

Designing for Online Learning

1 Context

Teaching online for the first time can be both familiar and vastly different to previous practice. This document provides guidance and advice for designing and delivering a synchronous online session with a sound pedagogical underpinning.

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2 Key Takeaways

2.1 General advice for effective online teaching

- Establish expectations and instructions with students as early as possible so that etiquette is clear.
- Include additional time in your session planning to enable students to fully engage in online learning. Some activities and actions can take longer in a synchronous online classroom.
- It can be much harder to “read the room” when you are delivering online. Consider stopping more frequently for questions or asking students if the pace is ok.
- Reflect on your practice. Take some time to understand what activities worked well within the online environment, and which activities may require further development. You may wish to make use of the [Reflective Practitioner Guide on the Learning and Teaching Hub](#).
- Time away from screen: create activities and opportunities for students to step-away from their screens and engage with learning ‘offline’.
- Regular breaks: we advise building in regular breaks to your delivery. This should include mini breaks every 20~ minutes and a more substantial break every 45~ minutes.

2.2 Getting Started: Good Practice

2.2.1 Before the session

- Prepare our equipment and try to ensure you have a stable internet connection.
- Check your audio settings to make sure you can be heard.
- Be mindful of your work area. Consider what your background looks like through your webcam, and try to ensure there is a light source in front of you.
- If appropriate, contact your students to remind them of any preparatory content and introduce them of the expectations in terms of engagement and etiquette.
- Test any technology or approaches you haven’t used before, either on your own, or contact Learning Innovation who can advise and help design activities.
- Engage with your facilitator to discuss and agree your roles and relationship.

2.2.2 During the session

- When applicable, remind students that the session is being recorded.
- Remind students of the expectations around use of webcams and microphones. For example, raising hands before speaking.
- Set out the objectives for the class in terms of content and tools used.
- Don’t be afraid of silence. If cold calling a student, try to say their name as you introduce a question to give them and the facilitator the opportunity to unmute and spotlight.
- Remember to take regular breaks.

2.2.3 Closing the Session

- If possible, leave some time for questions.
- Summarise the key learning points and link to the next session.
- Share any additional materials where appropriate.

2.3 Challenges using Technology

You or your students may experience technical difficulties. Some of the common issues can be mitigated through considered design, many will need to be referred to the IT Helpdesk who are better placed to support.

Common issues include:

- **Access:** students should be logging into the Zoom room using their own Zoom accounts. Students have been advised to register a free Zoom account using their '@london.edu' email addresses. If they are unable to login to Zoom, ask them to contact IT.
- **Sound:** ask students to use the Audio Setup Wizard to ensure their audio devices are working. Be aware there may be some delays in sound if connections are poor. Ask students to remain on mute if they are not actively speaking. Remind them they can hold the spacebar to enable their microphone quickly.
- **Video:** webcams can be used to create a sense of community. If you experience latency issues, you can switch cameras off to reduce bandwidth use.
- **Content Region Restrictions:** certain websites, or content held on those websites, may not be available in certain countries or regions. Be aware of this when using externally hosted content.
- **Content Availability:** screensharing may also be problematic for students with poor bandwidth. Share your slides before the session to ensure students can download and use them offline during the class.

3 Designing for the Online Classroom

This section provides key recommendations for core approaches to online synchronous delivery. Consider differentiating your practice by using multiple approaches. The chosen approach should be appropriate to the content you are delivering.

3.1 Lecture

If you are delivering content to students in the form of a lecture. You can use the Sharing functionality in Zoom to display presentation slides, documents or websites that help support the content you are discussing. Here are some key recommendations:

- Be aware of length of time you are teaching and embed regular opportunities for students to engage as well as breaks.
- Typically, people only get through about 60-80% of their usual content when delivering online. Therefore, be clear on the key learning objectives you want to achieve in the session and prioritise this.
- Consider adding additional content to Canvas for students to complete asynchronously. This could be in preparation for the class, or as a follow-up.
- Engage students by asking questions and asking for input on specific concepts and ideas.
- Use the Reactions in Zoom as a low-bandwidth method of determining engagement from students.
- Encourage to share their questions and thoughts in the Chat or by using the Raise Hand feature.
- You may wish to embed Mentimeter and ask questions to all students at once.
- You may not be able to address every question in the session. Consider posting responses to these questions after the class.

3.2 Guest speaker

Getting the speaker into Zoom: You can invite your guest speaker into the Zoom as a participant. They will then appear large on the screen when they start talking. If they need to use PowerPoint slides, or similar, then you can add them as a co-host.

Q&A: While the speaker is talking students can raise their questions through the Chat. Discuss with your speaker whether they would like to answer questions as they speak or allocate time at the end.

Once the speaker has finished, call a break. You, or your facilitator, can use this time to review the questions, theme them and summarise. You can then pose relevant questions to the speaker after the break.

Recording Guest Speakers: Your guest speaker may have several questions about being recorded in Zoom, or via lecture capture. It may be useful to let them know how the recording will be used. Key information is:

- Recordings are shared on Canvas so only students in that class can access it.
- Recordings will be kept until the end of the course (unless Faculty advise otherwise)
- At the end of the course our AV team will remove and delete the recordings.
- If guest speakers do not agree for their recording to be shared, their contribution can be edited out by the facilitator before the recording is shared with students.

3.3 Worked Examples

Worked examples are an approach to introducing non-expert students to new knowledge domains. It supports the understanding of key concepts as well as the application of knowledge in context. It consists of 'walking' learners through a problem and addressing each step.

If you are teaching a quantitative subject and use equations, you may wish to use the annotation tools available to you in Zoom, PowerPoint or on your personal devices, such as an iPad.

If your example is more holistic, break it down into steps. At each key step, ask students to share their ideas on the Whiteboard. Use an example that mirrors professional practice and appropriately applies the knowledge. You may wish to ask students to work in groups, reflect on the example and offer thoughts on how the problem could be approached differently.

3.4 Problem-Based Learning

Problem-Based Learning (PBL) is designed to align discipline-specific knowledge with transferable skills through experiential learning. Students develop an integrated body of knowledge from many disciplines while developing transferable skills such as problem-solving, critical and creative thinking, communication and leadership skills.

PBL is an approach to Active Learning, learn more on the [Teaching and Learning Hub](#).

3.5 Case-based teaching

Case-based learning approaches engage students in discussions on specific scenarios that closely resemble or typically are real-world examples. This approach provides students with an opportunity to see relevant concepts applied in context. The authenticity of case studies exposes students to new knowledge and perspectives in order to build not only subject knowledge, but also develop the necessary skills to critically apply the knowledge.

Your case study may take one of the following formats:

- **Finished:** the solution is presented, possibly with alternative solutions. Use these cases for analysis and illustration of key concepts.
- **Open-ended:** the results are not clear. Students should be asked to contribute potential solutions and discuss the impact.
- **Fictional:** fictional case studies should mirror professional practice.
- **Original:** You may have written your own case study or used an existing case from a colleague. Consider asking students to create a comparison between two studies on a related topic or create a problem-solving activity with the given information.

4 Engaging Students

4.1 Importance of collaboration

Collaborative learning forms a subset of active learning, requiring learners to work together in the pursuit of gaining knowledge, solving problems, or creating something new. Collaboration in this form provides an opportunity for students to engage in purposeful dialogue, creating mutual understanding and deep critical reflections.

You can use collaborative learning activities throughout your teaching. Set activities can be short and discussion-based, or longer problem-based tasks.

Learn more about Collaborative Learning on the [Learning and Teaching Hub](#).

4.2 Group-based activities

Break-out rooms allow you to distribute students into separate work areas where they can communicate and collaborate toward a task.

You can pre-assign students to groups, create random groups or allocate students to groups manually during the class. You can then enter each group individual to support students during the task.

Consider the following recommendations:

- Ensure the activity is clear and that all students understand the task before opening the breakout rooms.
- Use Broadcast messages to remind students of the time left.
- If appropriate, provide a canvas or worksheet for students to work on to provide direction toward the desired output.

4.3 Creating opportunities for feedback

It is important to design opportunities for feedback within your online teaching. Students should understand:

- what is good performance;
- what their current performance is; and
- how to close the gap between current and good performance.

There are lots of ways in which you can design opportunities for feedback. Be transparent with your students and tell them when you are providing feedback. You should:

- Praise good answers and correct misconceptions when students respond to questions.
- Review the output from set activities and use student generated work to explain how it meets assessment criteria or what improvements could be made.

Consider the Seven Principles of Good Feedback Practice (Nicol & Macfarlane-Dick, 2007):

- helps clarify what good performance is (goals, criteria, expected standards);
- facilitates the development of self-assessment (reflection) in learning;
- delivers high quality information to students about their learning;
- encourages teacher and peer dialogue around learning;
- encourages positive motivational beliefs and self-esteem;
- provides opportunities to close the gap between current and desired performance;
- provides information to teachers that can be used to help shape teaching.