Active Learning Spaces

Best Practice Sharing

Never Stand Still | Learning Environments

The UNSW Educational Strategy recognises the need for broader implementation of blended learning and teaching, while acknowledging there isn't a "one size fits all" approach. The active-learning classroom (flipped classroom model) brings together advances in education and technology to provide a personalised, engaging learning experience for every student – whatever their learning style, pace, or ability. Active learning classrooms enable teachers to provide an environment for learner-centred and blended approaches supported by current educational technologies. Quick tips, presenting modes and ideas for activities that make the most of the pod configurations, screens and whiteboards are provided in this guide.

Advice for getting started

General

Inform students that you have requested to teach in an active learning space and why it is beneficial for their learning. Involve students in a discussion about how you plan to use the room and the different teaching approaches the students may experience.

- Acknowledge that this is a new environment for you (if relevant) and the students. It is a big change and there may be some teething problems.
- Provide students with opportunities throughout the course to give feedback on group activities.
- Embrace flexibility. Active learning classrooms facilitate increased participation and the identification of issues/ areas where students may not have grasped a concept. This can be addressed in an immediate sense and may require adjustment to a lesson plan.
- Active learning spaces are not effective for delivering lectures. Long lectures should be broken up by activities and group work. See 'Mini-lecture' activity in Section 3 below.
- Students comment positively on the improved access to their teacher during group work activities. This also allows less-confident students to ask questions in an environment that is not as intimidating as whole class discussions.
- Familiarise yourself with the technology in the space before your first teaching session. Learning Environments offer a number of face-to-face AV sessions prior to the start of each semester. Support is also available during semester.
- Familiarise students with the screen connectivity functionality in the first week or two of session. Learning Environments has created a short instructional video for you to share with your class.
- Students feel uncomfortable with their backs turned to the teacher, particularly if they are also supposed to be looking at the screens mounted at each pod.
    - make your expectations clear i.e students do or don't need to face you when you're speaking.
    - students don't mind either way, they just prefer to know what you expect

Group work

- students benefit from being able to see the work of other groups during group activities, this keeps each group on task and facilitates idea-sharing and general learning from peers.
- use the screen-sharing functionality to project the student's work on all screens
- ask groups to pair up and present to each other
- ask students to walk around and view the screens/ whiteboards of other pods instead of presenting group work to the class
- encourage use of the whiteboards for group brainstorming/activity planning/problem solving

Short classes

- pod sharing: where there is limited time for all pods to present on an activity, pair 2 pods and have each pod group present to the other
- photograph the group work and post in Moodle using the Media Gallery
- see also 'Week-to-week presentations' in 'Activities'.

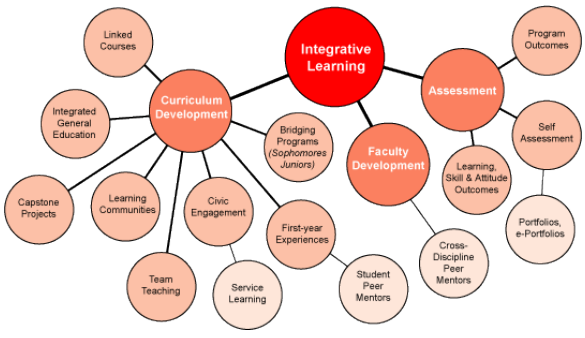
Active learning class activities

Mapping concepts

A) A concept map is a 2-dimensional node-link representation that depicts the most important concepts and relationships.
   - Construct a Focus Question that clearly specifies the problem the concept map should resolve
   - Ask each pod to identify, list and rank order 15 to 25 key concepts/ ideas that relate to the focus question.
   - Students can use this is as a preliminary concept map, enabling them to understand the relationship between key coursework terms.

Once each pod has these connections in place, the class comes back together and discusses how the concepts, framed by the terms, themselves form positions in dispute around central questions or rival answers. If terms are ambiguous, or ambiguously used by different authors, this will helpfully come out; and then disagreement and disambiguation follow.

The following is an example of mapping the concept of integrative learning:



Mini-lectures

Ask students to wheel their chairs into the centre of the class with a focus on a presentation from the main projector. This is useful for longer face-to-face sessions. It's worth noting that most learners can listen for 90 minutes with understanding, 20 minutes with retention and need to be involved every 8 minutes.

Parallel discussions

This group discussion format can be used in a week that covers several big concepts, each of which can be discussed along a similar ("parallel") sequence of discussion questions.

The steps are:

- Prepare a set of concepts and related discussion questions
- Assign one concept to each group
- Give groups time to discuss the questions on the concept among themselves.
- Tell the groups they will be asked to present the conclusions of their discussion to the class, and to end their presentation with a discussion question that they want to throw out to the class, they can write this on the whiteboard
- Groups take turns presenting their discussion conclusions to the class in 5-7 minutes
- The class discusses the discussion question chosen by the group for a few minutes. (Typically, groups end by asking for help with one of the questions they received, but sometimes they think of their own discussion questions too.)

Think-Pair-Share

This type of activity first asks students to consider a question on their own, and then provides an opportunity for students to discuss it in pairs, and finally together with the whole class. It is similar to the above parallel discussion activity except that students get individual thinking time. The success of these activities depends on the nature of the questions posed. This activity works ideally with questions to encourage deeper thinking, problem-solving, and/or critical analysis. The group discussions are critical as they allow students to articulate their thought processes.

The steps are:

- Pose a question, usually by writing it on the board or projecting it.
- Have students consider the question on their own (1 – 2 min).
- Then ask them to discuss the problem in their pod groups (5 min).
- Re-group as a whole class and solicit responses from some or all of the pods (5 min).

Advantages of think-pair-share include the engagement of all students in the classroom (particularly the opportunity to give voice to quieter students who might have difficulty sharing in a larger group), quick feedback for the teacher (e.g., the revelation of student misconceptions), encouragement and support for higher levels of thinking of the students.

Weekly Original Thoughts

Every week before class, students are encouraged to communicate a question and idea related to the current topic to the teacher. This activity is used to engage students, especially those that are less talkative or confident.

The questions and ideas are ungraded and can be about anything related to the week's topic. The activity is deliberately unstructured to encourage creativity and participation. The teacher reviews the questions and comments before face-to-face time and chooses some of the most interesting points. A

few students are called upon in class to repeat their questions or ideas and open it up for discussion. Students often apply their questions and thoughts to papers.

Excerpt from the syllabus:

Weekly Emails (Other Moodle activities (e.g. glossary, database, forum or chat) or Padlet wall embedded in Moodle could also be used)

To help generate discussions, I would like each person to send me an email on a weekly basis with one question and one original idea about the week's topics. The idea doesn't have to be earth-shattering. You can single something out that you thought was particularly interesting, criticise something you think was off the mark, or say how something applies to current events – whatever you like. You don't have to send me more than one or two sentences on each, grades will not be awarded for your emails. However, if you're a student who is not comfortable contributing in-class, this can be a good opportunity to show that you're engaging the course material.

These emails are also useful for me in structuring each class, and they are useful for you in order to help you develop your opinions about the course material. In return, I send the class a handout each week saying what aspects of the reading are important, and how you can best prepare for discussion.

Week-to-week presentations

Students are given a group work task in the latter half of a face-to-face class that requires the development of a PowerPoint presentation. They are given a week to finesse their work and must present at the following week's tutorial. This encourages student discussion outside class time and is useful for shorter sessions in the active learning spaces. Consider issues that might come up for students around equity in their contributions and provide support prior to setting any group tasks.

Whiteboard presentations

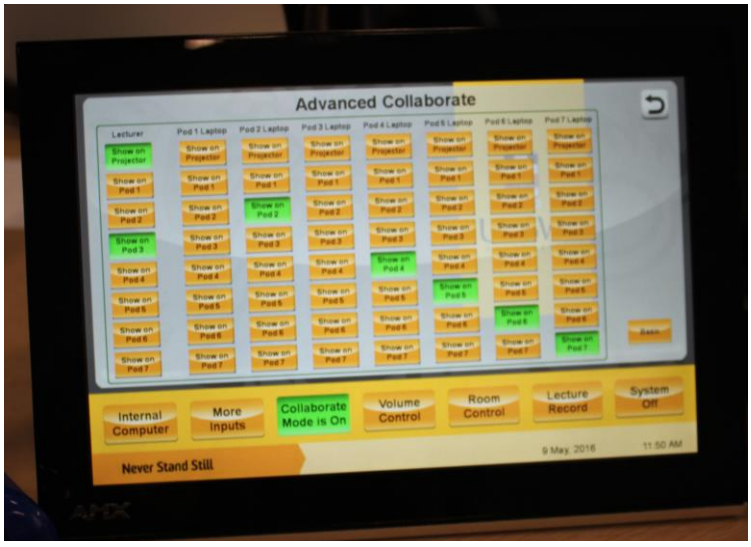
In classes that require students to work through mathematical problems, assign each pod to a particular problem and ask them to work through this on the whiteboard. Students then present their solutions to the whole class.

Audio Visual Setup

Presenting modes

Simple presentation

The presenter will have access to a touch panel that will look no different to the panels in CATS classrooms and theatres. The presenter will be able to select their input, for example internal computer and select send to screen 1, they will then be able to teach to the class as they would in any CATS room.



Presenting to all monitors

After selecting 'internal PC' on the touch panel, the presenter can select 'send to pods', this will turn on all the pod monitors and display the presenter's materials to all monitors, the presenter can also select send to screen 1 so that all monitors and Projector will have the presenter's materials. Please note that the student can always choose to go back to their own content being displayed on local monitor.

Student pods

Students will be able to connect their laptops to the pod monitor closest to them; on the keypad they can select the 'on' button, turning the monitor on, and display whatever content is being delivered by local laptop input plate to that screen alone.

Collaborate mode

There will be a button on the touch panel labelled 'Collaborate mode ON/OFF', this will unlock the share button on each of the keypads, as the presenter walks around the classroom looking at students material they can ask the student to press the share button, the content on their monitor at the time will be shared with the rest of the class and projector. The presenter can then turn off collaborate mode and continue presenting material to the projector and/or pods.

For a detailed guide, please refer to the CATS Touchscreen Quick Start Guide for Active Learning Spaces.

Useful resources

The UNSW Teaching Gateway has more information on the following topics:
Teaching for Learning: https://teaching.unsw.edu.au/teaching-approaches-and-strategies
Flipped Classroom: https://teaching.unsw.edu.au/flipped-classroom
Embedding Group Work in your Course: https://teaching.unsw.edu.au/embedding-group-work
The Value of Group Work: https://teaching.unsw.edu.au/group-work-value
Incorporate Reflection into Group Work Skills Development: https://teaching.unsw.edu.au/group-work-reflection
Group Work: https://teaching.unsw.edu.au/group-work
Group Work Case Study: https://teaching.unsw.edu.au/group-work-case-study
Book a consultation with an Educational Developer from the PVC(Education) Portfolio please use the PALS Moodle Forum – Consultation Scheduler.

UNSW Learning and Teaching Community Networks

- Faculty Educational Developers (UNFED)
- Work Integrated Learning Educators (WILEd)
- TELT Admin & Support Network (TAN)
- Flipped Classroom Community of Practice
- Student Resilience and Success Community of Practice
- Global Citizenship Community of Practice
- Peer Evaluation Community of Practice

More information on these networks can be found here.