

LSC Webinar Snapshot—Implementing Collaborative Learning Spaces: An AAU STEM Initiative (May 2015)

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The Context

In 2013, the University of Arizona was one of only eight universities awarded a grant from the American Association of Universities for their UA AAU Undergraduate STEM Education Project. A leadership team of faculty, administrators and other academic professionals was formed to guide the efforts of the cross-institutional project team. The overarching goal of the project was to shift the culture at the University of Arizona to one that embraces collaborative active learning strategies. An important component of the project was to explore the benefits of collaborative learning spaces which facilitate collaborative active learning pedagogies.



Several of the faculty members on the project team, particularly those teaching large foundational STEM classes, were challenged to transform their classes to include more collaborative active learning and less traditional lecturing in their classes. These instructors soon became frustrated with large lecture halls and traditional column-by-row seating that hindered student-student and faculty/classroom staff-student interactions.

In Spring, 2014, John Pollard, Director of General Chemistry, and Gail Burd, Senior Vice Provost for Academic Affairs, approached Karen Williams, Dean of University Libraries, with a proposal to temporarily transform the Science-Engineering Library Journal Room into a Collaborative Learning Space (CLS) that would seat 260 students. Karen Williams and her team embraced the opportunity to repurpose the space.

A self-forming team, which included members from faculty, Information Technology (IT), Office of Instruction and Assessment (OIA), University Libraries, Disability Resources Center, among others, was empowered to execute the high-paced project.

Early in the project, Jeanne Narum, Learning Spaces Collaboratory, and Andy Labov, CO Architects, facilitated a Collaborative Learning Spaces (CLS) Workshop which helped to propel the project forward and bring visibility to the effort to change the culture from one that accepts traditional lectures as the norm to one that expects more engaged student-centered approaches.



The Planning Process

Effective short-term and long-term planning has been essential to the University of Arizona's effort to shift the culture to one that embraces active learning strategies and values the benefits of collaborative learning spaces. First and foremost, engaging all key stakeholders in the planning has been essential. Starting with the rapid and agile implementation of the pilot space and culminating with the more deliberate and thoughtful development of a Collaborative Learning Spaces Strategic Plan, groups from across the campus have provided input to the planning process.

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Early-on, the project team for the Science-Engineering Library CLS pilot recognized that resources, especially time, were very limited and worked diligently to distinguish between wants and needs to ensure that resources were used wisely. Creative solutions, such as borrowed equipment, rented furniture, and just-in-time software/hardware solutions allowed the agile team to move the project from concept to implementation in less than 4 months. Coverage by UA News and other organizations provided important visibility for the project.

Planning for the pilot was ongoing and iterative, responding to information gathered throughout the process. Stakeholder sessions, surveys, interviews and focus groups were conducted prior to, during and after the pilot. Real time feedback from students and faculty during the pilot allowed the team to make adjustments as needed.

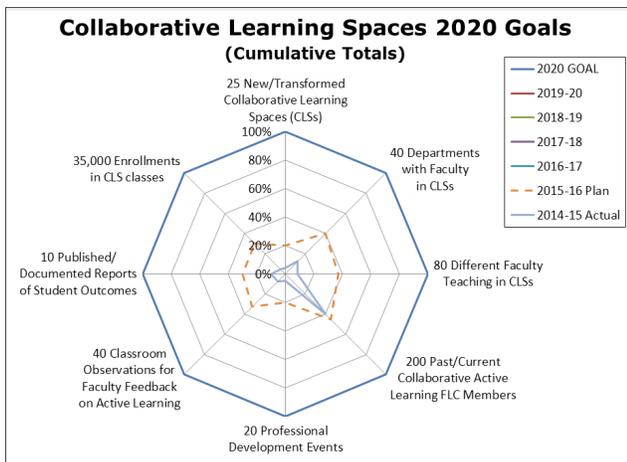
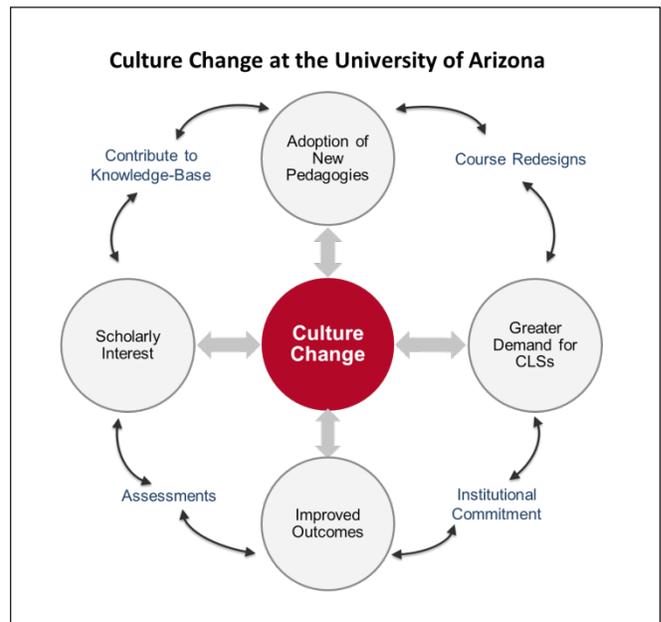
Encouraging data prompted a decision to convert the Science-Engineering Library room into a permanent Collaborative Learning Space. Once again, the project team was challenged to meet the needs of the stakeholders while dealing with significant physical, cost and time constraints. The transformation is well on its way and the 260-student flat Collaborative Learning Space, one of the largest in the nation, will be ready for classes in Fall, 2015.

Concurrently, longer-term goals were established and leadership buy-in was secured. A Collaborative Learning Spaces Strategic Plan was developed that defines the mission, vision, strategic priorities and goals. It outlines the strategies, actions and initiatives necessary to achieve the goals and details the quantitative 5-year objectives for # of spaces, student enrollments, departments/faculty using the spaces, etc.

In essence, the University of Arizona aspires to promote collaborative active learning pedagogy by making a wide range of sizes, locations and types of collaborative learning spaces available to the entire campus community.

Where we are now

The University of Arizona's approach to culture change has been driven by the strong evidence showing that students learn better when active learning strategies are used. An important goal is to create opportunities for many faculty members and students to experience collaborative learning spaces that facilitate these pedagogies. As illustrated in the diagram below, we believe that the elements of culture change are synergistic. We strive to achieve change by pursuing all fronts.



We believe that adapting existing spaces and leveraging existing resources maximizes the return. Five new collaborative learning spaces will be available for Fall 2015. The rooms are distributed across campus and range in size from 30-student, which is an innovative room made possible by a grant from Steelcase, Inc. to the 260-student Science-Engineering CLS.

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Advice about first steps

The most important steps to getting started at the University of Arizona have been:

- ♦ Identify a champion in a key leadership role who will carry the message
- ♦ Engage all key stakeholders throughout the process
- ♦ Empower project team members to make decisions
- ♦ Recognize that the process is iterative and adaptive
- ♦ Find work-arounds – don't let the project stall
- ♦ Be forward-thinking.

What's next

The University of Arizona Collaborative Learning Spaces Strategic Plan establishes the goals and objectives for the next five years. A university-wide campus planning effort which is currently underway provides an opportunity to identify existing and new spaces that are suitable for collaborative learning spaces.

Resource

UA AAU Undergraduate STEM Education Project
<http://aaustem.oia.arizona.edu/>



Groups across the university are being asked to commit resources to support these efforts. We anticipate that teaching and learning on our campus will be very different at the end of this journey...which is really just the beginning. ■