

Flexible Seating in Classrooms Creates Greater Student Engagement

When students come to math class at Advanced Technologies Academy in Las Vegas, Nevada, they choose where to sit and on what - bean bags, bar stools, couches, booths, and even throw rugs.

What began as an experiment in flexible seating in 2018 blossomed into an untethered, studentcentered environment that's taken hold in the 1,100-student magnet high school.

"We started with just a few bean bags to see how students responded," said Kristen Taylor, Honors Geometry and AP Calculus AB teacher. "We wondered whether they'd be asleep in two minutes or less, but that sleepy, tired, uninterested student never appeared. Instead, they became more engaged."

Today's interactive, technology-based lessons allow students to be the focal point instead of teachers.

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Technology Increases Participation

Taylor and colleague Michael Patterson come from traditional teacher-centered environments where they taught from the front of the room facing students in rigid chairs, tables, and desks.

"Through our own professional development, we realized we were much more engaged when we took part in lessons," said Patterson, who instructs Honors Geometry and Honors Algebra 2. "We wanted to reverse the way we taught by giving students more freedom and decisionmaking, so they became more accountable for their own learning."

What started as a physical classroom change coincided with a pedagogical shift, too. Taylor and Patterson, both of whom have more than 20 years' teaching experience, wanted to better reach students who have different learning styles, which was tough to do through traditional teaching models.



"We knew we had to change the way we deliver lessons, which involved better use of technology to get increased participation," Patterson said. "We've gone from presenter to more of a partner or a tutor role," he said.

Eliminating Classroom Restrictions

Instructional time begins with a 10- to 15-minute mini-session displayed on their Promethean ActivPanel. Teachers stand on a raised platform, providing students with a clear line of sight from bar stool to bean bag chair.

Already gathered in groups throughout the classroom, students jump into the lesson from their tablets or by interacting directly with the ActivPanel through its 1:1 capability.

"The typical restrictions of 'sit here, be quiet, do your work,' no longer exists," Patterson said. "The classroom flows and moves. We find that kids feel freedom to get up and help each other more."

Some of the strongest students now are tutoring those failing to grasp a concept or lesson.

"Our learning management system allows us to spot students struggling with a certain topic," Taylor said. "We can pull them aside and match them one-on-one or in small groups so they can get the individual attention they need."

Nurturing a Collaborative Environment

Bringing technology into the classroom benefits students and teachers. Students taking appbased quizzes or formative assessments get immediate feedback, while teachers gain visibility into who understands a concept or



needs extra help. Students also can sharpen their geometry, algebra, calculus, and graphing skills using interactive apps, which can be presented on the ActivPanel or mobile devices.

Additionally, digital lessons allow teachers and students to be untethered from a static space, such as an in-classroom desk and chair. For instance, students are free to continue an assignment or watch a tutorial from anywhere they have internet access. Teachers, in turn, can use an app to be notified when students turn in assignments.

"A more traditional teaching format restricted us to the front of the room but being untethered allows us to move to where we need to be to help students," Patterson said. Using traditional teaching methods, teachers spent most of class time presenting which

meant students used the end of class to do

some work or ask questions. Technology provides Advanced Technologies Academy students with the solutions to understand lessons quicker, while teachers have greater visibility into students' development.

"We hoped implementing technology alongside a more informal environment would promote more sharing, talking and working together," Taylor said. "It's created an energy that wasn't there before - and greater collaboration in the room."

