DEAR COLLEAGUES:

Giving our students an inspiring learning experience in an inspiring learning environment is at the heart of the Scientia Education Experience and the UNSW Strategy. Our teaching can inspire students only when they are actively engaged. This booklet provides some examples from your colleagues on how they have used active learning spaces to get their students engaged in – and enthusiastic about – learning.

We look forward to hearing from you about how you have integrated your learning designs into the active learning spaces on campus to achieve an outstanding experience for our students.
Quick tips

This section identifies key strategies that can help to get you started using active learning spaces. Quick tips are divided into general, teaching, and technology tips.

It is important to inform students that you have requested to teach in an active learning space and explain why it is beneficial for their learning. Involve them in a discussion about how you plan to use the room and the different teaching approaches they may experience as part of their course. Acknowledge that this is a new environment for you (if relevant) and possibly them.

Get to know the particular spaces you’ll be using in advance and try to visualise how you see the students using them.

Thinking about appropriate uses of the space when designing lesson plans for each class was helpful.

UNSW Lecturer
Quick tips: General

**Improved participation:** the discussions and other activities that are part of active-learning classrooms enable increased student participation. Often areas where students may not have grasped a concept will come to the fore. You can address these on the spot, then make any adjustments to your lesson plan later.

**Better access:** students comment positively on the improved access to their teachers during group-work activities, so it’s important to make sure you make yourself available to answer questions and offer support.

**Interactivity:** active learning spaces can build deeper engagement in learning activities. Lectures (if used) should be broken up by learning activities and group work.

Quick tips: Teaching

**Smaller group tasks:** less-confident students are more likely to ask questions when the environment is not as intimidating as whole-class discussions.

**Feedback:** ensure you give students opportunities to offer feedback on group activities. Ask them to talk about the ways they like to learn.

**Improved communication:** students may feel uncomfortable with their backs turned to you, particularly if they are also supposed to be looking at the screens mounted at each pod. To help them feel more comfortable, state clearly whether they do or don’t need to face you while you’re speaking. In general, students are happy to go along with what you expect.
Quick tips: Technology

It is a good idea to familiarise yourself with the technology in the space before your first teaching session. Learning Environments offers a number of face-to-face audiovisual sessions before the start of each semester. Support is also available during the semester.

Similarly, make sure you familiarise students with the screen functionality in the first week or two. Learning Environments has created short instructional videos for you to share with your class.

Contact the CATS Help Desk for support or access to the instructional videos:

Website: www.learningenvironments.unsw.edu.au
Phone: (02) 9385 4888

Quick tips: Virtual applications

You and your students can access virtualised teaching lab applications such as SAS, MAPLE, MatLab, and SPSS anytime and from anywhere that you have Internet access.

Once your applications are virtualised:

• You can incorporate more self-directed learning;
• You are no longer tied to the computer labs.

You can run demonstrations and get students to complete software-enabled exercises anywhere you have Internet access at www.myAccess.unsw.edu.au.

I started slowly and built my confidence in using the technology in the space. I could then expand my problem-solving exercises to encompass wider group scenarios, and was able to better align my online and face-to-face class activities.

Associate Professor David Heslop, UNSW Public Health and Community Medicine Lecturer
Class activities in learning spaces

The active-learning classrooms at UNSW enable you to provide a rich environment for learner-centred and blended-learning approaches that are supported by current educational technologies. Active learning involves students in making decisions, solving problems, and sharing learning resources to build their knowledge.

Before creating an active-learning activity, think about it from a student’s perspective. Students need an overview of what they will do in that particular activity and why they are doing it. Explain how the activity will help them to achieve the learning outcomes for the subject and complete assessment tasks. Remember to also explain how the active-learning activity will help them develop graduate capabilities for the workplace.

Class activities in learning spaces

EXPECTATIONS

Share your philosophy on what your and the students’ roles are in these spaces at the outset, and tell students why you are taking this approach (for example, it offers advantages to their learning such as opportunities for small-group learning). Manage your students’ expectations by clearly stating what you expect in terms of class participation, interactions with their peers, and interaction with you, and specifying what technology you will and won’t be using.

Be aware that there may be some sensitivities (cultural or social issues) concerning students’ initial attitudes towards active learning. The School of Business found that as classes progressed, students began to “come out of their shells”, and active learning began to be the new normal way of working in these classes.
Class activities in learning spaces

ADOPTING BLENDED LEARNING

As well as providing active-learning activities inside your class, you can do more outside your classroom by developing a blended-learning approach to your subject. At UNSW we define blended learning as an education program (formal or informal) that combines online digital media with traditional classroom methods requiring the physical presence of both teacher and student, with some element of student control over time, place, path, or pace.

You can “blend” time (face-to-face vs. recorded materials), place (small-group work on campus vs. online discussions), people (podcasts of guest lecturers), and resources and activities (textbook vs. online readings, in-class quiz vs. online quiz).

Before you start using an active learning space, consider a range of relevant class strategies and discuss these with your students. Ask them how the group could make the best use of this space to learn better. If you clearly set out the learning outcomes that need to be achieved (e.g. developing generic skills such as communication/teamwork, and understanding specific content areas) and the strategies that you have considered (e.g. running a debate, roleplays or simple presentations), you can involve your students in deciding the best fit for the activity and the group. Remember to involve all students and be prepared to guide them to reach the best decision.
Class activities in learning spaces

ADOPTING BLENDED LEARNING
To make the best use of an active-learning space, consider possible changes in curriculum design, learning activities, and approaches to assessment and delivery to enhance collaborative learning. This generally means modifying your teaching so that it doesn’t rely on a single focal point for lectures. Multiple points can include using the central projector screen or the document camera or adjusting individual screens to show different scenarios to different groups.

GROUP WORK
Embracing group work in active learning spaces has many benefits:

- Students can see other groups’ work during activities. This keeps each group on task and facilitates idea-sharing and learning from peers.
- The screen-sharing functionality can project the students’ work on all screens (it’s useful to remember that anything shown through the main screen is recorded).
- Groups can pair up and present to each other, or walk around and view the screens or whiteboards of other pods instead of presenting group work to the class.
- As Dr Kar Ming Chong has pointed out, whiteboards can be used for group brainstorming, activity planning, and problem-solving.

TECH TIPS
Students can photograph the whiteboard outcomes and share them on screens.

Figure 1: Whiteboard images (Dr. Kar Ming Chong and Botong Cheng, UNSW School of Accounting)
Class activities in learning spaces

SHORT CLASSES

When class time in an active learning space is limited, try:

- Pod sharing: where there is limited time for all pods to present on an activity, pair two pods and have each pod group present to the other.
- Photographing the group work and posting it in Moodle using the Media Gallery.

The next section is divided into (1) in-class activities and (2) blended-learning activities. The list is by no means exhaustive, and we encourage you to share your activities and those you have found through research and practice with your colleagues.

In-class activities

CLASS DISCUSSIONS

Group discussions are a critical learning activity, as they let students articulate their thought processes (Steen, Vasserman-Stokes & Vannatta, 2014). The success of group learning activities depends on the nature of the questions posed; ideally, questions should encourage deeper thinking, problem-solving, and critical analysis.

The examples on the next few pages give some interesting ideas for discussions that can build student confidence. The activities start with pair and small-group discussions before moving to whole-group discussions. Each activity helps to build a learning community and cater for the diversity within each classroom.

TECH TIPS

If the responses are captured on the main screen, they will form part of a lecture recording.

I found there is a “warm up” time where students become used to working together and focusing on the goals of the session. I enthusiastically provided guidance, and the “warm up” period was short.

Dr Mohammad Mojtaba
UNSW
Built Environment Lecturer
In-class activities

THINK-PAIR-SHARE

The Think-Pair-Share activity – where students think individually about a topic, question, or problem before pairing with a classmate to discuss it and create a shared response – has the advantage of supporting engagement by all students. In particular, it gives voice to quieter students who might have difficulty sharing in a larger group. It also gives you quick feedback (such as the revelation of student misconceptions). You can also use this activity for buzz groups (small groups within a larger class, each of which is asked to discuss a question or an aspect of a problem) or brainstorming activities, and to promote active conversations that bring to the fore students’ prior knowledge of the content.

I’ve used Think-Pair-Share to get students to tap into their prior knowledge of my topic before starting for the day; I’ve also found it helps them to regroup after watching a video excerpt or before we start a problem-solving exercise.

UNSW Lecturer
In-class activities

TURN AND TALK

This activity is a simplified version of the Think-Pair-Share activity, as it limits the number of students involved. In a Turn and Talk activity, you pose a question to the class; students then turn to the person next to or diagonally opposite them to discuss it. You might tell them to take two minutes to discuss with their partner, with each person getting some time to talk.

This can serve as a comfortable way for students to share their ideas with others, and can set the stage for them to share with the larger group.

You don’t need to necessarily hear all (or any) of the ideas shared – the important aspect of this strategy is for the peers to share and for individuals to access their prior knowledge about a topic.

Example prompt
Part of the challenge of communicating climate change with the public is that there is disparity between what scientists and the non-scientist public think and know about climate change. Why do you think there is such a disparity?

TURN AND TALK

You can also use a Turn and Talk activity to get students to talk to each other about what they do and don’t understand, and share with each other their notes about what was just covered in a mini-interactive lecture.

You can build reflection into the class by encouraging your students to add to the personal notes they’ve already taken based on the discussions they have in the Turn and Talk activity. You may also want to adapt specific teaching strategies that support active learning (CRLT, 2016; Churchill, Fox, & King, 2016; Freeman et al., 2014; Lamb & Shraiky, 2013; Steel & Andrew, 2011; Tisdell, 2017).

I found that [the Turn and Talk activity] leads to good class discussions as students explore new areas of interest.

Dr Rosemary Howell, UNSW Law Lecturer
**PARALLEL DISCUSSIONS**

Once students are comfortable with Turn and Talk and Think-Pair-Share, you can use a parallel group discussion format to cover several big concepts. Each concept 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 amongst 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 everyone; they can write their question on the whiteboard or show it on their pod screen.

- Groups take turns presenting their discussion conclusions to the class (their time should be limited to between five and seven minutes).
- The class spends a few minutes discussing each group’s question.

**TECH TIPS**

Student conclusions can be captured by asking students to select “Show on all”, which activates the main screen and pods.

**PARALLEL DISCUSSIONS**

Typically, group work ends with groups asking for help with one of the questions they have been given, but sometimes they also think of their own discussion questions. This activity builds on the effective use of questioning, which can help your students to think more critically.

One challenge that can arise during group work can be an individual student’s loss of focus on the topic. As you would in a traditional class, try to keep them focused on what they need to achieve through the activity. Simple strategies, such as telling students to note three key things they should learn from the session that they can share at the end, could keep students engaged throughout the session. The points they share could also be a valuable way to bring the session to a clear and satisfying end.

That sense of people moving into [being] that self-learning, responsible, active participant – without asking for clues and without asking for permission – is significantly different to what I’ve ever experienced.

UNSW Lecturer who taught in the Mathews active learning spaces
FISH BOWL

A “fish bowl” activity allows a small group of students to discuss ideas or concepts while the rest of the class observes and takes notes.

About six to eight chairs are placed in a semi-circle in the middle of the active learning space. This inner circle of students engages in a discussion. The rest of the class observes the discussion, either from their regular seats or from an outer circle of chairs around the inner group. When an observer wants to join the conversation, they come forward and tap the shoulder of the person they want to replace, at some point when that person is not talking. The tapped speaker leaves the inner semi-circle, and the new speaker, who can expand on the topic or provide additional evidence, takes their place.

You can build in a feedback or a summary activity that you can capture directly onto the main screen, or ask students to regroup at the end of the activity and record their reflections on their local pod screens.

PRESENTATIONS

Over time, your students will start to take ownership of the active learning space and will feel comfortable making presentations at their local pods. Encourage them to use the pod microphones when they are presenting their materials and ensure the “Show on All” mode is selected so that the presentation is captured into the lecture recording system.

PRESENTATIONS ON INDIVIDUAL PODS

In classes that require students to work through specific, clearly defined problems, you can assign a particular problem to each pod and ask them to work through it on the whiteboard. If students complete the problem by hand, they can simply leave their results on the whiteboard or do a Gallery Walk. If students have completed the tasks electronically, they can present their solutions to the whole class using the “View Student” option.
In-class activities

GALLERY WALK

One way to make learning more active is to ask students to share any group presentations from their own pod (students choose “View Student”). Allocate one member of their group to stay at the pod and help to explain it as the class circulates to look at all of the pod screens. Students can take turns so that each of them has a chance to visit the other groups’ responses. This sets up a more interactive way of presenting group findings than simple presentations.

MINI-INTERACTIVE LECTURES

In mini-interactive lectures, you can use the Pause Procedure technique (Bonwell, 1997). This is an extremely easy and effective approach to promoting greater student engagement with minimal modification to your lecture presentations. During a 50-minute lecture, you will pause for approximately two minutes on three occasions (i.e., every 12-15 minutes).

During the pauses students can work in pairs to discuss and rework their notes without instructor-student interaction: for example, they can record their summaries, discuss an experience, write down a question, reflect silently, or summarise key points on their individual pod screens.
MINI-INTERACTIVE LECTURES

Mini-interactive lectures can be used to present a key concept or theory (preferably in a small “chunk” of time that is linked to a related activity).

Note for online lecturers: if you are making a lecture recording that distance or online students will be using, you can modify the Pause Procedure to include the Pause-Play-Repeat technique (see the diagram on the next page).

If you don’t move around during your presentation, some students may feel uncomfortable with their backs turned to you – particularly if they are also supposed to be looking at the screens mounted at each pod. It helps them when you let them know whether you expect them to face you while you’re speaking. In general, students are happy to go along with what you expect.

I found the best way to explain a concept when teaching in an active learning space was to remove myself from the centre of the space and talk from the side. Unlike a standard lecture and tutorial, it is better if you walk around.

TECH TIPS
You can show your slides via the “Display on Student Pods” setting on your control panel. This will display your material to the main screen and to all pod screens to enable students to view materials clearly. This will also ensure your slides are included in the recording of the lecture.

Dr Kar Ming Chong, UNSW Accounting Lecturer

In-class activities

In-class activities

INCREASE TOPIC
PRESENT AN EXAMPLE
PAUSE FOR AN INTERACTIVE ACTIVITY
BEGIN WITH OBJECTIVES
FOLLOW UP WITH REFLECTIVE EXERCISE
SUMMARISE MAJOR POINTS
PROVIDE INSTRUCTIONS
PRESENT MAJOR POINT
SHARE REFERENCES

Figure 2: Pause-Play-Repeat Diagram
Assigning short in-class writing activities in class is a way to increase active engagement. This activity can help build on the set readings students are expected to look at before class. It can also help to focus their attention on information presented during a mini-interactive lecture; stimulate individual reflection and problem-solving through writing; and increase the proportion of students willing to contribute to a later class discussion. This type of writing for learning does not require your feedback, correction, or evaluation. You may choose to use the pod options if you wish to share the final writing outcomes.

You can also ask students to enter their group responses to a prompt on their pod screens in five minutes or less. Alternative writing activities include:

• Put up some comparable lists on student pods and ask them to identify inconsistencies and ask them to resolve them.

• Use the document object camera to show an object that requires students to apply their pre-reading knowledge or learning from that day to solve a problem (the use of the document object camera is discussed in greater detail on the next page).

• Pose an abstract question that requires students to brainstorm initial solutions, or invite students to evaluate a task (for example, which approach is better and why?). The results can be shared on a local pod screen or the main screen.

RECORDING MINI-INTERACTIVE LECTURES

As you are probably using a lecture recording, there are many ways you can build interactive activities. Visit the lecture-recording page (https://teaching.unsw.edu.au/transforming-lectures) for ideas on transforming your lectures, or ask for technical assistance from the Centrally Allocated Teaching Spaces (CATS) team.

LEARNING FROM OBJECTS

You can use the document object camera to incorporate objects into learning activities and class discussions. For example, you can place an object under the camera and explain its purpose (or ask students what they think the purpose might be), then present questions or group tasks associated with it. Students can also use the camera for their presentations. Whenever the camera is used, this forms a part of the lecture recording.

One UNSW Health Management academic uses the camera in small-group problem-solving exercises. Students are asked to create logistical solutions and develop plans for placing strategic hazard-reduction sites on a typological map. The map is placed under the camera and groups are provided with scenarios in which they must decide where to place hazard-response resources so that the resources (such as hospitals) are not themselves under threat. Each group then presents their solutions to the whole class using the camera, which projects to all pods.
Blended-learning activities

Blended-learning activities use combinations of traditional face-to-face learning experiences together with online and mobile technologies. The activities can occur before, during, or after class. Blended-learning activities can, but don’t have to, occur at the same time as face-to-face (Bath & Bourke, 2010).

It is worth looking at how you plan for these activities. You can find more information about using blended learning, particularly in flipped classrooms, at www.teaching.unsw.edu.au/flipped-classroom. There is information about types of online learning activities at www.teaching.unsw.edu.au/online-learning-activities.

At UNSW you can plan your blended lesson to include appropriate technologies that enrich the learning experience. There is more information about this at the UNSW Selecting Technologies site (www.teaching.unsw.edu.au/selecting-technologies).

Flipping in the School of Business

Before class, students access the accounting topic content via a podcast. Then, in small groups in their weekly class, they apply this content to problems in collaborative learning experiences. They share and summarise their findings at their pods or at whiteboards. When the focus of a class is flipped to problem-solving and collaborative learning, students are more engaged.
**Blended-learning activities**

The Selecting Technologies site gives information on how to:
- Add blogs, media collections, and video assignments to your classes
- Maximise interactive learning, deliberation, and reflection
- Use adaptive online tutorials, formative assessment, and team-based learning activities
- Invite students to respond to design challenges related to videos (viewed online before class)
- Encourage student-generated content whilst choosing various formative and summative assessment tasks
- Flip a class with readings, videos, and a quiz.

You can find more information about how your peers have integrated online activities and resources in a predominantly face-to-face context at the web site Blended Learning – examples from UNSW: [www.teaching.unsw.edu.au/blended-learning-examples.unsw](http://www.teaching.unsw.edu.au/blended-learning-examples.unsw).

**PRESENTATIONS (INCLUDING DEBATES)**

One way to blend a presentation or debate is to encourage student discussions outside of class time. To do this, give students a group-work task in the latter half of a face-to-face class that requires the development of slides for an oral presentation or points for a debate. They might then be given a week to refine their work to present in the following week’s class. Consider ways to ensure that all students in the group are accountable for contributing equally to the group’s work.

**PRESENTATIONS (USING SOCIAL MEDIA)**

While presenting to the whole class, students can incorporate social-media elements such as Twitter or Instagram.

Google Docs is a place where my team can contribute ideas to strengthen our answers, rather than writing individual answers. Using team encourages communication in my team, which also helps our team assignments and presentations.

UNSW Student

You can find more information about how your peers have integrated online activities and resources in a predominantly face-to-face context at the web site Blended Learning – examples from UNSW: [www.teaching.unsw.edu.au/blended-learning-examples.unsw](http://www.teaching.unsw.edu.au/blended-learning-examples.unsw).
WEEKLY ORIGINAL THOUGHTS

This activity can help engage students who might be less talkative or less confident. Remembering that our student population is a diverse one, every week before class, encourage students to communicate a question and idea related to the current topic to you (see a sample weekly email below). The questions and ideas are ungraded and can be about anything related to the week’s topic. This blended learning activity is deliberately unstructured to encourage creativity and participation. You review the questions and comments before your face-to-face class and choose some of the most interesting points. A few students can possibly be asked in class to repeat their questions or ideas (if agreeable), and then you open it up for discussion.

TECH TIPS
To show the questions on both the main screen and student pods, use the “Display on Student Pods” setting on your control panel.

WEEKLY ORIGINAL THOUGHTS (CONT.)

Here is an example of how an instructor might introduce an activity that requires students to respond to a list of questions by email, outside of class time:

You can single something out that you thought was particularly interesting, criticise something you think was inaccurate, 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 question. 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 with the subject material.

These emails are also useful for me in structuring each class, and they are useful for you in developing your opinions about the subject material. Before each email is due each week, I will send the class a handout saying what aspects of the reading are important and how you can best prepare to discuss them.
**Blended-learning activities**

**POLLING**

Polling is an online blended-learning activity that serves a similar function to students raising their hands in class. It draws on various software tools for polling such as Poll Everywhere. Having students vote anonymously on what they perceive as the best explanation or answer to a question, discussing their ideas with peers, then voting again can lead to greater learning of the material. It is important to have students discuss why they think their explanation is the most accurate and why the explanations others have proposed may not be accurate. This activity draws on mobile learning initiatives as seen in Churchill, Fox and King (2016).

If polling is applied after a class, it’s important that you look at the polling results and listen to the students’ reasoning to determine what further explanations and summarisation you might need to make in the next class.

**ROLEPLAYS AND SIMULATIONS**

Roleplays and simulations encourage learners to take on different roles, or assume different characters, to interact in diverse and complex learning settings. You can use roleplays in your active learning space by asking students to prepare for them out of class and following up in class, after the roleplay, with a series of questions or prompts to elicit deeper analysis. Such prompts can be shown on all pods, and summaries can be recorded on the main screen.

*Figure 4: Poll Everywhere infographic (Wordpress 2015)*

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I really enjoy classes with interactive roleplays, and I can prepare outside of class with substantive material. I come prepared to engage with other students, and the lecturer prompts us to put what we learn into practice.

UNSW Student
EXTERNAL TOOLS
For many subjects, textbook providers may have supportive online resources. For example, students in a maths class may benefit from a MyStatLab learning environment where they can do quizzes or watch interactive applets before they come to classes. By curating these resources, you can focus on your key content points and identify any learning misconceptions. You might decide to demonstrate in the first class how students can access these resources.

Another enabling technology that can be used in any learning space with Internet access is myAccess. For example, you might decide to undertake a MAPLE 18 demonstration of differential calculus in a lecture, and then in the same lecture, invite students to form groups to analyse and provide solutions to similar examples. Students can use the myAccess service to run specialised virtual software applications wherever they have Internet access.

Other applications include AutoCAD, MYOB, NVivo Pro, SAP, Navigator, IBM SPSS Modeler, Foodworks, and Arena. Instructor resources for using myAccess include Getting Started Slides, course outline materials, a student email template, and a student Moodle announcement template. You can find these resources here: http://www.myaccess.unsw.edu.au/academics.

I really find that it is more flexible to learn this way and easier to view my progress, as I have to be well prepared for each question before class starts.

UNSW Student

Blended-learning activities

MAPPING CONCEPTS
A concept map is a type of graphic representation that shows the most important concepts, relationships, and outcomes of a problem-solving exercise. It builds on brainstorming and mind-mapping activities, and helps students organise and represent knowledge. Free online concept-mapping software is easily accessible (students can access software such as edraw or bubbl.us; you may also have a preferred mapping tool you would like to encourage them to use).

Once the software has been loaded onto at least one student computer (possibly before class starts or as a requirement at the start of the course), students can use the concept-mapping tool in small groups to help them understand relationships between key coursework terms.

For example, you can construct a focus question that specifies a problem that the concept map should resolve, and have pod groups identify, list, and rank 15 to 25 key concepts that relate to the focus question.
Blended-learning activities

Once each group has these concepts mapped and showing on their pod screen (using the "Show on Pods" setting), you can bring the class back together to discuss how the concepts, framed by the terms, form contrasting positions on the central questions. If the terms are ambiguous, or ambiguously used by different authors, this can be highlighted in the conversations.

If you or your students are using the normal whiteboard to create a mind-map or concept map and want to keep a copy, you can photograph the work and post it in Moodle using the Media Gallery. If you are using the pod screens, the students on whose computer the image is displayed can circulate it to all.

Figure 5: Sample mind map (Boyes, n.d.)
The active learning spaces are usually set out in small tutorial groups around pod screens, but you can vary the layout for different classes.

Dr Kar Ming Chong, UNSW Accounting Lecturer

If you give students permission to move the chairs closer or set the tables up differently, they will become more comfortable in the learning space.

PRESENTING YOUR MATERIALS ON THE MAIN SCREEN

In each interactive room, you will have access to a touch panel identical to the panels in CAT6 classrooms and theatres. The first step is to turn the system on (select “System On”).

You will be able to select the input (for example, “Internal Computer”) and where it is shown (for example, “Display on Projector 1”).

For Lecture Recording+ capture, ensure you have selected “Display on Projector 1”. The icon will have a green background, and the text will change from “Display” to “Displaying”.

Figure 6: Touch panel screenshot 1 (Learning Environments 2017)
When a pod is set to "Collaborate Mode is On" (which is the default setting), students can share their work from their local screen. Selecting "Displaying on Student Pods" will display your materials to Projector 1, as well as to all pod monitors. You can then begin the learning activities as you would in any CATS room, knowing that students can view the screen content locally.

As students work through a group problem or discussion, they can all see the discussion outcomes on their pod screen. Students can toggle back to view the lecturer’s screen by clicking "View Lecturer".

The options for displaying student content are only available when the lecturer has selected "Collaborate Mode On".

**Audiovisual setup**

**COLLABORATION WITH PODS**

Before small-group conversations can start, students use the "On" button to turn the pod on, then connect a laptop to the monitor closest to them. Only one computer will be linked to the screen (VGA, HDMI, and Mini DisplayPort connections are available).

**Audiovisual setup**

**COLLABORATION – WHAT THE STUDENTS DO**

The options for displaying student content are only available when the lecturer has selected "Collaborate Mode On".
COLLABORATION ACROSS PODS

Good practice in learning encourages students to actively work together to solve problems and issues, and to create new knowledge. One way to do this is to invite students to collaborate in small groups. You can ask students to show their work to all other pods ("Show on Pods") to facilitate wider group discussions, this will keep your own work on the main screen.

If you want students’ work to be recorded in Lecture Recording+, then ask them to choose “Show on All”. This will display their work on all the pods and the main screen and will be recorded in Lecture Recording+.

“Stop Showing” stops any broadcast and returns the screen and projectors to their last state before the broadcast began. When the report is finished, they can go back to displaying their own content on their local monitor by pressing “View Student”.

TECH TIPS
If you want students’ work to show on the main screen as well as the pods, ask them to choose “Show on All”.

TECH TIPS
When students display slides on Projector 1, encourage them to use their microphones for better Lecture Recording+ sound quality.

Information on holding more-advanced group conversations (say, between Groups 2 and 6, or 1 and 5) is available at the CATS Help Desk:
Website: www.learningenvironments.unsw.edu.au, or Phone: (02) 9385 4888 for AV and technical support.
UNSW support

TECHNICAL SUPPORT
For audiovisual technical support, or for a tour of your active learning space, contact the CATS team.

Learning Environments offer a number of face-to-face audiovisual sessions before the start of each semester.

Email: learningenvironments@unsw.edu.au, or Phone: (02) 9385 4888 to book a session.

HOW TO REQUEST A LEARNING SPACE BOOKING
You can request an active learning space booking through your Faculty coordinator. To see the available rooms and their functionality (including weekend facilities), access Learning Environments:
https://www.learningenvironments.unsw.edu.au/content/spaces.

For timetabling and scheduling support at Learning Environments, phone (02) 9385 7878.
Research into innovation in learning spaces is ongoing. This list is by no means complete, but refers to the articles referenced in this resource and other topical papers.


(continued)


The establishment of the Interactive Rooms demonstrates that UNSW values the opportunity to enhance comprehensive student collaboration. These spaces are aligned to the Scientia Education Experience domains that support student learning. The following UNSW resources may also be helpful in your lesson planning for teaching in an active learning space.

**Useful resources**

- Teaching for Learning  
- Flipped Classroom  
- Embedding Group Work in your Course  
  [https://teaching.unsw.edu.au/embedding-group-work](https://teaching.unsw.edu.au/embedding-group-work)
- Incorporate Reflection into Group Work Skills Development  
  [https://teaching.unsw.edu.au/group-work-reflection](https://teaching.unsw.edu.au/group-work-reflection)
- Faculty Focus: 7 Things You Should Know About Research on Active Learning Classrooms.

**Image credits**

- Figure 1: UNSW School of Accounting (2017). Dr K M Chong, B Cheng. Whiteboard images. [Image].
- Figure 5: Boyes (n.d.) Sample mindmap.
- Figure 6: UNSW Learning Environments (2017). Touch panel screenshot 1 [Accessed 12 Jan. 2018].
- Figure 7: UNSW Learning Environments (2017). Touch panel screenshot 2 [Accessed 12 Jan. 2018].
- Figure 8: UNSW Learning Environments (2017). Touch panel screenshot 2 [Accessed 12 Jan. 2018].
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Alamysick photo (2017) showing three students around laptop #82409244 Available at www.alamy.com JTPIGT

Notes

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