ACTIVE LEARNING CLASSROOMS
Creative Spaces for Innovative Pedagogy
at the University of Victoria
What is Active Learning?

Active Learning shifts the responsibility of learning to the learners. There are many definitions of active learning, but generally active learning transforms students from passive listeners to active participants. In an active learning environment, students learn through inquiry, collaboration, task-based assignments, and critical reflection.

Studies show that active learning has significant benefits for students, and that students in active learning environments often learn, retain, and perform better in active learning classes than in passive learning, or traditional lecture-based, environments.

http://wiki.ubc.ca/Course:EDCP371_951_2010/Active_learning
Active Learning Classrooms (ALCs) are spaces that are designed to support engage students actively in the learning process. ALCs are highly collaborative and interactive learning environments.

ALCs have been implemented all over the world. They might also be called “collaborative facilities,” “technology-enhanced active learning spaces,” “interactive environments,” or “incubator classrooms.” Regardless of the name, ALCs have in common that they are student-centered, flexible, and often technologically assisted.

ALCs represent a new culture of learning based on dialogue, interactivity, and pedagogical innovation.
ALCs around the world

Active learning classrooms are being used in higher education institutions around the world, including McGill, MIT, Queen’s, University of California Berkeley, the University of Minnesota, and North Carolina State University.
What are the benefits of Active Learning?
The benefits of Active Learning

Active Learning Classrooms have been demonstrated to have a variety of benefits to students, staff, and institutions, including:

1. Enhanced Student Performance
   - Studies indicate that Active Learning promotes better content retention rates than traditional lectures do, leading to better performance in subsequent classes.
   - Failure rates are noticeably lower, especially among minority and at-risk students.
   - Increased participation and engagement – students become accountable to the whole room, and responsible for each other’s learning.
   - Students increase their self-confidence and self-reliance.
The benefits of Active Learning

Active Learning Classrooms have been demonstrated to have a variety of benefits to students, staff, and institutions, including:

2. Employable Skills

• Active Learning Classes have a greater focus on group work, project planning, evaluation, presentation, and practical lab skills

• Students engage in higher-order thinking tasks such as analysis, synthesis, and evaluation.

• Through collaborative learning, students learn different strategies for learning from, listening to, and working with others.
The benefits of Active Learning

Active Learning Classrooms have been demonstrated to have a variety of benefits to students, staff, and institutions, including:

3. Increased Learning Satisfaction

- Class attendance rates are documented as higher, often above 90%
- Students feel valued and appreciated, as the increased comfort and professionalism meets students’ expectations for higher education
- Strong community of learners built, providing students with resources and contacts to assist their learning throughout their education
- Students receive more frequent feedback throughout the learning process
The benefits of Active Learning

Active Learning Classrooms have been demonstrated to have a variety of benefits to students, staff, and institutions, including:

4. Students become Teachers

- Instructors act as facilitators and content experts, guiding groups and individuals toward correct answers and skill-development alongside other students
- Students are encouraged to generate and share information
- Student access and share their own prior knowledge
- Dialogue, discussion, and peer-to-peer instruction become an essential part of the learning process, leading to enhanced retention and comprehension
The benefits of Active Learning

Active Learning Classrooms have been demonstrated to have a variety of benefits to students, staff, and institutions, including:

5. Flipping the Classroom

• Students are responsible for learning basic materials and content before attending class. Classes are then dedicated to putting knowledge to practice in a collaborative and supportive environment.

“What used to happen is that content was delivered in the classroom, students would struggle with it doing homework outside. We’ve reversed that.”

-Robert J. Beichner, SCALE-UP Project
https://youtu.be/MdymI61hLPY?list=PLE8C54256779B374D
The benefits of Active Learning

Active Learning Classrooms have been demonstrated to have a variety of benefits to students, staff, and institutions, including:

6. Understanding by Design

- Classes and activities are built to facilitate problem-based learning, using case methods and simulations
- Wrong answers become case-examples that can be shared with the class to help everyone learn the next stage
- Courses are designed to achieve learning goals, not to prioritize content coverage. Instructors design instructional materials based on what the learning outcomes for the course are, rather than the other way around.
How does the classroom support Active Learning?
Facilitating Active Learning

By designing space for active learning, the space itself becomes a catalyst for pedagogical change.

UVic’s Active Learning Classrooms are designed to be:

Simple, Accessible, Modern, Remotely Supportable, and Flexible.

ALCs support Active Learning by facilitating:
Facilitating Active Learning

1. Comfortable, welcoming, and flexible learning

Comfortable furniture, rolling and swiveling chairs, movable tables, mobile/multiple whiteboards to record student work allow for multiple modes of learning and teaching, especially group work. The aesthetically welcoming, relaxing, clean, modern, non-traditional classroom space makes this learning a comfortable and engaging environment.
Facilitating Active Learning

2. Collaborative spaces

Designated group work spaces, modular tables, writeable surfaces, screen-sharing capacity and shared workstations allow students to collaborate in groups or as a class. Open space and flexible furniture allows the instructor to adjust groups as needed and to easily circulate within the room to facilitate group work.
Facilitating Active Learning

3. Student-Instructor connection

Instructor stations located in the center of the ALC rather than at the side or in the front allow the instructor to more easily circulate the room. Wide aisles enable the instructor to move from group to group easily, while enhanced sightlines ensure that all students are visible to the instructor and vice-versa. Screen-sharing and multiple displays allow students to see what the instructor is displaying and enable the instructor to share student work with the rest of the class.
Facilitating Active Learning

4. Technology-enhanced learning

Simple interfaces that enable the instructor and students to easily control the technology in the room enable integrated learning within the classroom. Classes can interact collaboratively with the technology to manipulate and create information, and instructors can facilitate this process with minimal familiarity and training. The appropriate infrastructure including outlets, workstations, projects, and microphones are integrated seamlessly into the room.
Active Learning Classrooms at UVIC
ALCs at UVic

Active Learning Classrooms developed at UVic so far include:

MAC D115
MAC D111
CLE A127
CLE C109
Sources/Additional Reading


HermannMiller. “Rethinking the Classroom: Spaces Designed for Active and Engaged Learning and Teaching.” http://www.hermanmiller.com/content/dam/hermanmiller/documents/solution_essays/se_Rethinking_the_Classroom.pdf


Sources/Additional Reading


Queen’s University. “What Are Active Learning Classrooms?” http://queensu.ca/activelearningspaces/active-learning/why-do-active-learning


