TEACHING ONLINE WITH ZOOM
A Guide to Making the Most of Your Interactions with Learners.

OVERVIEW
This resource offers an overview of the Zoom video conferencing tool that is now integrated into our virtual learning environment Brightspace.

Zoom is the UCD virtual classroom of choice, it is a video communications app and may be downloaded across different platforms and devices – to enable video conferencing, webinars, virtual chat, screen sharing, annotation, whiteboard etc.

AUDIENCE Faculty, Tutors, Demonstrators, Those That Support Learning And Students

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> www.ucd.ie/teaching
GETTING STARTED

The following highlights some of the organizational functionality of the Zoom tool and offers some insights into the most effective setup for teaching and learning.

Review the additional notes on the Virtual classroom from the UTL webpages.

Alternative Host/Co-host

Zoom allows for multiple presenters, enabling them to have full access to the main screen and the tools. When creating a zoom session consider whether you might wish to add one or more alternative hosts. This is ideal if you have a tutor supporting you with the session, a guest lecturer or intend inviting the learners to share content and screens.

Consider how you might agree and utilise the co-host role to best support your session and arrange and agree in advance their role during the session e.g. to monitor chat, bring questions to the attention of speaker, post links/files to chat, create breakout rooms etc.

Note, you may find that this is not practical for your session if you do not have the additional support.

Waiting Room

When creating a zoom session you can opt to set up a waiting room, this allows you to manage the entry into the live session. Once started can elect to admit students all at once (or individually if required).

Note, if you use this setting ‘you’ will need to allow latecomers into the session individually. You may even consider choosing to lock the session to minimise potential disruption. Once you lock the session no students will be able to join from that time onwards.

Zoom View

It is useful to understand the different view options in Zoom and to advise your students how to best use them in your session.

- Speaker view.
  The speaker alone is spotlighted and is ideal for presentations/sharing slides and other learning materials.

- Gallery view.
  The screen is filled with the individual participants' video (default to 25 screens), this is ideal for interactive discussions, Q&A, and offers up an opportunity to engage with the cohort as one might do in a face to face environment.

  Note for this to work the host/speaker/presenter will need to stop sharing their screen.

- Immersive view.
  This feature allows a host the option to place learners into a virtual scene (of their choosing). This is ideal to differentiate a panel of speakers or student presentations from the general cohort.
PREPARING TO TEACH: BASIC INSTRUCTIONAL DESIGN.

The following provides some simple insights in utilising the Zoom tool to best serve your session. Though primarily used for synchronous live teaching, it can also be used to record full lectures, micro lectures, plenary feedback etc or set up virtual meetings and working groups.

To begin we look at some practical ‘delivery’ considerations for the tool itself and how one might set up a Zoom session in Brightspace. This is followed by a focus on the pedagogy by highlighting some sound instructional design tips/considerations when teaching (online, blended or face to face).

See the overview of Blended and Online Learning from the UTL webpages.

Schedule and Session duration
Zoom is now integrated into the virtual learning environment Brightspace as the bespoke virtual classroom. This means that it can be scheduled in line with the designated lectures, tutorials (or other teaching sessions) - and may be linked to from a (Brightspace) session folder and/or simply timed to open at a specific time.

It is always worth considering to open any such session a little early, to enable participants to check in and test connectivity, audio and video. And in so doing to put up a welcome message (via the whiteboard) or to share a holding slide.

Recording a session
One of the many advantages of using the virtual classroom is that the sessions may be recorded for use after - whether for review, revision, or as a resource.

Decide in advance if you are going to record a session and inform the participants. Remember breakout sessions are not recorded, only what occurs in the ‘main room’ e.g. your lecture, whiteboard activity, screen sharing etc.

Having decided to record a session, the file is sent to the ‘cloud’ for storage. On session end you will receive an email to inform you that the file is ready and available for access by your students through the Zoom page in Brightspace.

Review the guide on ‘Managing your Zoom Recordings in Brightspace

Session Outcomes/Objectives
In line with module design it is important to consider what specific learning outcomes may be addressed per teaching session e.g. if a module outcome may enable a learner to ‘Demonstrate an understanding of the integration of technology into teaching practice.’ Then a specific session might begin this journey by ‘Introducing educational technologies’ - this can be said to be a learning objective i.e. describing a small action or smaller quantity of knowledge than a learning outcome.

The concept of learning objectives is a means to clarify what a particular session shall involve in its teaching and learning approaches. This is obviously helpful to both faculty and students in signalling what each others’ roles and responsibilities may be, and may be considered good practice for face to
face learning. However, when creating online learning opportunities, such as a Zoom virtual class (live or recorded) it becomes key to highlight these learning objectives to ensure transparency and guidance for all parties.

Activities
Like any class/session scenario Zoom offers a number of opportunities for students to engage with different activities; that will break up a long session; offer a means for inclusive engagement; differing means of expression and to support and enhance their learning.

The following table highlights some potential activities and the tools within Zoom you may use. Further details on the actual tools follow below.

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<td>List of attendees (for staff use only)</td>
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Following on from the previous section above [re: Session Outcomes/Objectives] it is often the case that a learning objective will beget an action - and set up a potential learning activity.

To follow the example above ‘Introducing Educational Technologies’ the obvious first activity is for the faculty member to provide said introduction [via slides, video, talk etc]. However it may also elicit any number of student activities, such as:

- Discuss what is meant by the term educational technology - facilitate a **break-out session**
  - Encourage students to express their opinions, come to a consensus, create a definition etc.
  - Post the discussion question and any instruction into the chat for access by students while in the breakout group

- List technologies you have encountered - capture them on the **whiteboard**
  - Brainstorm and share ideas, open and inclusive activity.
- Identify educational technologies - utilising web search and *shared screens*
  - Promote information literacy by directing students how to search, assure provenance and accurate information.

- Find the most common tools - utilise a *poll* to capture usage
  - Capture plenary data, use as a potential catalyst to interrogate data and define next steps.

**Roles & Etiquette**

As with any teaching, it is important to consider how it shall run and what exactly is to be expected of all parties during the session and any subsequent sessions in the module for example roles and responsibilities, activities, support, guidance etc.

*Review the additional notes and guidance on Netiquette for Online Learning.*

The use of the learning objectives shall provide some direction in respect of potential activities, however it may be necessary to establish and discuss some ground rules with the cohort, even agree a form of learning contract [this in itself may constitute a nice ‘icebreaker activity’]. Areas to consider include:

- Notifying all a session shall be recorded
  - Clearly identifying the purpose of recording and where and how long it may be available.

- Inviting people to remain muted (at particular points)
  - Clearly signposting the structure of a session.

- Acknowledging not all may wish to turn on video in large group settings
  - Building in opportunities for small group / individual activity.

- Encouraging use of synchronous feedback tools [and offering a guide to such]
  - chat tool, emoticons, poll etc.

- Sharing documents via the chat
  - To support activities, provide resources etc.

- Nominating select reportees to ‘share screens’
  - Identifying processes to include learners in the session design/structure

- Expectations of group participation etc.
  - Clear goals for activities and engagement - ideally mapped to specific objectives, and/or assessment (formative or summative)

The [UCD Acceptable Use Policy](http://www.ucd.ie/teaching) offers oversight to one’s behaviour within the institutional confines “Users are expected to ensure usage of University IT Resources is carried out in an acceptable, safe, respectful and legally compliant manner.” And provides further details on themes ranging from GDPR, Copyright, devices use etc.
Session summary
Finally, the use of Zoom as a virtual classroom does offer something quite unique to face to face teaching - the ability to capture not only faculty presentations, but core activities shared on the main screen (via the recording), the poll results, and a transcript of all chat conversations [including unanswered questions one may wish to follow-up].

There is a further benefit to this, the ability to edit and/or include a post-session summary. It offers a moment for faculty to review and reflect on a session and gather insight on the activities and contributions from learners. Using this to inform where the next session may take up or offering feed-forward to the learners in light of their contributions.

This post editing can be captured in the virtual classroom either after the session has formally ended by simply carrying on the recording and/or creating a short micro-video using Zoom that is an addendum to the full session recording.

TIPS AND GUIDANCE: BUILDING IN ACTIVITY AND ENGAGEMENT.

Engaging learners
The Zoom tool offers an array of modes/tools to engage the learner. Like any face to face class environment the opportunity to offer differing modes of engagement is often key to a successful teaching and learning session.

The ability to offer and support activity within a class, may often depend on the session design, timing, cohort, level, the physical environment to name a few. Within an online session these are equally important, here are a few possibilities to consider that the Zoom tool set offers.

Chat tool
This may be used as a whole class activity or as a one to one endeavour. It may be a nice way of posing a question to the whole class, and for all to see the ensuing responses re: a debate, point of knowledge, ideas and opinions etc.

You can also use the chat to disseminate links (to web pages, activities, resources etc) and to directly share documents. The added benefit here is that the Chat thread may be archived and reviewed or shared at a later point.

Consider carefully the etiquette of using the chat tool - do you want / can you manage constant posts Vs a direct invitation to respond/interact at a given point? Similarly your potential to be overwhelmed may well be replicated for the learner - be mindful of their needs also.

Note: When in the breakout groups participants can only access the chat that they received prior to entry. You can't send messages to them via the chat when in the group.
Polling
Poll in Zoom: Creating and running a poll in Zoom meeting allows you to gather and share back the results of the responses from your students for single and multiple choice questions. You can create your poll in advance of the meeting.
If you would like to do more advance polling consider using Poll Everywhere, this is now the UCD preferred web-based student response tool. This comprehensive tool allows for a multitude of different question constructs to be utilised: from simple MCQs, to word clouds, ranking, image notation etc.

Consider the reason ‘why’ you wish to integrate the Poll; will it support, enhance, engage, encourage, reinforce, direct, summarise etc Often they are best used when complimenting an already existing activity e.g. bringing a discussion to conclusion by sharing/ranking ideas. Or reinforcing an in-class exercise by clarifying answers on an image map.

(Encourage use of) The non-verbal feedback tool
This simple tool, open to all participants and found on the main menu bar, offers a series of visual expressions - emoticons (the immediate menu provides such examples as: a tick or incorrect mark, a happy to sad face, slow down or speed up etc). These emoticons may be used as a means to gather a quick snapshot of progress, understanding, acknowledgement etc.

The ability for the learner to prompt you to ‘Slow down’, to suggest a ‘Break’ is required, to ‘Thank’ someone for a contribution, or ‘Raise’ a question is done in a subtle yet clear manner. It enables all participants to be able to actively contribute on their own terms and for facilitators it offers a quick visual check that matters are proceeding effectively.

Consider highlighting the tool and its ability to offer quick feedback. Its ability to be universal enables all learners the opportunity to contribute equally.

Breakout rooms
Zoom breakout rooms provide a space for student group discussions, collaboration and active-learning activities. Breakout rooms are most effective when they are planned and managed effectively and students are given explicit instructions on how they should participate in the learning activity. When setting up breakout rooms lecturers (i.e. hosts) have the option to pre-assign students, randomly assign, assign manually or let the student self assign. A lecturer can move between breakout rooms to clarify or monitor a task or stimulate discussion. The lecturer can broadcast a message to all breakout rooms if they need to provide relevant information. A timer can be used to notify students of the time remaining in the breakout room. Students in a breakout room can get the lecturers attention by using the ‘ask for help’ option.

Review the additional notes and guidance on ‘Setting up Breakout Room’s.

Screen annotation
Essentially a means to ‘draw over’ or ‘highlight’ the screen, these basic tools may offer an added layer to screen sharing.
One may annotate a slide, image (or any part of a shared screen e.g. documents, applications, web pages etc) with the digital pen, equally you may invite the learner to do similar.
Consider how you may use this to guide learners to: a login window, a particular graphical detail, a reference etc. Equally reflect how it may serve as an activity for the learners to highlight/identify: key components of a schematic, details on an aerial photograph, missing chemical elements etc.

Whiteboard
This virtual whiteboard can be used as any ordinary whiteboard; to draw, write, annotate etc. for both the facilitator and learners. Once again the key benefit lies in being able to capture and archive the contents for review and sharing. One can also create ‘extra white boards’ akin to a set of slides, so materials/contributions can be revisited.

Consider how you might invite contributions from the floor by posing a question, even using alternate sides of the whiteboard to post a vote.

Camera share [capture live writing]
Under the ‘share screen’ option in the ‘advanced’ tab you will find the opportunity to share an alternate and additional camera (to the default laptop or desktop camera). This simple option enables you to utilise a phone camera (wirelessly), or a secondary camera connected to your PC as another video source. This becomes rather useful if you wish to capture written input e.g. mathematical equations whilst maintaining a video of yourself (the facilitator) speaking. One can also use the additional camera to highlight ‘live’ details e.g. from an experiment, a clinical setting or artefact.

This video resource from San Francisco State University provides an easy setup guide.

Consider carefully if this added complexity is an option for you? It may work effectively if you had a fixed camera setup (i.e. a camera on a tripod to capture your writing) or even a colleague to guide the camera to a specific ‘live’ element for inclusion. As with all these options, you can also enable the learner to share their camera too, perhaps capturing ‘live’ elements from fieldwork, or remote labs.

Pre-recorded content
Finally, the simplest and perhaps most useful function within Zoom is the ability to use much of the above functionality to record a session without an audience. In this way Zoom is excellent for creating asynchronous video resources that can be archived and shared later.

Consider creating micro-lectures on key concepts, or revisit materials that need further explanation, offer guidance to assessment. Perhaps record an introduction to the module and its assignments, capture plenary feedback etc. Be strategic in what you choose to record, both in terms of its duration and its longevity i.e. always look to being able to ‘reuse’ the videos (if possible).
RESOURCES: ADDITIONAL SUPPORTS

UCD ITS Support
https://www.ucd.ie/itservices/ourservices/educationaltechnologies/virtuallearning-brightspace/virtualclassroom/zoom/

Guidelines for Faculty Using the Virtual Classroom
https://www.ucd.ie/teaching/t4media/vc_faculty_guidelines.pdf

Using Zoom for Online Classes [UCD Business School]
https://buselrn.ucd.ie/blended-learning/virtual-classes/using-zoom/using-zoom-for-online-classes/

Decide How to Host Your Event [University of Minnesota]
https://it.umn.edu/services-technologies/resources/zoom-decide-how-host-your-event

Closed Captioning and Live Transcription [Zoom Resource]
https://support.zoom.us/hc/en-us/articles/207297366-Getting-Started-with-Closed-Captioning

Virtual Backgrounds [Zoom Resource]
https://support.zoom.us/hc/en-us/articles/210707503-Virtual-Background