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# **BEL+T's BSL Guide**

# **BEL+T's BSL Guide**

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### Overview

BSL Kits are available for ABP teaching staff. For guidance on borrowing these kits from the ABP Loans Desk, click here.

### What is Blended Synchronous Learning?

Blended Synchronous Learning (BSL) is a Teaching and Learning Activity Type. It may be used for subjects offered in Dual Delivery mode. For more general advice on Dual Delivery, be sure to review <u>BEL+T's Dual Delivery Guide</u>.

In BSL, the same teaching and learning activities are experienced by all students in a subject at the same time, with some students face-to-face and others online.

As BSL practices develop, a range of approaches are emerging to align with particular pedagogical needs and the affordances of specific learning spaces. BEL+T has identified four BSL approaches commonly employed by working with Learning Environments and Field Services, and with ABP staff.

<b>BSL Approach</b>	Example Scenarios
BSL Sessions in BSL Rooms	Seminar or workshop in a BSL-equipped space (e.g. MSD 144/146)
BSL Sessions in Lecture Theatres	Interactive Q+A in a live lecture theatre
Distributed BSL	Breakout rooms or site visits
'DIY' BSL	Use of a BSL Kit for student presentations in a non-BSL equipped space

### When might I use BSL?

Some ABP subjects are timetabled as 'BSL' in BSL Rooms. These are typically Dual Delivery subjects with smaller enrolments that need to accommodate a single cohort of blended and online students. Additionally, some individual design studios have opted for a semester-long 'DIY' BSL approach as a way of accommodating a mix of online and blended students.

Subject coordinators may employ BSL approaches for particular activities, such as cohort-wide discussions or site visits. BSL offers a way for all students enrolled within a subject to synchronously engage in the same learning experience, it can support cohort building and a sense of belonging. In addition, BSL allows guest speakers or critics to engage remotely with face-to-face activities.

### What are the main things to consider for BSL?

Whatever form BSL takes, the Key Considerations for Dual Delivery (Learner Equity and Access; Cohort Building; Staff and Student Expectations) remain important touchstones. To address these, some broad Things to Consider for BSL are listed below.

- Planning
  - BSL sessions typically require considerable planning, particularly if this approach is new to you, to reduce your cognitive load during the session and to optimise the student experience.
  - Planning to accommodate local time zones for all students, and encouraging in-the-room students to bring particular devices/equipment can be important to a smooth session.
  - Do you plan to use any shared virtual platforms that require preparation or pre-arranged access?
  - Does the BSL activity require training and/or support to be arranged in advance?
  - Contingency planning is also essential in case technology 'decides to be uncooperative'.
  - Plan for breaks in longer sessions, as BSL can be tiring for staff and students alike.
- Operation
  - Consider establishing protocols for BSL activities and how students might contribute to the development of these to be equitable and inclusive.
  - Multiple options for communication channels (e.g. speaking or using the chat function) may accommodate diverse student preferences but can also bring challenges for effective management.
  - Identify pedagogical transition points (e.g. commencing a BSL session or moving between whole-cohort and breakout activities) and how these can be as seamless as possible for students.
  - Breakout activities can lead to audio challenges, especially when mixing face-to-face and online students together.
  - The selection/arrangement/positioning of display screens, cameras and virtual interfaces may need adjustment for different learning activities.
- Performance
  - Consider practicing where/how to position yourself when facilitating BSL activities, as well as the positioning of cameras relative to in-the-room students.
  - The goal is for online students to feel a sense of co-presence, which is promoted through verbal and non-verbal cues like eye contact and gestures being directed towards them.
  - To further foster a sense of togetherness, avoid language that implies BSL activities are comprised of two separate cohorts of students.
  - Every minute of a session does not necessarily need to be a whole-cohort BSL activity, so make these moments count by encouraging all students to meaningfully contribute. Remember that some in-the-room students may not wish to be on camera, and camera-free areas must be available to them.

### How should I use this guide?

While you may already have an idea about which of the four commonly-used BSL approaches is most relevant to you, you might also be deciding between approaches or deciding how to mix them in your teaching. Each section includes a scenario diagram for common activities, along with things to consider before, during and after each BSL session to help you make these decisions.

In addition to reviewing this guide, staff who are considering BSL activities are encouraged to contact BEL+T to discuss.

### What kind of BSL support is available?

For support with BSL technology in BSL Rooms, the University's Field Services team offers training sessions, which can

be booked <u>here</u>. For issues related to malfunctioning technology in a teaching space, Learning Spaces can provide in-room support. Call +61 3 8344 0777 for an urgent request or click <u>here</u> to lodge a (non-urgent) request.

Details on borrowing and using ABP BSL Kits can be found <u>here</u>. Subject coordinators wishing to discuss the pedagogical implications of BSL, including planning individual BSL sessions or reviewing the design of BSL subjects, should contact BEL+T at <u>abp-belt@unimelb.edu.au</u>.

#### **Additional Resources**

• BSL References and Publications

Angelone, L., Warner, Z., & Zydney, J.M. (2020). <u>Optimizing the technological design of a blended synchronous</u> <u>learning environment</u>. *Online Learning Journal* 24(3): 222-40.

Bower, M., Dalgarno, B., Kennedy, G., Lee, M. J. W., & Kenney, J. (2014). <u>Blended synchronous learning: A handbook for educators.</u> Office for Learning and Teaching, Department of Education, Macquarie University, Sydney.

Bower, M., Dalgarno, B., Kennedy, G.E., Lee, M.J.W. & Kenney, J. (2015). <u>Design and implementation factors in blended synchronous learning environments: Outcomes from a cross-case analysis</u>. *Computers & Education*, 86: 1-17.

Detyna, M., Sanchez-Pizani, R., Giampietro, V., Dommett, E.J., & Dyer, K. (2022). <u>Hybrid flexible (HyFlex)</u> teaching and learning: Climbing the mountain of implementation challenges for synchronous online and face-to-face seminars during a pandemic. *Learning Environments Research*.

Lakhal, S., Mukamurera, J., Bédard, M-E., Heilporn, G., & Chauret, M. (2021). <u>Students and instructors perspective</u> on blended synchronous learning in a Canadian graduate program. *Journal of Computer Assisted Learning* 37: 1383-96.

Leijon, M. & Lundgren, B. (2019). <u>Connecting Physical and Virtual Spaces in a HyFlex Pedagogic Model with a Focus on Teacher Interaction</u>. *Journal of Learning Spaces*, 8(1).

Raes, A., Detienne, L., Windey, I. & Depaepe, F. (2019). <u>A Systematic Literature Review on Synchronous Hybrid</u> <u>Learning: Gaps identified.</u> *Learning Environments Research*, 23: 269-90.

Tan, D.Y., Pee, G-Y.M., Kwan, W.L., Lur, K.T., Koh, L.L.A., & Yeo, Z.Y. (2022). <u>Virtual dissection activities as a</u> strategy for blended synchronous learning in the new normal. *IEEE Global Engineering Education Conference (EDUCON):* 565-70.

White, C.P., Ramirez, R., Smith, J.G. & Plonowski, L. (2010). <u>Simultaneous delivery of a face-to-face course to on-</u> <u>campus and remote off-campus students</u>. *TechTrends*, 54(4), 34-40.

Zydney, J.M., McKmmy, P., Lindberg, R. & Schmidt, M. (2019). <u>Here or There Instruction: Lessons learned in implementing innovative approaches to blended synchronous learning</u>. *TechTrends*, 63: 123-32.

• Learning Environments and Field Services Links

Facilitating BSL

Using the BSL Touchpanel

Video User Guide for BSL Spaces

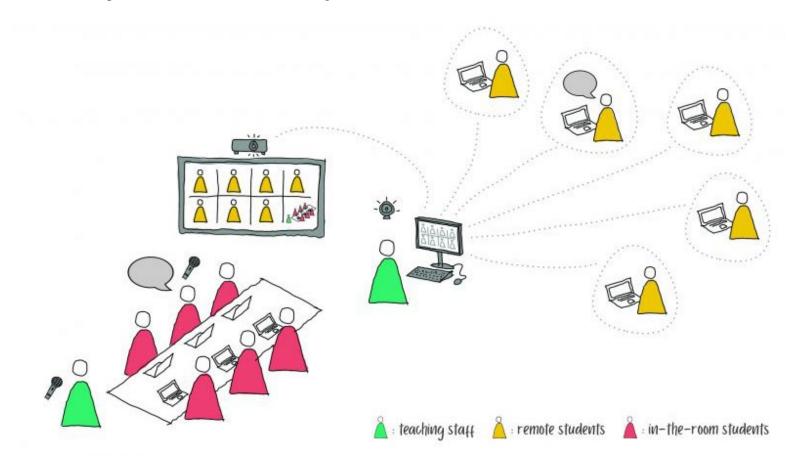
Blended Synchronous Learning Quick Start Guide

Planning for Live-Streamed Sessions

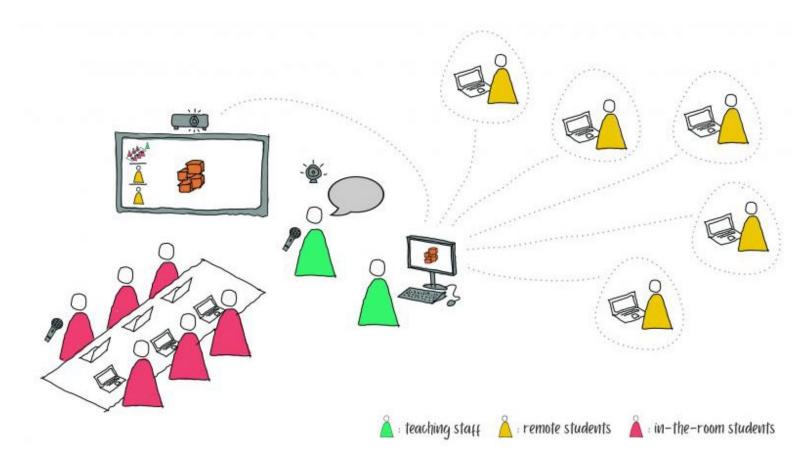
BSL Support Resources Padlet Board

### **BSL Sessions in BSL Rooms**

The University has upgraded several teaching spaces for Blended Synchronous Learning (BSL) Sessions. A complete list of BSL Rooms can be found <u>here</u>, including rooms in the Glyn Davis Building. BSL Rooms are equipped with built-in cameras, microphones and monitors for facilitating BSL activities.



An interactive discussion conducted in a BSL room, indicating how cameras, microphones and projection screens can be arranged to facilitate a whole-cohort experience.



Staff conducting a presentation in a BSL Room (e.g., MSD 144 and 146) to both in-person and online students simultaneously.

### Things to Consider

- Before the Session
  - Arrangements and styles of equipment can vary between BSL Rooms, arrange a time for you and any other teaching staff to **test the functionality** and plan positioning of equipment and participants for each BSL activity.
  - If you plan to incorporate **physical objects**, **posters**, **annotating or sketching**, test how these might best be captured through the document camera or by zooming onto the whiteboard, pin-up wall, etc in advance.
  - Consider how to manage facilitating the teaching and learning activity in addition to the technology, and **staff roles** for these. Note the location of BSL control panels and cameras varies in each room.
  - Launching the operating system, as well as various platforms, devices, equipment, often takes a minimum of 15 minutes, so **plan accordingly**. Other classes may be scheduled in the same BSL Room before or after the session alert online students ahead of time if this is the case.
  - Plan the BSL session to allow time to discuss BSL protocols with all students and/or guests.
  - Consider whether to encourage students attending BSL sessions in-the-room to bring devices for joining and participating in **virtual platforms** like Zoom, Miro, etc.
- During the Session
  - Students and guests will need time to familiarise themselves with BSL and the **spatial and technological specifics** of the BSL Room.
  - Communicate and gently remind face-to-face students and guests about the importance of facing cameras and using inclusive language to foster a **sense of togetherness** across the whole cohort.
  - Adjust the computer projection and cameras as needed during the session to **optimise visual connections** between all participants. Students may need to rearrange in the room, depending on the location of built-in

cameras.

- After the Session
  - **Reflect on what was more or less successful in your session**. Consider what you would do differently if you conducted the same session again (e.g. next year), as well as how you may change upcoming sessions.
  - Solicit informal feedback from students to inform ongoing changes to your BSL approach and ensure that these are student-centred.

### **BSL Sessions in Lecture Theatres**

With an eye towards cohort building and student engagement, subject coordinators with sessions timetabled in lecture theatres often dedicate time for whole-cohort synchronous interaction. The challenge is that lecture theatres typically are not equipped with BSL technology; nevertheless, staff have used various strategies to essentially conduct BSL sessions in these spaces as outlined here.

One option in teaching spaces fitted with Echo360 Lecture Capture technology is to use the University's 'live-streamed sessions' (LSS). This allows remote students to access the session synchronously through Lecture Capture on the subject's Canvas site and to interact via the Canvas chat function when it is enabled. Interactive tools, such as Poll Everywhere, can also help to gauge student comprehension and/or engagement.

Unfortunately, the LSS interface does not capture the faces/voices of remote students. Thus, an alternative is to organise a parallel Zoom Meeting to encourage engagement and/or to support participation of remote guests. There are only a very small number of "Zoom-enabled" theatres on campus. Therefore, using Zoom in conjunction with Echo360 often requires a certain approach.

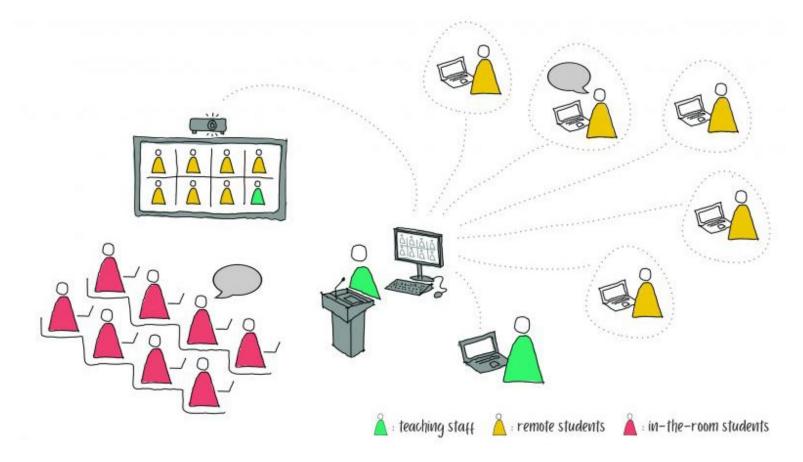
In most cases, a lecture theatre's lapel microphone, table-top microphones and presenter camera are not integrated into the lectern computer. Instead, they are integrated directly into Echo360. Therefore, the use of parallel Zoom Meetings using lectern computers requires the use of the lectern computer's built-in microphone and camera. If you want to connect to zoom from a lecture theatre, a step-by-step guide can be found.

How to connect to Zoom from a lecture theatre

# How to connect to Zoom from a lecture theatre

- 1. Choose the Mac Operating System (macOS) when you turn on the iMac lectern computer. This is due to reported issues whereby the Windows operating system has often failed to recognise the built-in microphone of the iMac lectern computer.
- 2. Log in to Zoom.
- 3. Set up Zoom audio and video:
  - a. You will be prompted to join with video or not. We recommend using the lectern computer's built-in webcam. Keep in mind that this will limit your movement in the theatre to remain seen by the online students.
  - b. It is recommended that you click "Test Speaker and Microphone" (under the Audio Settings) to identify the most appropriate audio setup. The built-in room speakers will allow the online students to be heard by their in-the-room colleagues. The lectern computer's built-in microphone is the only functional option. Should a microphone feedback loop develop, which is often described as a squealing or screeching noise, try changing the speaker source to the lectern computer's built-in speaker. This is not ideal as it limits the ability of in-the-room students to hear their online colleagues.
- 4. To display slides or other content, use the share screen option in Zoom.
- 5. Use the touch panel in the lecture theatre to project the display of the lectern computer for all in-the-room students to see.
- 6. Proceed with the teaching activity while being mindful of your position in the camera's frame and the microphone's range.
- 7. Once complete, the University's LSS will automatically upload a recording of the lecture to Canvas.

Your audio and video preferences should save for future Zoom sessions, which should reduce the set-up time.



An interactive discussion being facilitated in a lecture theatre using a teleconference platform like Zoom, with a teaching assistant to monitor and manage chat/polling functions.

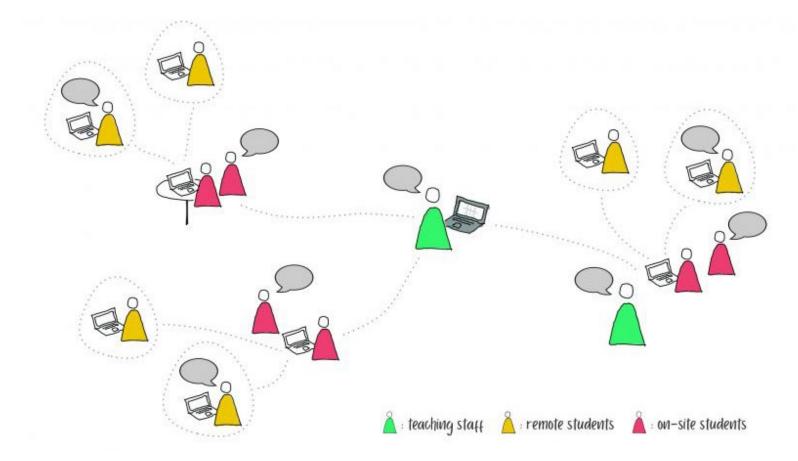
### Things to Consider

- Before the Session
  - Arrangements and quantity of projection/display screens, microphones and cameras can vary between lecture theatres, so **make time to test** functionality and consider optimal arrangement of visible windows for each BSL activity.
  - If you plan to incorporate **physical objects or sketching** in the activity, test how these might best be captured through the document camera or by zooming onto the whiteboard in advance.
  - Consider how to manage facilitating the learning activity in addition to the technology, and staff roles for these. The cognitive load to simultaneously facilitate a verbal discussion and to monitor the chat function may work best with a teaching assistant or student volunteer in the beginning.
  - Launching the operating system, as well as various platforms, devices, equipment, often takes a minimum of 15 minutes, so **plan accordingly**. Other classes may be scheduled in the same BSL Room before or after the session alert online students ahead of time if this is the case.
  - Plan the BSL session to allow time to discuss **BSL protocols** with all students and/or guests.
  - Consider whether to encourage students attending BSL sessions in-the-room to bring devices for joining and participating in **virtual platforms** like Zoom, Miro, etc.
- During the Session
  - Once platforms are launched and displayed on the theatre screens, cameras and microphones may not capture people seated in the theatre. This means that teaching staff will need to **repeat questions/comments into the microphones** to engage remote participants.

- Consider inviting face-to-face participants to position themselves in the front of the theatre space and turn to face the camera if comfortable doing so. A less formal environment and tone may **help remote participants to feel more at ease** with their faces being projected on screens.
- Consider how the use of webcams for face-to-face participants, including yourself, might **improve connections across the cohort** through co-presence.
- Consider whether a **lapel microphone or lectern microphone** better suits your style of BSL facilitation. If you tend to move around the space, the lapel microphone will be necessary. However, you'll need to remember to check your position in the camera's frame.
- A conventional 'think-pair-share' activity can translate to BSL sessions by forming **Zoom breakout rooms** for remote students that are timed to close. Representatives from both online and in-the-room cohorts can then report back to the entire cohort.
- After the Session
  - **Reflect on what was more or less successful in your session**. Consider what you would do differently if you conducted the same session again (e.g. next year), as well as how you may change upcoming sessions.
  - Solicit informal feedback from students to inform ongoing changes to your BSL approach and ensure that these are student-centred.

## **Distributed BSL**

Not all BSL sessions occur in BSL rooms, or even on campus. Two unique scenarios fall under the approach of "Distributed BSL". The first aims to minimise audio challenges associated with multiple, simultaneous breakout rooms, when each are comprised of a mixture of face-to-face and remote students. This can be helpful in subjects with extended, team-based activities and consultation sessions. In this case, it is more effective to have face-to-face students distribute themselves around the building (e.g. in unoccupied learning spaces). Of course, this requires prior coordination, but the benefit of engaging remote and face-to-face students together can outweigh the logistical effort.

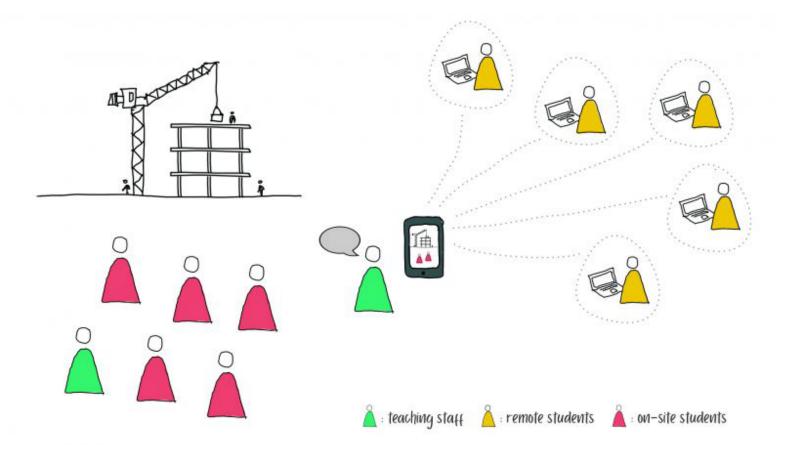


Facilitating breakout activities whereby face-to-face students are distributed around the building and interacting with online students via Zoom.

### Things to Consider

- Before the Session
  - Inform students attending the in-the-room sessions to bring devices for joining and participating in virtual platforms (e.g. webcams, headphones, etc.) in advance.
- During the Session
  - Discuss ways to make the experience different from an entirely online experience with in-the-room students. How might they use their device(s) to capture in-progress analogue drawings or models and work on these collaboratively with input from remote students? What could online students contribute to these efforts?
- After the Session
  - **Reflect on what was more or less successful in your session**. Consider what you would do differently if you conducted the same session again (e.g. next year), as well as how you may change upcoming sessions.
  - Solicit informal feedback from students to inform ongoing changes to your BSL approach and ensure that these are student-centred.

The other scenario is a visit to somewhere external to the timetabled space, such as a campus open space, a construction site or a professional office space. These become BSL opportunities when some students attend in person and others attend through a teleconferencing platform like Zoom or MS Teams. This requires planning to organise the appropriate equipment and support, but can be a very valuable learning and cohort-building experience for all.



Conducting a BSL site visit using a mobile device.

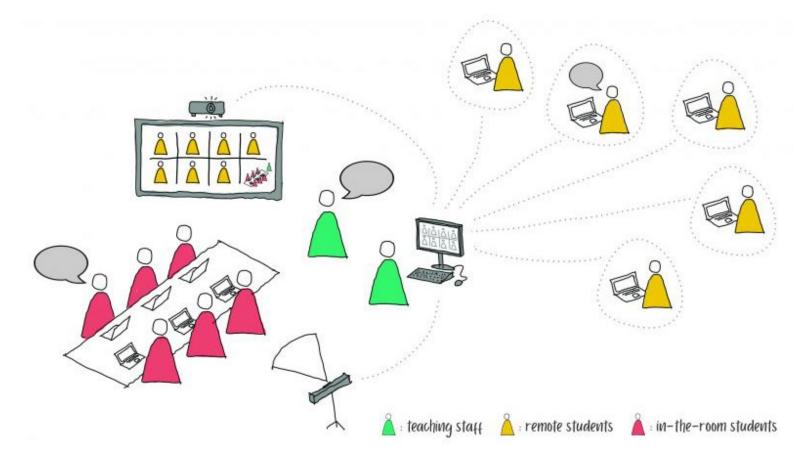
### Things to Consider

- Before the Session
  - Consider how to manage facilitating the learning activity in addition to the technology, and **staff roles** in relation to these. For instance, it may work most effectively for one staff member to lead the group while the other operates a device capturing the activity/surroundings.
  - Consider whether to encourage students attending the sessions in-the-room to **bring devices** for joining and participating in virtual platforms.
- During the Session
  - Periodically pause to check that remote students can see, hear and communicate effectively with you.
  - You will likely need to **relay questions and comments** between the remote and in-the-room participants. Again, depending on available staff and technology, you may consider dividing into groups for part of the visit and reassembling for debriefing or Q+A sessions.
- After the Session
  - **Reflect on what was more or less successful in your session**. Consider what you would do differently if you conducted the same session again (e.g. next year), as well as how you may change upcoming sessions.
  - Solicit informal feedback from students to inform ongoing changes to your BSL approach and ensure that these are student-centred.

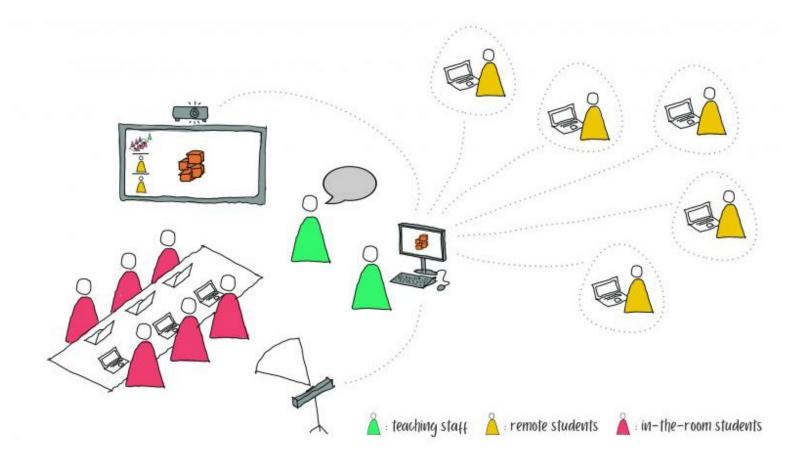
## 'DIY' BSL

This approach to BSL includes the varied, emergent strategies used by subject coordinators to facilitate BSL in campus learning spaces other than BSL Rooms or lecture theatres. The approach involves bringing a special piece of audio and/or video equipment, such as a BSL Kit, into the space as a way of including the whole cohort in the activity. In ABP, the 'DIY' BSL approach is most often employed for design studios or subjects timetabled in computer labs.

'DIY' BSL Kits are available for ABP teaching staff. BEL+T has produced <u>guidance on borrowing these portable kits from</u> the ABP Loans Desk and setting them up in a teaching space.



A seminar-style discussion being conducted in a small tutorial room using a BSL Kit.



Facilitation of student presentations in a small tutorial room using a BSL Kit.

### Things to Consider

- Before the Session
  - Keep in mind that these approaches must be **adjusted for the particular circumstances** and arrangements of each on-campus space, and coordinators will need to manage tech setup on a session-by-session basis.
  - Remember that some students may not want to be recorded on camera in-the-room, and have a right to this privacy by University policy. Ensure there is a **camera-free part of the room** that students are aware of and able to use.
  - If you plan to incorporate **physical objects**, **posters**, **annotating or sketching** in the activity, be sure to test in advance how these might best be captured with the BSL equipment by zooming onto the whiteboard, pin-up wall, etc. BSL Kits can even be set up to point downwards onto the table for capturing annotations and sketches or demonstrations during feedback sessions.
  - Consider whether to encourage students attending BSL sessions in-the-room to bring devices for joining and participating in virtual platforms.
  - Consider the optimal **placement of the BSL equipment** to capture each activity, and whether its placement will need to be moved at any point in the session. Ideally, the camera will be aligned with the projection screen so that face-to-face participants will appear to be looking directly at the remote students who are projected on the screen. However, the camera may need to be repositioned at times to effectively capture the whiteboard or pin-up wall.
- During the Session
  - **Confirm with remote participants** that the audio quality and camera angle is optimal. You may need to ask students in the room to arrange their work and/or themselves in such a way that best accommodates direct communication (i.e. eye contact) across the entire cohort.
  - Ensure students know where the camera-free part of the room is, and that it stays private if you move the camera or equipment.
  - Take care with DIY setup equipment re OHS (eg ensure cables cannot become trip hazards, and equipment is stable and safe).
- After the Session
  - **Reflect on what was more or less successful in your session**. Consider what you would do differently if you conducted the same session again (e.g. next year), as well as how you may change upcoming sessions.
  - Solicit informal feedback from students to inform ongoing changes to your BSL approach and ensure that these are student-centred.

