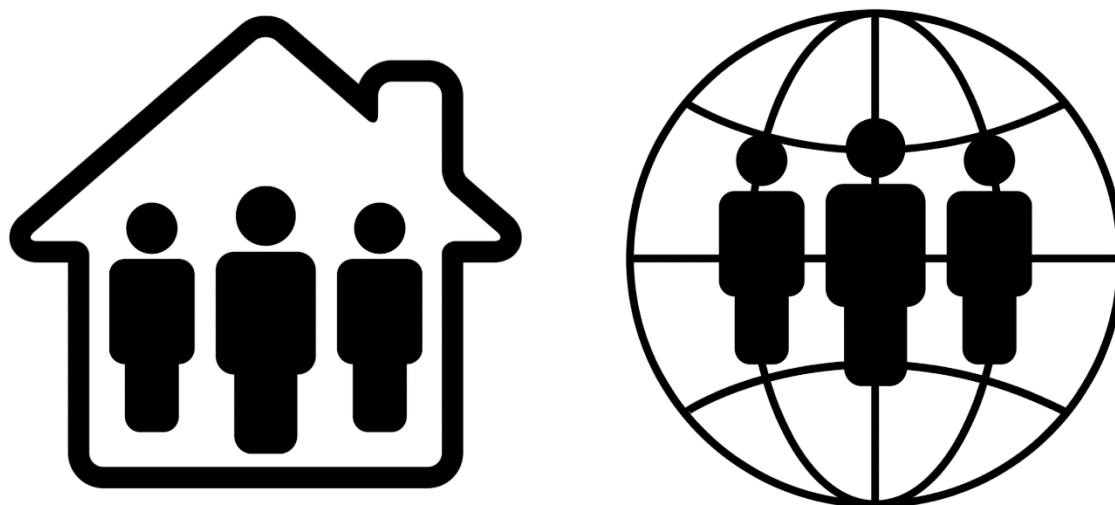


Hybrid teaching considerations

Teaching planning should take into account the need for an inclusive approach to teaching. For this reason, hybrid teaching (i.e. where within a session, some students participate remotely in with those students who are on-campus) *should only be used for very small classes, or where a few students need to join temporarily on a remote basis.*

Definition

At UofG **Hybrid Learning** has students online and on-campus in one session *at the same time.*



Caveat

Hybrid learning requires very careful design and facilitation as well as particular technology for it to be an effective and inclusive learning experience. Consequently, this approach should only be considered as an *interim* solution.

It may become necessary in certain situations to accommodate remote learning for individuals e.g. if a handful of students in a cohort are unable to make it to Glasgow owing to international travel restrictions, or if a student has to isolate because of Covid at some stage in the semester.

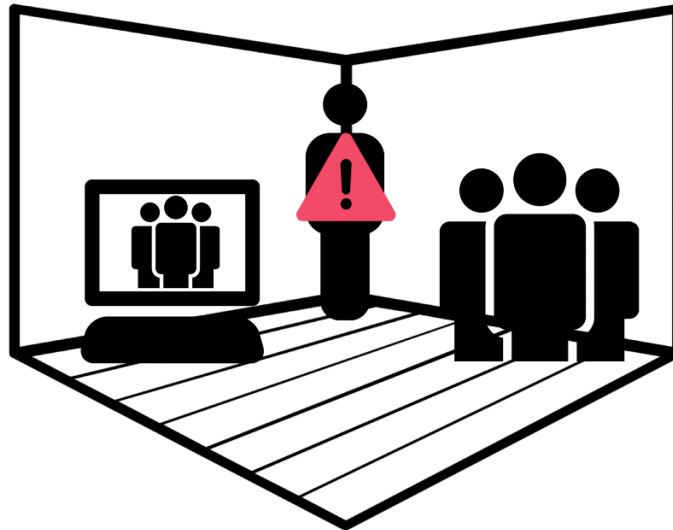
You might ask yourself the question how many students should be unable to join on campus, before you consider interim hybrid teaching. There is no hard and fast number, this depends on the room you are in (see also Rooms and equipment), what you are teaching, what kind of resources you have for remote students, if the session is suitable for having only one or two students join via Zoom or watch via live-casting and then interact with other students during activities.

If you need help to decide what might be best for everyone involved: the students' learning experience and yourself, please contact the [Academic & Digital Development](#) (ADD) team. We are happy to talk this through with you.

Students simultaneously in the classroom and remote

For you as the teacher, this can be a demanding situation, and you should be aware that it will likely add to the situational workload.

Increased Cognitive Load

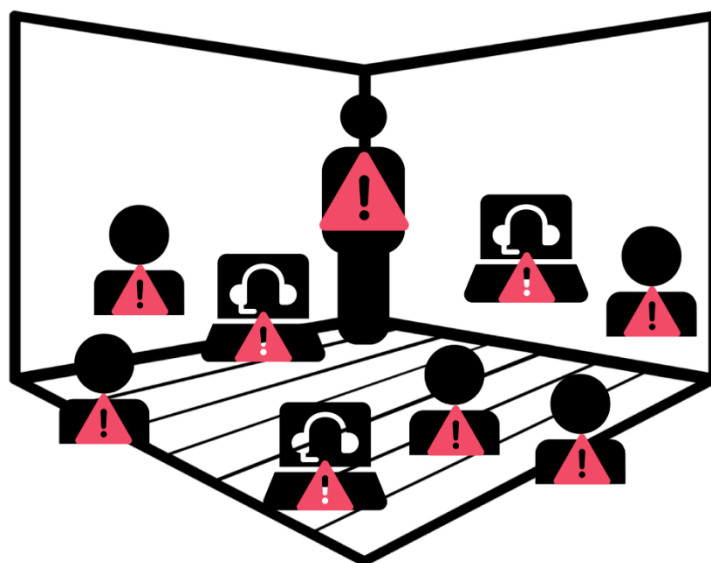


Potential issues

In hybrid teaching one group of students can easily feel left out (usually the remote one) or even encounter a poorer learning experience than the other.

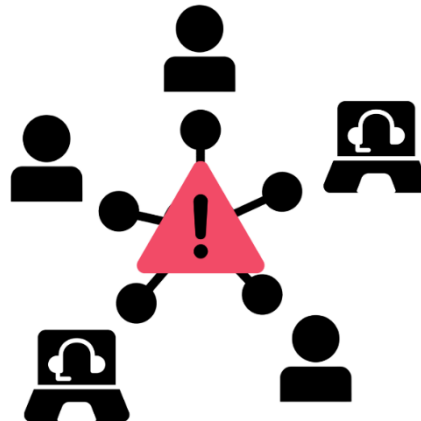
Having students join remotely via a room camera with a view of the teacher, who, at the worst, ignores their existence, is an inadequate learning experience that lacks engagement and active learning opportunities.

Similarly, if you are attempting to integrate remote students by engaging them as much as those in the classroom, this becomes easily overwhelming.



Furthermore, if you ask your in-classroom students to log into Zoom where your remote students are, you will likely encounter wi-fi issues, and microphones picking up stray voices.

Wi-Fi strength
Mics pick up stray voices

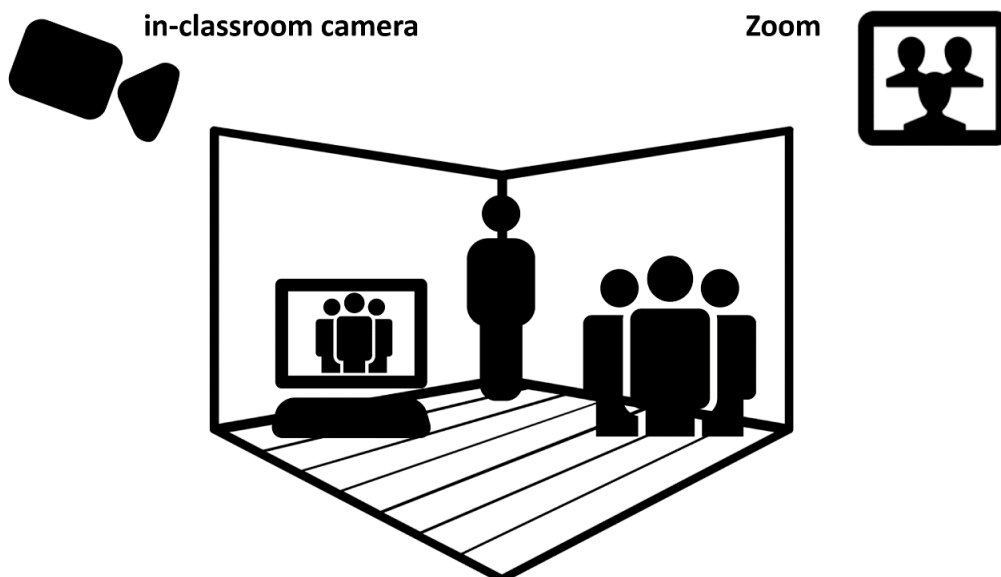


If you do need to accommodate remote participation, we therefore recommend two approaches that mitigate the issues as much as possible. The approaches depend on the technology that exists in the room and/or the teaching support that is available to you.

All approaches require careful learning design that incorporates student activities.

Single teacher in classroom

You will probably have an in-classroom camera that you can use, either a mounted one which belongs to the room equipment, or one on a laptop/PC cam/tablet.

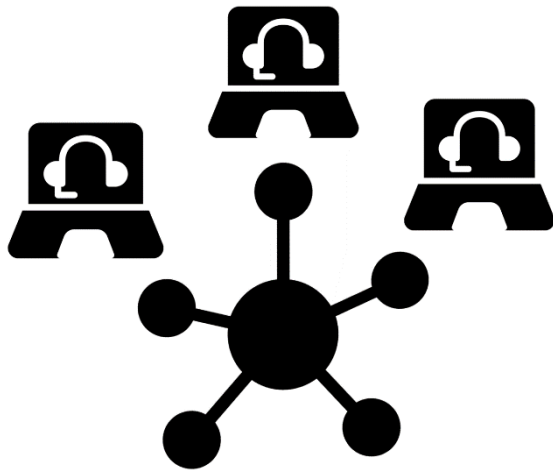


Don't rely on being able to capture all the in-classroom students (unless the room is specifically equipped for this). Neither should you project the remote students onto the screen by default, as this would be potentially quite uncomfortable for those involved.

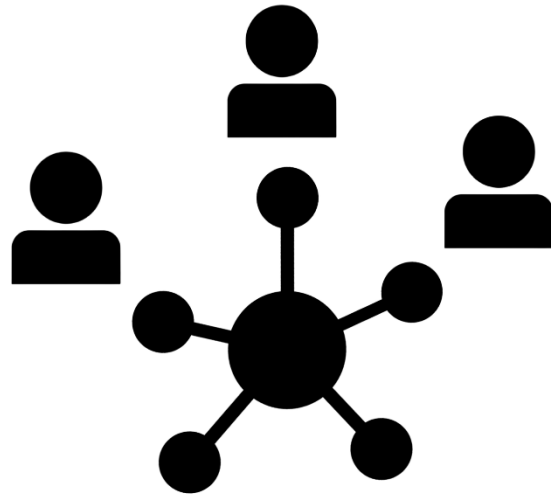
If you are teaching on your own, it is unlikely that you are able to continuously engage the remote students, as explained above. Instead, prepare learning activities which allow you to *group your remote students* and *group your in-classroom students*.

The numbers of each will probably be varying throughout the semester, owing to sudden self-isolation needs, for example, as we have experienced throughout the last year.

Remote students grouped



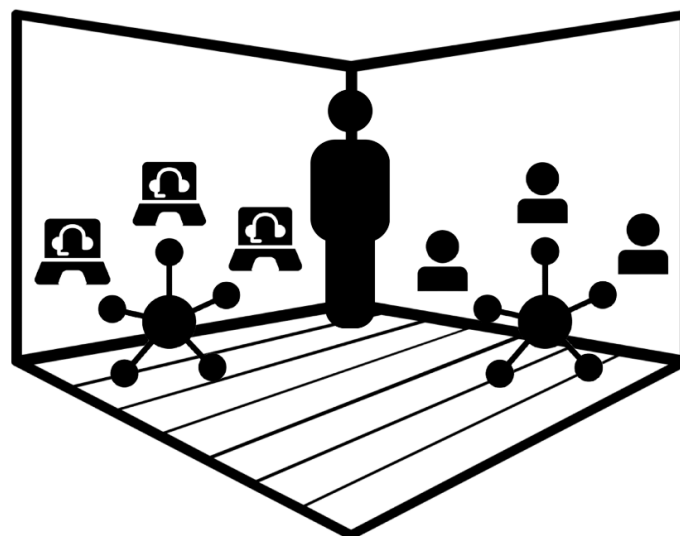
Classroom students grouped



Use Zoom breakout rooms for the remote student group(s) so that they can work together similarly to the in-classroom student groups.

You can also use the main Zoom session for your remote students if you have so few to only need a single group. If you do this, make sure they are not projected onto the room screen (see above), and that the sound is off.

Students undertaking learning activities



Two teachers in classroom

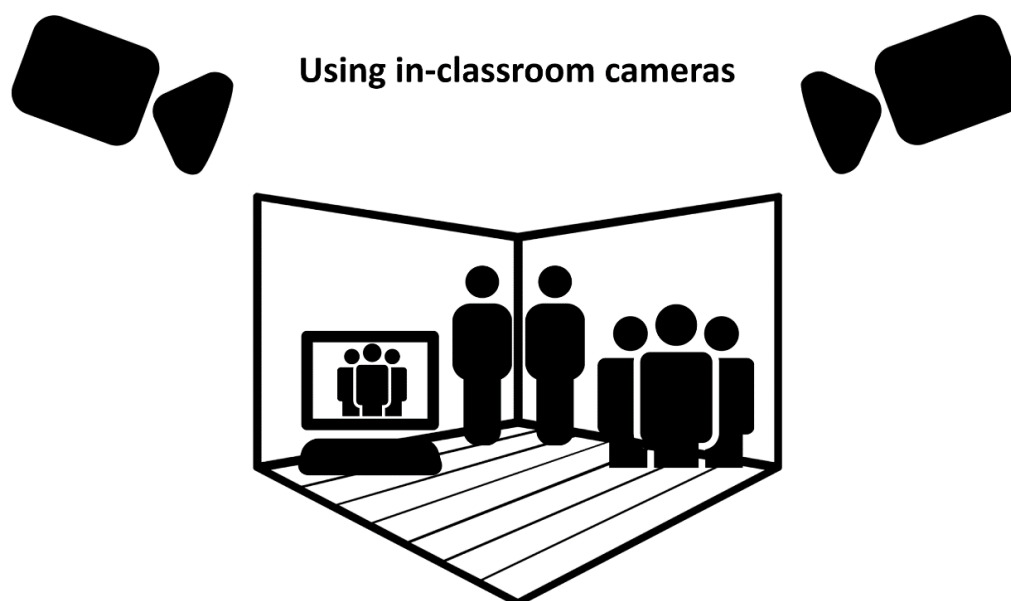
If you have the option to co-teach, or if you have a GTA to assist you in the classroom, you will be able to engage with the remote and the on-campus students throughout your session.

Depending on the room you have been allocated, it might be equipped with room cameras that allow a view of the classroom.

Note: Room cameras, for the most part are the same as the lecture capture cameras which are set up to take in only the lectern and teaching wall. Video conference rooms have dedicated 'audience' cameras – these can be turned off if required. VC rooms tend to be smaller, so may lend themselves to tutorial/seminar type discussions where students are more comfortable being on camera and will be expected to make contributions during the session. The same applies to OWLs, which are portable audience cameras.

A list of room guides and equipment is available on the [Space Management and Timetabling](#) website.

Further information on using audience cameras which facilitate VC-type sessions in a hybrid classroom environment can be found on the room equipment information



As described in the section above, you can use Zoom. Either in addition to live streaming via Echo360 or on its own. If you are in an Echo360 enabled room, you can livestream via your Moodle account. Here is an example from the CoSE Lockdown Live Lounge in 2020 '[Where do space Rocks come from](#)'.

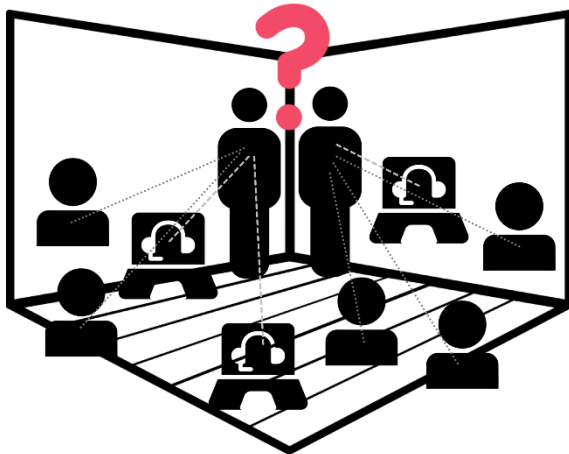
If you need to use a laptop/PC/tablet to stream via Zoom make sure your remote students are able hear you properly – at the same time, make sure to stream your presentation or anything else that you are using onto the room screen.

When presenting, be sure to share your screen so that remote participants can follow along with students in the room.

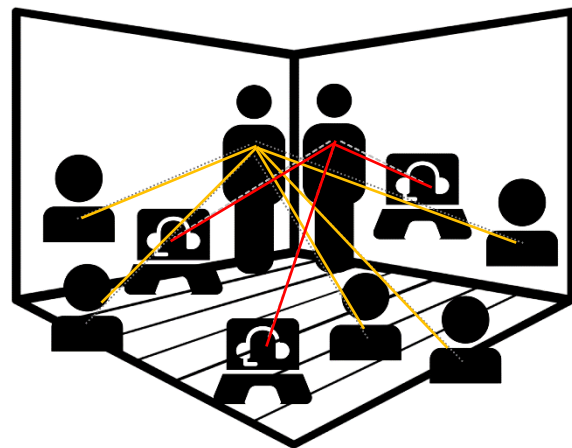
Note: using a hardwired internet connection via ethernet cable is more stable than wi-fi and all CTT rooms with teaching space PCs do have Zoom available

Don't try to interact with both the in-classroom students and the remote ones, as this would effectively return you to the single teacher overload. Instead, each one of you deals with one type of student: remote or in-classroom.

Each teacher deals with a mix of both in-classroom and remote students



Each teacher deals with either in-classroom or remote students



Should you have periods of didactic teaching in your session, you can prompt your remote students to add questions into the Zoom chat. Your co-teacher is probably best placed to monitor those and ensure these students have as much of a voice as the in-classroom ones. Remember, your co-teacher could be solely online rather than stationed in the classroom. This will depend on the number of online participants and the level of facilitation (if any) required for active learning activities.

When it comes to learning activities, unless your room is equipped with participant cameras, it will still be a better learning experience for all involved if the remote and the in-classroom students undertake activities separately and to come back together in the reporting stage (depending on the type of activity).

Rooms and equipment

TEAL rooms

The TEAL rooms let students work in small groups around a shared screen which could then be shared to the primary displays in the room. They also have an option for screen casting/sharing from student devices to the primary display.

White boards

All of the smaller seminar rooms, and several of the lecture theatres in the JMS hub have portable whiteboards which you can use to support student group work. The same is true for rooms that have individual whiteboards on the wall.

Using a whiteboard for student work would allow you to support them while maintaining physical distancing.

Visualisers

All CTT teaching spaces with a display have the option of visualiser input. These can be used to display student work. If the student is comfortable sharing their work on the screen, you could work through as an example for all, and students are able to see clearly what is being done without getting too close.

Zoom

As explained above in Students simultaneously in the classroom and remote, you might want to use in-room Zoom where students have their own devices and you as the teacher use the room PC or a laptop/tablet to share screens. If you are doing this, microphones would need to be muted.

This does allow students and staff to share the same view and discuss face to face without having to get close, but wi-fi strength is a potential issue.

All teaching space PCs have zoom installed so this would work in any teaching space.