

RESEARCH SUMMARY

ACTIVATING INTRINSIC MOTIVATION

**Embry-Riddle
Aeronautical University**
PRESCOTT, ARIZONA

*Steelcase Education
Active Learning Grant Recipient,
Cycle 3*

For years, the Center for Teaching and Learning Excellence at Embry-Riddle Aeronautical University in Prescott, Arizona (ERAU Prescott) offered training workshops on active learning strategies, discussed active learning course redesigns with faculty and assembled literature on the topic. With interest and ability on the rise, the university reported that “the one thing faculty and students still lack is a dedicated active learning space.” That changed when ERAU Prescott received an Active Learning Center (ALC) Grant.

STRIVING FOR A CULTURE OF LEARNING

The university was interested in studying how instructors implementing active learning strategies in a space designed for this purpose might stimulate students’ intrinsic motivations to learn and foster a culture of learning.

The ALC was established in a recently renovated biology lab. ERAU Prescott selected a versatile, informal ALC classroom style that featured a mix of high and low mobile tables to support team-based learning.

Full-time faculty from all four colleges on campus – Engineering, Aviation, Security & Intelligence, and Arts & Sciences – taught 10 undergraduate courses in the space.

After one semester using the ALC, faculty asked administrators for another similar classroom. By the next academic year, ERAU Prescott introduced the “Flex Space,” which includes many of the same furnishings and tools, such as personal whiteboards, in use at the ALC.

POSITIVE LEARNING ATTITUDES

Student responses to the ALC were similarly positive. When asked, “How well did you like the instructional methods used in this course?,” 54% of students responded with a 6 or 7 on a 7-point scale, where 7 was the most positive response. Sixty percent of students gave the same high ratings in response to the question, “How much do you think you learned taking this class?” And 70% of students did so in response to “How effective was the instructor in teaching this course?”

**“As a facilitator, I love
the way the furniture
encourages discussions,
group work and an
inviting environment.”**

*Jonathan Gallimore, Ph.D.,
College of Arts & Sciences*

“The Active Learning Center lets learning activities happen without them feeling forced or awkward.”

Ty Groh, Ph.D., College of Security and Intelligence

70%

OF STUDENTS REPORTED THAT THEIR INSTRUCTOR IN THE ALC WAS EFFECTIVE OR VERY EFFECTIVE

When asked to indicate how much they learned in the course, 74% of students reported learning “a lot” (51%) or “a great deal more than I ever expected” (23%). No respondents chose the option to report that they learned “very little.”

A PLACE TO BE PRESENT

ERAU Prescott viewed the ALC experience as an optimal opportunity to investigate the relationship between instructor presence on self-reported student learning and motivation.

Surveys gauged the rapport between instructors and students by asking students how much they respected their professors and viewed them as thoughtful and compassionate. They also tested student’s level of agreement with statements about instructor behaviors that demonstrate presence, like using new teaching methods and requesting feedback.

Then, researchers examined correlations between student responses to instructor presence and students’ attitudes about learning. They found very high correlation (.620) between students’ positive

responses to the question “How well did you like the instructional methods used in this course?” and to instructor behaviors identified with presence.

They also found high correlations between students indicating rapport with their professors and positive responses to the questions “How much do you think you learned taking this class?” (.588) and “How effective was the instructor in teaching this course?” (.723).

74%

OF STUDENTS REPORTED THAT THEY’D LEARNED “A LOT” OR “A GREAT DEAL MORE THAN THEY EVER EXPECTED” IN THE ALC

ERAU Prescott continues to build on these findings – and is sharing them far beyond campus. Dina Battaglia, Ph.D., the university’s director for Teaching and Learning Excellence is presenting ALC research findings to educational developers around the world in order to advance the science of teaching and learning.