

# Multi-campus Teaching by Videoconferencing

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<http://www.latrobe.edu.au/teaching/teaching-resources/teaching-videoconference.html>

Videoconferencing is a communication tool which is used for multi-campus teaching at La Trobe University. Videoconferencing enables lectures and tutorials to be offered live, or synchronously, to two or more venues. This document presents principles of good practice for teaching using videoconferencing, and reflects the university's approach to *Flexible learning* (<http://www.latrobe.edu.au/teaching/teaching-resources/flex-learning/index.html>). It includes practical advice in the section *Where do I start?*

Videoconferencing connects groups of people in different locations, and allows audio and visual interaction, using screens that display pictures, sound, computer images and video.

Standard videoconference teaching rooms at La Trobe University (venues equipped and maintained by the Audio-Visual Services division of ICT), include lecture theatres and tutorial rooms which are equipped with two screens showing the remote audience and the presentation. A presentation live to a local audience can be videoconferenced to one or



more remote campuses simultaneously.

An additional facility is three “teacher only” venues, available from end of 2009, in which a presentation without a local audience can be videoconferenced to one or more remote campuses. These venues can also be used for recording presenter training and evaluation.

These guidelines refer only to videoconferencing in standard teaching rooms.

## ***Principles of good practice***

Simply achieving technical success in videoconferencing may not necessarily result in effective learning. Effective teaching requires a focus on student learning. The following principles for videoconferencing are based on good pedagogy and the use of standard teaching rooms at the University. They are modelled on the [Statement of the Use of Technologies to Support Learning and Teaching at La Trobe University](http://www.latrobe.edu.au/teaching/assets/downloads/statement-learningtech.pdf) (<http://www.latrobe.edu.au/teaching/assets/downloads/statement-learningtech.pdf>):

- **An equivalent experience for all students:** The university will offer an equivalent experience of learning to all students, enabled by the presence of a tutor, lecturer or demonstrator at all teaching venues during a videoconference presentation.
- **Student engagement:** Lectures and tutorials should be challenging, interactive and engaging for students at all locations, whether for large class or small class videoconferencing. Feedback and formative assessment can be used to build engagement
- **Relevant content:** Lectures and tutorials should have a clear purpose and relevance to students by aligning assessment, learning outcomes and learning activities. Teaching

and learning will be effective when framed around the principles of *constructive alignment* (Biggs & Tang, 2007, p. 50ff).

## Adopting the right approach for your teaching and learning

If you have students on more than one campus, the options for flexible learning include:

- lecture presentation live to all venues, with a colleague present at the remote venue,
- lecture presentation twice: once to the local lecture venue; then by videoconference without a local audience, from a studio or office to the remote venue

Videoconferenced lectures may also be recorded by Lectopia and placed on the LMS.

The size and location of your student cohort, the expertise of your colleagues, and the need for interaction will be factors in your choice.

## Videoconferencing to a larger group

Interaction is an important means to achieve engagement, and it is much easier for students to be actively engaged in small group settings. Large groups provide constraints on interaction, however, it is possible to build an inclusive learning environment and engage students from all venues.

The lecture as a sustained lecture monologue for 50-60 minutes is unlikely to engage students. Students report difficulty maintaining focus. The lack of feedback and long periods of physical inactivity in a passive mental state are reported as negative factors during lectures (Gibbs, 2007; TEDI, 2001).

A strategy for engagement is to break the lecture into segments, with brief interactive intervals. For example, ten minutes segments of “lecture”, interspersed with structured activities for students. This may be pausing to make notes, asking students to compose questions, answering questions you ask them, and so on. (Race, 2006, p. 5; Smith, 2005)

Preliminary	10-12 min Lecture	3-4 min activity	10-12 min Lecture	3-4 min activity	10-12 min lecture	5-6 min summary

Figure 1: Breaking the lecture into segments

In the videoconferenced lecture, breaking the lecture to conduct a short discussion can be managed at each venue between the lecturer and the facilitator. To engage all students, be sure to:

- **Welcome and acknowledge** all students: in large and small group settings, explicitly welcome students from all venues, and seek acknowledgement that the technology works and they can hear and see clearly. Use this to build a social bond.
- **Structured discussion:** The presence of a facilitator in the remote venue enables brief question and answer period to be managed across venues. More in-depth discussion using videoconference works best with small groups.
- **Wrapup feedback:** near the end of the lecture, ask all students what they are clear about from the session, and what remains unclear for them.

Interaction strategies that may be incorporated into live lecture presentations are: paired or small group work, a short quiz to all students, mini-case studies, questions and answer, student presentations. See [Lecturing \(http://www.latrobe.edu.au/teaching/teaching-resources/lecturing.html\)](http://www.latrobe.edu.au/teaching/teaching-resources/lecturing.html) on the CTLC Teaching Resources page.

Interaction during live lecture presentations may also occur using online modes, even in a large class setting, such as inviting questions from the audience by **email** from laptops or **sms**.

## ***Where do I start? Organising Videoconferencing for Teaching***

### **Organising**

- The starting point for organising videoconferencing is to book the required rooms, usually through your Faculty administration. Locating rooms can be done through [Room Information](#) at the Timetable website: <http://www.latrobe.edu.au/timetable/>.
- You can then make the videoconference bookings through the AVS booking form <http://avbdb.latrobe.edu.au/avs/videobooking.asp>. Lectopia sessions can also be booked using the same form. All videoconferences must be booked, the earlier the better. Last minute bookings may not be possible due to equipment or data link load balancing requirements.
- It is essential to have training in the videoconferencing facility you are using. CTLC advertises and conducts pre-semester induction sessions. See 'Lecture Theatre AV Sessions' at: <http://www.latrobe.edu.au/ctlc/workshops/>

### **Preparation**

- Organise a **teaching presence** at all venues: a tutor or facilitator present at your lecture who will enable interactive work with their local audience.
- Become familiar with the venue and operation of equipment. Know where the camera is positioned, microphones, document cam, etc. Know your presentation options and how to select them. Find a peer mentor in your School to guide your videoconference and sit in on your class.
- The audio is from a fixed microphone. Make sure you know how to switch it on (and when to turn it off....). The videoconference cameras do not track the presenter. You must remain in the zone where the camera can 'see' you and send your image to the remote site(s). In many venues there is a screen positioned so that you can see yourself 'in shot'.
- Prepare your presentations so they are visible in font size and contrast. For a guide to preparing presentations, see:
  - Powerpoint slides, see the CTLC site on [Lecturing](#)
  - Using images in PowerPoint presentations.  
<http://www.latrobe.edu.au/nursing/blogs/eLearning/?p=42>
  - Top Ten Slide Tips <http://www.garreynolds.com/Presentation/slides.html>
- Contact details for technical support from AVS are placarded on or near the lectern.

## Technical standards

Videoconference teaching rooms at La Trobe University supported by AVS are equipped for dual projection to enable participants to see both the presenter and the presentation materials simultaneously. The presentation content is viewed at high definition. Camera focus and positioning, lighting and audio can all be controlled remotely.



If videoconferencing is organised with venues outside La Trobe University, the experience may not be up to the university's technical standards or the participants' expectations. If regular

connections with such venues are considered necessary, contact AVS for advice before committing to the booking.

Non-compliant faculty videoconference venues will not be connected to University AVS venues for teaching, as they degrade performance at other venues and may cause unreliable connections. Meeting room videoconference systems are generally unsuitable for videoconference teaching, due to their low resolution, consumer grade audio and video, lack of dual video operation and no possibility of fault rectification.

### On the day of the videoconference lecture

- Allow enough time on the day for setting up. Note that Lectopia recording automatically commences 5 minutes past the hour. Videoconferencing starts automatically on the hour and disconnects 5 minutes before the hour.
- Switch off your mobile phone completely. In 'silent mode' mobiles still cause radio interference which will be broadcast over the loudspeakers and videoconference.
- Check with the facilitator at each of the remote sites, and ensure that they can manage the use of the microphone, and contact technical support if needed.

### At the start of the lecture

- The conference will be connected automatically on the hour. The equipment will start and connections made and tested. Videoconferences are monitored at the commencement of the session.
- Welcome and include people from all venues from the start. Confirm with the remote audience(s) that vision and audio are received and two-way contact is established.
- Check that interaction across campuses works – you may need to organise clear name tags or arm waving to indicate questions and speakers
- Indicate how interaction may take place during the lecture, as contributions, questions or discussion from participants from all venues, preferably using a facilitator.

### During the presentation in the lecture

- Understand what you are projecting to the remote sites. This varies according to the options you choose on the control panel. It could be one screen or two, presenter or presentation, or combinations.
- Be sure to "engage" the remote students and include them in your lecture. It is easy to concentrate on and include only the local students.

- Know which remote sites you are transmitting to and refer to them by their names, which appear on the screen.
- Know where the camera is positioned and speak to it, rather than to the projected image of the remote site
- Don't wander around the room. This will result in you being out of shot for remote sites, and out of range of Lectopia audio recording. Stay within approximately two metres of the lecturing desk.
- Regularly check how students at the remote site(s) are going. Allow time for them to respond to your questions.
- Make clear requests and indicate how you'd like students at the remote sites to respond. E.g. "Can you hear me at Mildura? Wave your hands if you can hear me".
- Allow enough time to summarise your lecture so you are not forced to rush through the last remaining points
- Make sure you finish on time (5 mins before the hour). In busy lecture theatres there is likely to be another class immediately following your lecture – they'll need time to set up. The videoconference (and Lectopia recording) will automatically end at 5 minutes to the hour.

### **In case of problems**

- Prepare a back up plan in case the technology or electricity fails. For example, think of some activities that students can do while they are waiting for the problem to be rectified.
- Make sure you know how to contact the technician at the originating venue. If there is a technical difficulty, he will contact and co-ordinate technical assistance at other sites.

## **Resources**

### **Resources at La Trobe University**

Guidelines for flexible learning using the La Trobe University LMS  
Flexible learning, Curriculum, Teaching & Learning, La Trobe University  
<http://www.latrobe.edu.au/teaching/teaching-resources/index.html>

Statement of the Use of Technologies to Support Learning and Teaching at La Trobe University. <http://www.latrobe.edu.au/teaching/assets/downloads/statement-learningtech.pdf>

AudioVisual Services (AVS). <http://www.latrobe.edu.au/ict/services/teaching-services/audio-visual-services/>

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<http://www.tedi.uq.edu.au/teaching/index.html>

Enhancing Experiences of Groupwork  
<http://www.iml.uts.edu.au/learnteach/groupwork/index.html>

Twenty terrible reasons for lecturing, Oxford Centre for Staff and Learning Development (OCSLD), Oxford Brookes University.

[http://www.brookes.ac.uk/services/ocsd/2\\_learntch/20reasons.html](http://www.brookes.ac.uk/services/ocsd/2_learntch/20reasons.html)

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