Collaborative Learning Spaces
Shift the Culture Toward Improved Teaching and Learning

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UA Stimulus for Change

- Grant from Association of American Universities (AAU) to improve STEM teaching
- Team of innovative faculty - “coalition of the willing”
- Faculty Learning Communities on Improved Learning
- Support for evidence-based teaching
- **Piloted, surveyed, and developed collaborative classrooms**
Collaborative Learning Space Pilot

Our surprise: Success of the Collaborative Learning Spaces Helps Drive Change

Science-Engineering Library
BioSciences West
Rm 301
Before 160 seats
and
After 112 seats
Capacity

UA Collaborative Learning Spaces
January 2019 (31 Rooms)

New in 2018
How do we leverage these spaces to promote change?

- Hired Director of Academic Resources who is a project manager with significant teaching experience
- Strategically invite instructors for rooms and set expectations
- Advocate evidence-based teaching through professional development for instructors and UG learning assistants
- Encourage and support research analysis of student learning
- Bottom-Up Faculty Program with Top-Down Administrative Support

http://academicaffairs.arizona.edu/collaborative-learning-spaces
Profile of a Successful CLS Instructor

- **Participates in professional development opportunities**
  - Faculty Learning Communities (FLC), CLS Workshops, Training videos, DBER publications, One-on-one consultations with OIA professionals, Observation of experienced instructors, Website resources: OIA, CLS & peer institutions

- **Develops quality course materials**
  - In-class small group activities that foster critical thinking and allow students to grapple with concepts
  - Frequent retrieval practice in and out of class such as low-stakes quizzes
  - Focused lecture segments that promote conceptual understanding of lesson’s topics followed by formative assessments

- **Conducts classes using evidence-based teaching strategies**
  - Lesson goals consistently and clearly communicated
  - Students engaged throughout class in a variety of collaborative active-learning strategies
  - Ongoing evaluation of student learning with appropriate adjustments (formative assessment)
  - Classes taught exclusively by instructor(s) prepared to teach in a CLS

- **Uses effective classroom management techniques**
  - Assigned groups and/or remixed groups
  - All students expected to engage
  - Off-task behavior addressed

- **Links in-class and out-of-class activities**
  - Homework, quizzes and exams directly related to in-class activities
  - Tests that assess student ability to integrate knowledge and use critical thinking skills

- **Supports efforts of colleagues committed to high quality teaching and learning**
  - Scholarly approach to teaching
  - Team teaching opportunities
  - Dissemination of learnings
  - Guidance/advice for new CLS instructors

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**COPUS – A Classroom Observation Protocol**

COPUS data collected from a lecture-based class and a class which uses active learning strategies.


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**Collaborative Learning Spaces**

Jane Hunter

[www.academicaffairs.arizona.edu/academic-resources](http://www.academicaffairs.arizona.edu/academic-resources)
CLS Student Survey, Spring 2016
(n= ~2,500 students)

Participation enhances learning

Classrooms enhance activities

Able to get help in class

Prefer CLS over other rooms

~80%

~84%

~88%

~62%
Comparison of Instructor Preferences to Existing Classrooms

Instructor Room Preferences*

- Large lecture halls
- Small-medium lecture halls
- Traditional classrooms with tablet armchairs
- Traditional classrooms with movable tables
- Seminar rooms for groups of 20 or fewer
- Collaborative Learning Space

UA Classrooms by Classification Type

- Large lecture halls
- Small-medium lecture halls
- Traditional classrooms with tablet armchairs
- Traditional classrooms with movable tables and chairs
- Seminar rooms for groups of 20 or fewer students
- Collaborative Learning Spaces

*survey F2017
Some Typical Comments

STUDENT
“My experience as a UA student and a first semester chemistry student has been greatly enhanced by this new classroom set up. I am more collaborative and it helps me work with others and communicate my thinking. I wish more classes were set up like this.” (BSW Rm 301 student)

FACULTY
“I am trying new ideas here that I have never tried in my 10 years of teaching so it has been fun for me. The classroom is a ‘partner’ in the learning process.” (ILC Rm 141 instructor)
Science-Engineering Library CLS
264 seats

- 2019-2021 will be heavily impacted by noise during library construction
- Used for foundation courses (CHEM, BIO, Physics) and General Education
- ~6,500 enrollments per year
- Heavily booked from 8 AM to 6PM Monday – Friday
the solution – transform...

Gittings North Gym
Gittings Gym as a Collaborative Learning Space

264 seats

Estimate for transformation = $1.2 to 1.4 million; our most expensive CLS
Acknowledge:

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Lisa Elfring, Assistant Vice Provost for Instruction and Assessment and Associate Professor of Practice