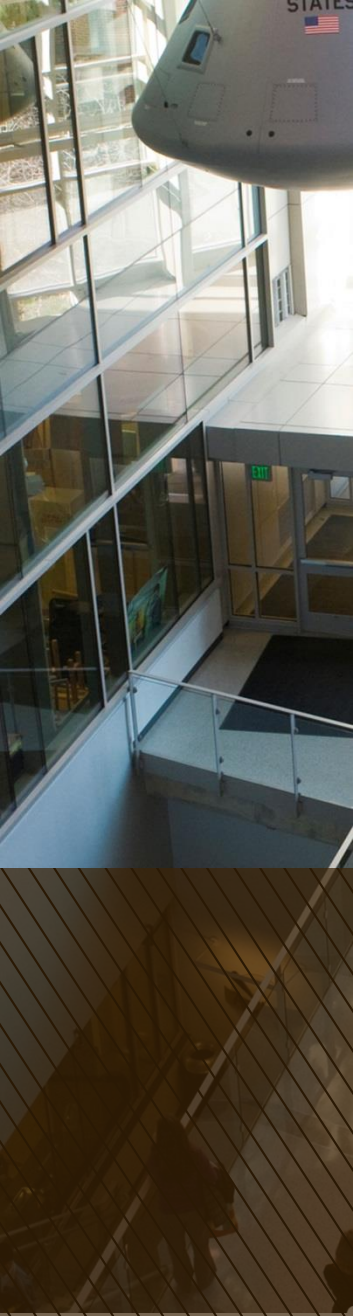
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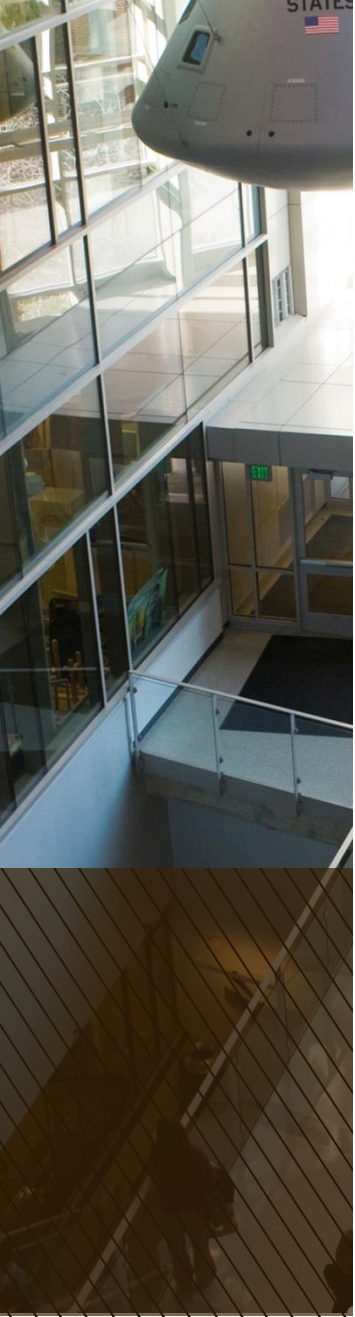
IMPACT: Pedagogical Leadership

Donalee Attardo, IMPACT Co-Chair
Director, Teaching & Learning
Technologies, ITaP

IMPACT background and mission



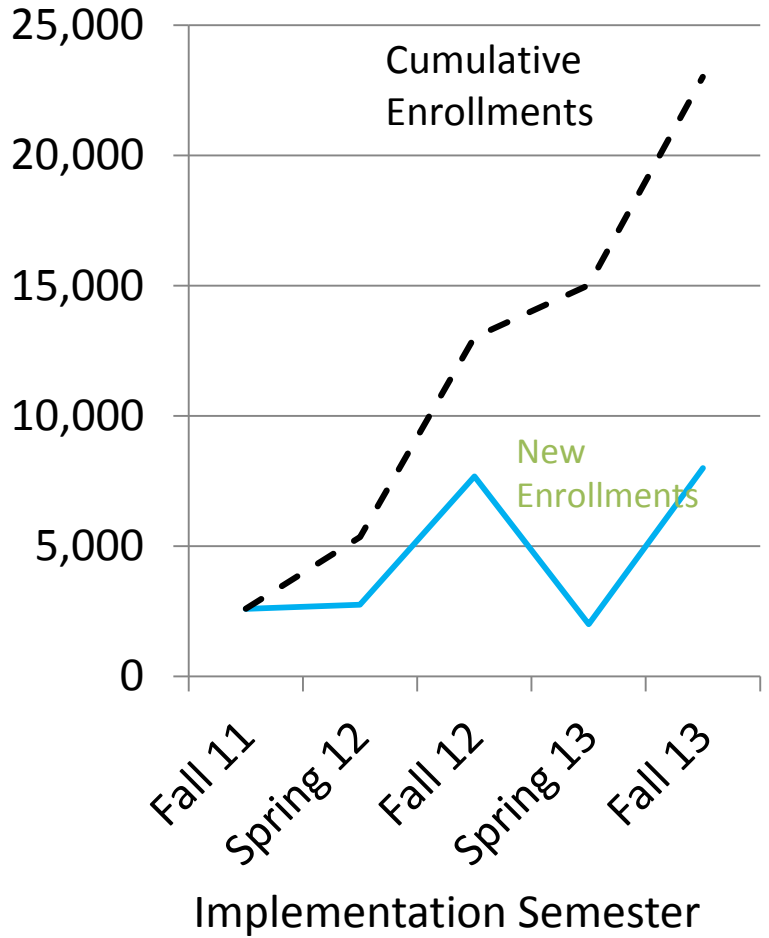
The overarching goal of IMPACT is to transform large enrollment foundational courses in order to achieve a more student-centered learning environment through active and collaborative learning, as well as other student centered teaching and learning practices and technologies, such as those found in blended learning environments.



IMPACT 2010 – 2013

Funded at \$0.5 million per year

- TO DATE...
- 63 courses, mostly lower-level, large-enrollment courses
- 9 of 10 colleges represented
- 68 faculty
- 25,000 cumulative enrollments



Weekly participation in FLC sessions

IMPACT support team

Emphasis on learning outcomes and assessment

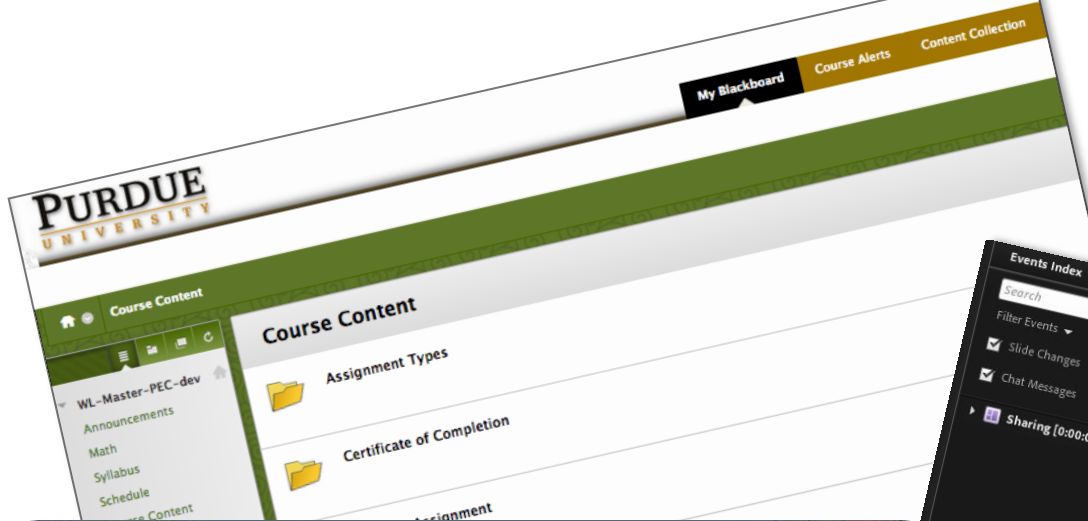
Faculty Learning Community (FLC) cohort



Redesigned Course

Course Redesign Plan





i>grader v6.0.0.R02

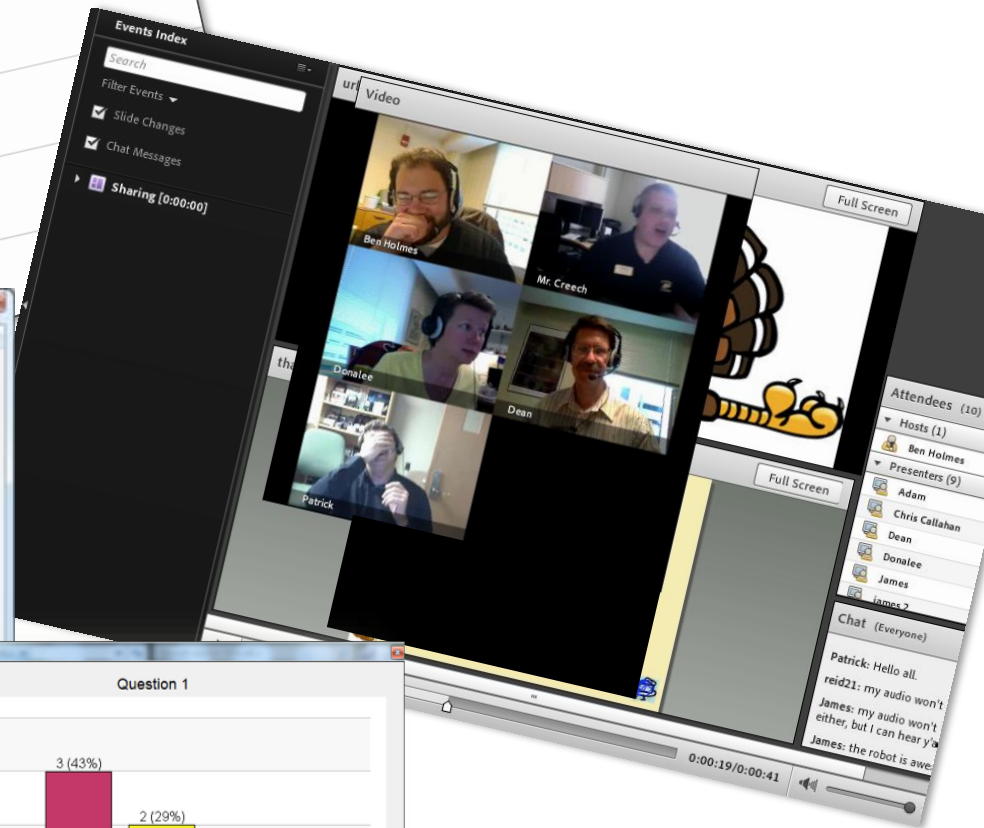
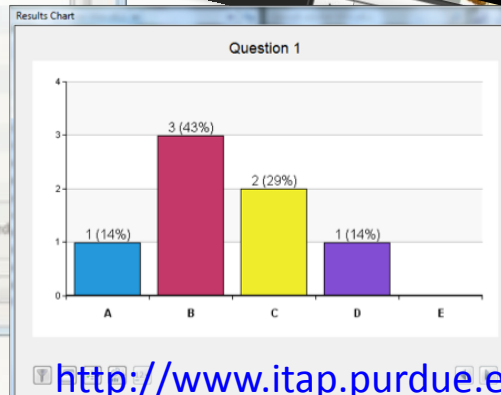
Physics-101-001

Student Name

Name	Average	Total	11/23/10	11/25/10	11/27/10
Moon, Marion	2.33	7.00	3.00	2.00	2.00
Powers, Crystal	0.00	0.00	Ab	Ab	Ab
Raynor, Sandy	2.33	7.00	3.00	2.00	2.00
Song, Patrick	0.00	0.00	Ab	Ab	Ab
Wagner, Malcolm	2.33	7.00	3.00	2.00	2.00
Wallace, Jerome	2.33	7.00	3.00	2.00	2.00
Woodard, Beth	0.00	0.00	Ab	Ab	Ab
#0004141	1.33	4.00	2.00	1.00	1.00
#0005ASA	2.33	7.00	3.00	2.00	2.00
#0008080	1.67	5.00	2.00	1.00	2.00
#0009D9D	1.67	5.00	2.00	2.00	1.00

Class Average : 6.00

Output formatted





How can I find **enough time** to teach and give one-on-one support?

Gabriela Weaver
Mixable user

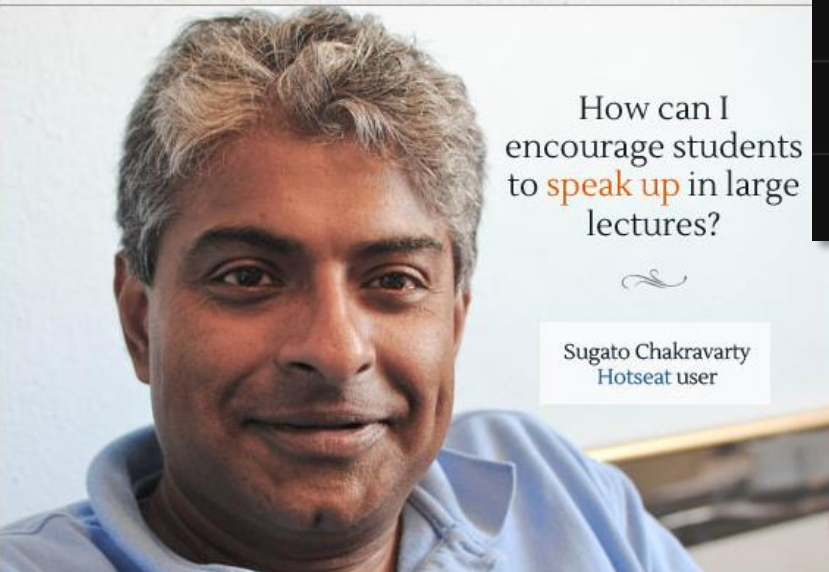
Read Gabriela's story

- PASSPORT**
badge-powered learning
- JETPACK**
learning anywhere
- DOUBLETAKE**
make video mobile
- MIXABLE**
social academics
- HOTSEAT**
classroom microdiscussion
- SIGNALS**
early intervention
- NEED4FEED**
conference twitter analytics
- BACKDRAFT**
write now, tweet later



How can I cover **all the material** that comes up in class?

Dr. Jonathan Day
Mixable user



How can I encourage students to **speak up** in large lectures?

Sugato Chakravarty
Hotseat user



Where can I find **affordable** course materials for undergraduates?

Jennifer Neville
Jetpack user

Read Jennifer's story

Purdue studio suite of technologies

<http://www.itap.purdue.edu/studio/hq/>



Larry Nies
CE 355

Gaining a global perspective and improving student's information literacy skills are goals for this course.

- Teamed PBL
- Educational game play
- Research writing & reflective writing
- <https://www.itap.purdue.edu/newsroom/detail.cfm?NewsId=2767>



Tim Newby
EDCI 270

Tim is using a combination of case-based projects and technology in a unique way.

- groups develop lesson plans for a teacher in a foreign country
- teacher is interviewed via Skype.



Ellen Gundlach
STAT113

- Online lectures
- Online homework,
- Mixable discussion assignments
- "flipped" class discussion/ active learning sections
- Peer-to-peer learning and better conversations with the instructor.



Bill Crum
CS 159

- *Programming for Engineers*
- Moved lectures online
- Active learning during in-class lectures
- Small group work
- Would like to use innovative space but it isn't available
- Working on redefining learning outcomes and working further on redesign



Gary McFall
CS 235

- *Intro to Organizational Computing*
- Moved lectures online
- Lab time used for project-based work
- Use of real-life examples: e.g., students analyze and compare realtor profitability
- Would like to use innovative space but none available



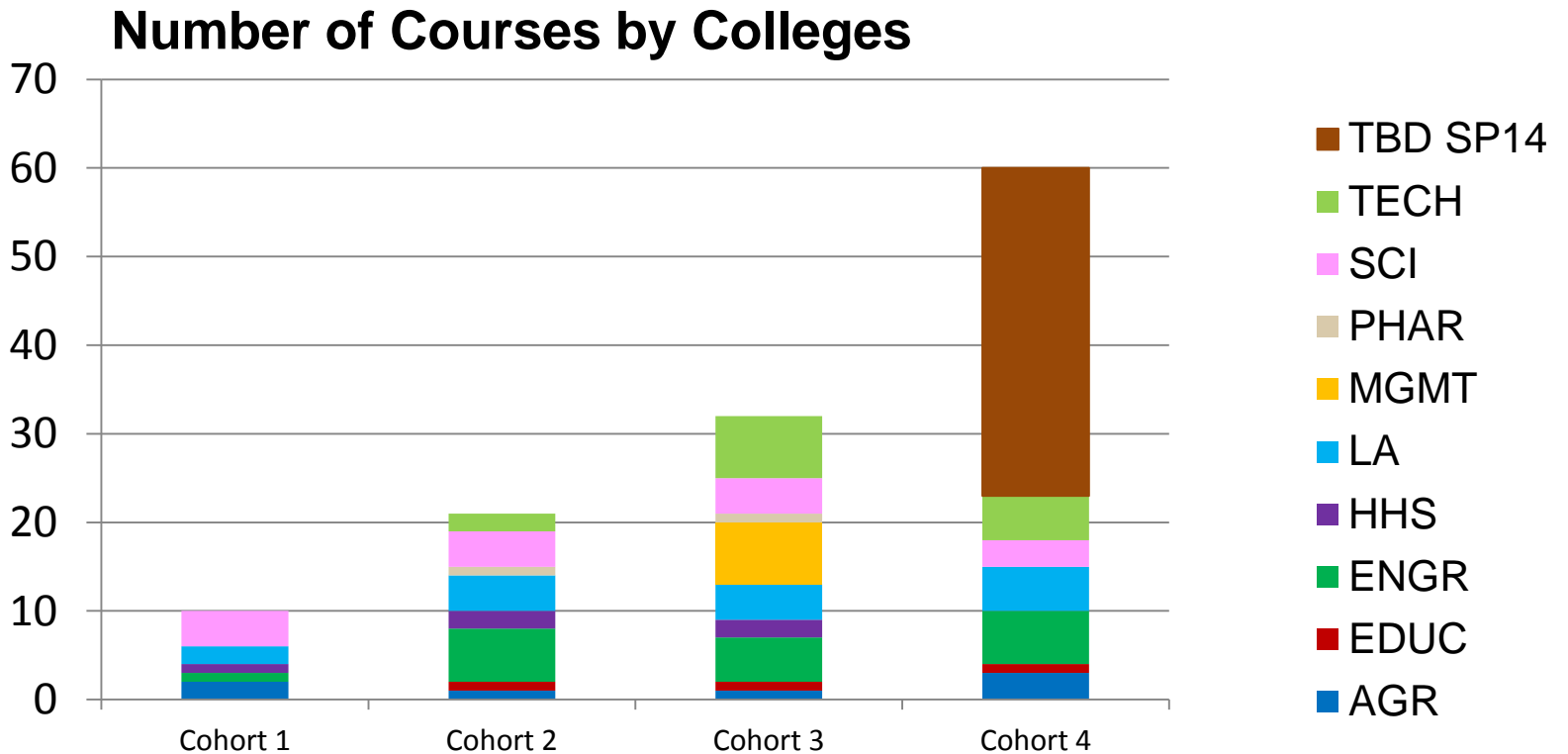
Capacity: 117

Capacity: 90

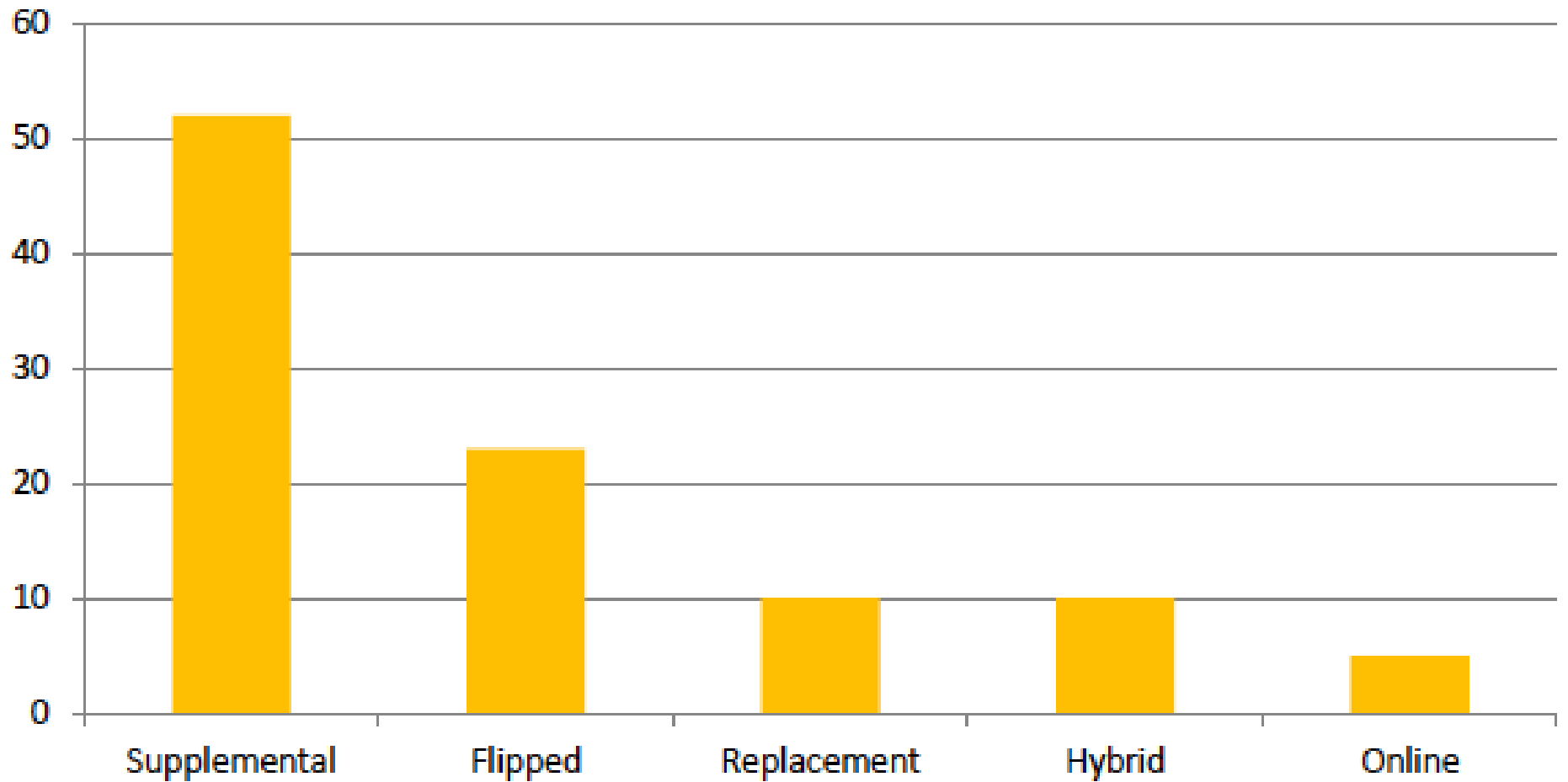


Capacity: 72

IMPACT 2010-2013

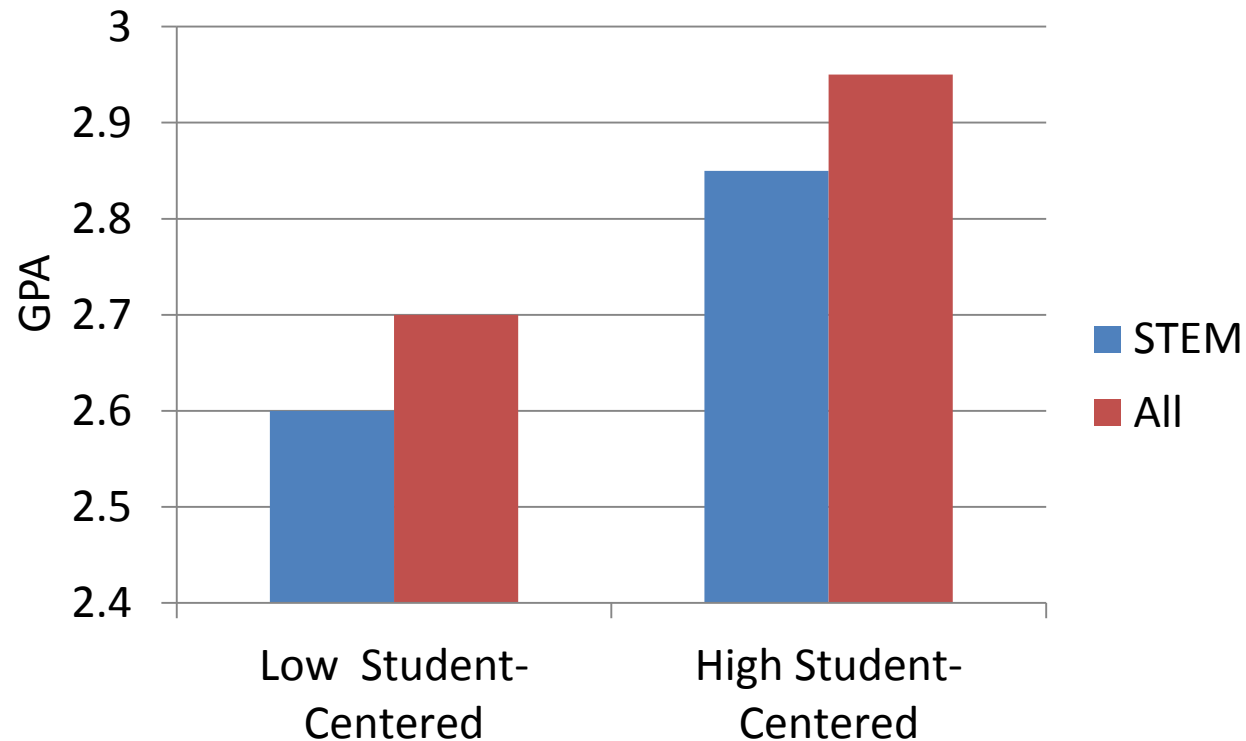


REDESIGN MODELS



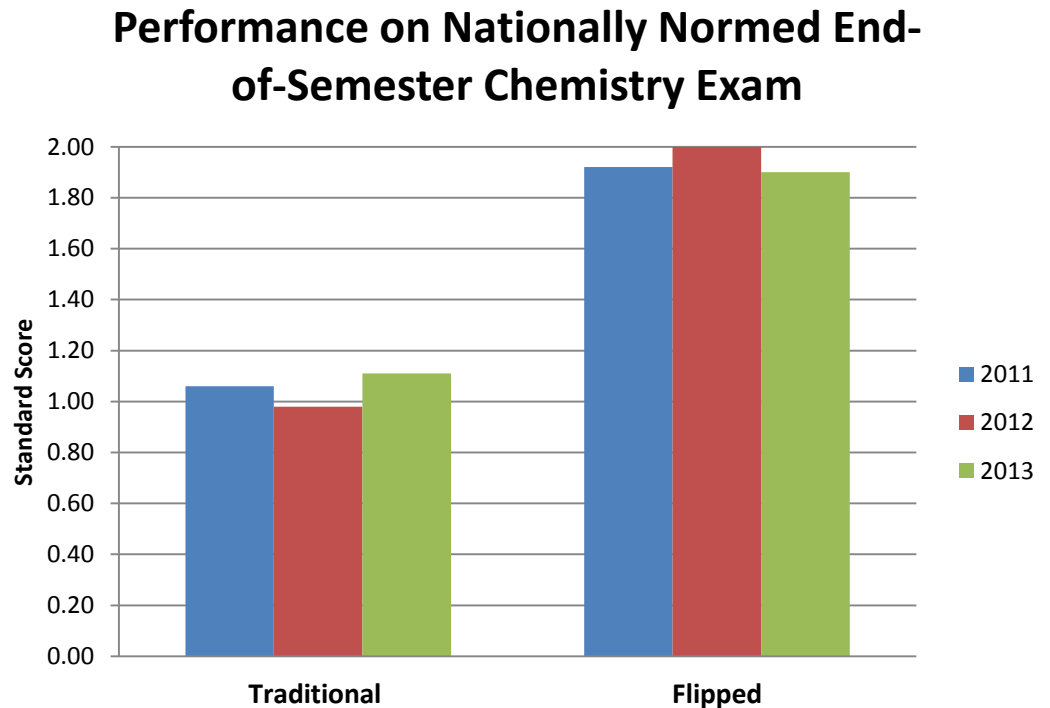
RESULTS

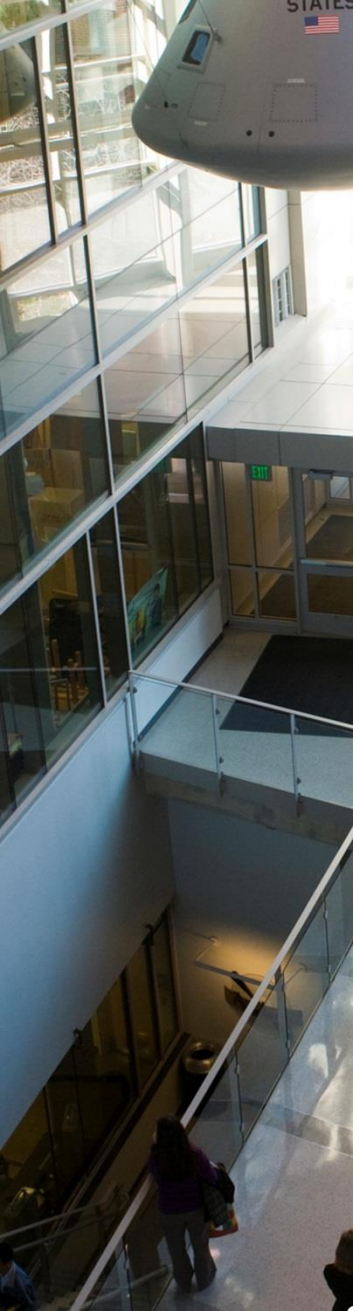
- IMPACT course transformations help achieve a student-centered learning environment
- When this environment is achieved, we observe an increase in actual **student performance (measured by GPA)**.



Results

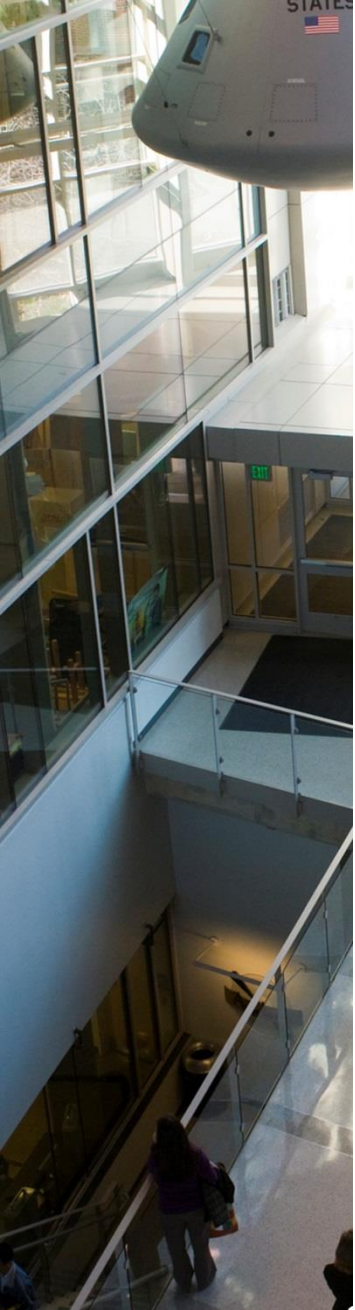
- The General Chemistry (major's track) course was “flipped” in second semester.
- Three years of data demonstrate a reproducible improvement in performance relative to the traditional course.





Funds Currently Committed for Expansion (FY14-16)

- President has approved \$2.5M non-recurring funds over the next 3 years
- Goals: transform all foundational core courses (courses recently approved by Faculty Senate)
 - additional IMPACT AP and grad staff, with expertise in instructional design and assessment of student learning
 - IMPACT redesign funding for faculty



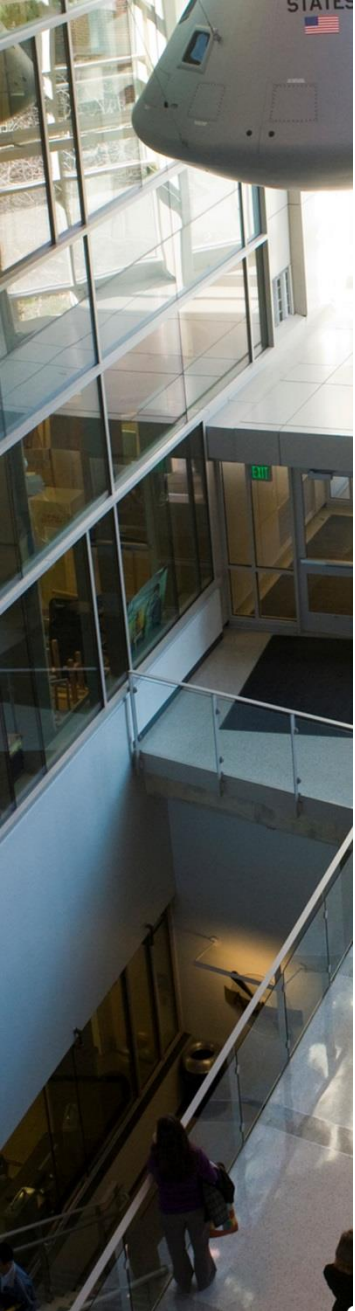
Taking Next Steps: Areas of Focus

Focus of Years 1-3

- Transformation of the foundational courses that have been approved as part of the new Core Curriculum

Focus of Year 4

- Proposed: course transformations will continue at a rate of 60 courses a year
 - The transformation of current courses not necessarily foundational; could be upper level (30 courses a year)
 - Target new faculty (design of 30 courses a year)



Questions?

Donalee Attardo

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