large active learning classrooms
Designing for Large Active Learning Classrooms

While attempting to optimise the learning environment, education leaders are recognising that traditional lecture halls, while efficient, might not always support highly effective learning. The long-term relevancy of traditional lecture halls has also come into question, with various models, including MOOCs and flipped classrooms, leveraging technology for lecture capture. While these models are efficient at integrating large capacities, they might not effectively achieve active, engaged student-centered learning.

In an effort to better understand the support needed to address this tension, Steelcase Education conducted research around the design of large active learning classrooms. Through a mixed-methods research approach, Steelcase Education developed design principles for instructors and institutions to learn from as they look into implementing large active learning classrooms as a solution.

Steelcase’s research also showed that, while large active learning classrooms are one solution to increase effective learning, there are many other models to consider—including flipped classrooms, math emporium classrooms, and lab/project rooms with online lectures. These models are some of the solutions that balance teaching with space and technology, and should be considered as schools address learning effectiveness and efficiency in their campus plans.

PREPARE THE MINDSET
• Begin with a pilot classroom; select an underutilised classroom space
• Create transparency into large active learning classrooms through large windows or a storefront
• Provide an observation zone where other faculty can observe the Large Active Learning Classroom (LAC) in use

DESIGN FOR SOCIAL ENGAGEMENT
• Limit the size of the tables to groups of four to six students and provide swivel seating
• Consider adding lounge furniture within the classroom to create informal environments
• Support shoulder-to-shoulder postures at the table among the learners and the instructor/teaching assistant
• Support breakouts/asides

DESIGN FOR PARTICIPATION
• Create clear sight lines for the instructor to monitor the room
• Provide ways for students to signal professors visually, using lights or signs
• If microphones are necessary, make them approachable

DESIGN FOR FEEDBACK
• Provide analog tools, such as whiteboards, for students to show their work
• Provide digital tools, like apps or clickers, to allow students to show their knowledge
• Provide backup tools in case the technology fails

DESIGN FOR FLEXIBILITY
• Provide movable furniture
• Provide easily accessible power that doesn’t inhibit the flexibility of the furniture
• Where applicable, use storable furniture

DESIGN FOR NOISE
• Include acoustic panels and carpet to diminish noise levels
• Consider microphones for the instructor and for each group

DESIGN FOR GROUP IDENTIFICATION
• Assist with wayfinding, and streamline transitions between activities by creating a system to identify specific tables and zones within the classroom

DESIGN FOR TEACHING STAFF
• Plan for a team of teaching assistants proportional to the size of the class
• Provide seating for teaching assistants or designate a teaching assistant zone

SUPPORT LEARNING BEFORE AND AFTER CLASS
• Facilitate and expedite the entering and exiting of the space
• Activate the space immediately outside the class to support social interactions and allow for productive waiting
• Consider the use of digital signage just outside to prepare students prior to class
Large Active Learning Classroom Thought Starters

While learning models are evolving rapidly, the typical university and college classroom hasn’t changed in decades. Today’s media-rich but hands-on classroom experience requires spaces that support movement, technology and multiple modes of learning. The following design considerations applied to a 915m² classroom for 120 students can be used to inform plans for large active classrooms. For additional planning ideas, please visit Steelcase.com/planningideas.

1. Provide varied furniture and seating options that subdivide the classroom and prevent a sea of chairs, while also allowing students to choose a seat based on personal preference.

2. Maximise the space by utilising perimeter whiteboards for collaborative idea generation.

3. Provide clear sight lines to digital and analog content from every seat in the classroom.

4. Set up tables for groups of six with flexibility in furniture to accommodate larger or smaller groups.

5. Provide swivel seating that encourages visual connection to the instructor and physical movement, and allows for quick modal switching.

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Observation zones can function as arrival zones, offering students and faculty comfortable spaces to engage without interrupting class.

Assign perimeter whiteboards with identifying signage to designate writable zones for specific table groups.

Provide places on the perimeter to break out or retreat to.

Use colour to help define different groups.

Provide open views into the classroom with glass, but control visual privacy as needed with varied opacity.

Alcove at classroom entrance carves out corridor space to accommodate gathering students as they wait for class to begin.

Exit zone for adjacent classroom has a standing-height surface to continue class when adjourned.

Niches with comfortable furniture provide students with places to study along the circulation path.