Active Learning is “anything course-related that all students in a class session are called upon to do other than simply watching, listening and taking notes” (Felder & Grent, 2009)

HIGH STRUCTURE

COLLABORATION...
Early career and senior faculty members worked together mentoring one another to use active learning and ensure that student learning outcomes were achieved.

STEM faculty worked across and within departments in faculty learning communities.

45

IMPROVING STEM EDUCATION

...BY THE NUMBERS
6 Semesters
4 Departments
12 Introductory courses
25 Faculty apprenticeships
3,000 Students per semester, average

HIGH LEARNING GAINS

13%

higher normalized learning gains among students engaged in active learning compared to those in traditional classes were found in preliminary results.

IMPROVING ATTITUDES

72%

of students reported that the active learning course made them more interested in the subject overall.

ACTIVE LEARNING STUDENTS’ GRADES

FAILING GRADES decreased with active learning.

ACTIVE LEARNING IMPROVES STUDENT APPROVAL

Students were much more positive about the learning environment of the active learning course rather than the course in the lecture-based format.

Percentage of students surveyed who strongly agreed that the atmosphere in class was conducive for learning

45%

15%

ACTIVE LEARNING IMPROVES STUDENT ATTITUDES ABOUT STEM

HIGHER LEARNING GAINS

13%

STRUGGLING STUDENTS SHOW GREATEST IMPROVEMENT

All students learned more, but those in the bottom quartile saw the greatest improvements.

COLLABORATION ...

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