

interactive online teaching and learning

synchronous
and
asynchronous

Guidance

1. How will you teach?
2. How will students engage?
3. How will you interact and communicate?
4. How will you assess?

I. How will you teach?

Synchronous or asynchronous

You may choose to engage your students synchronously and/ or asynchronously depending on your **intended learning outcomes** for the session and the content or material you are using.

Think about what you want to do in real-time or not in real-time.

Consider:

There are many advantages and disadvantages to asynchronous and synchronous teaching options:

Synchronous	Asynchronous
Blackboard Collaborate Zoom Skype or other platforms	Recorded lectures, email, social media platforms, chat, messaging, YouTube videos, podcasts and open source online learning content
Advantages: <ul style="list-style-type: none"> - immediate personal engagement (sense of community) - you can: take questions, encourage discussion, create discussions and breakout groups - link out to other online resources - sessions can be recorded for revision 	Advantages: <ul style="list-style-type: none"> - can be useful if you (or your students) are experiencing a challenging situation - no need to use video or live face-to-face - students manage their time and tasks (work at their own pace) - more time to engage with and explore the course material
Disadvantages: <ul style="list-style-type: none"> - requires fast or powerful Wi-Fi networks accessible - students may experience technical challenges or difficulties 	Disadvantages: <ul style="list-style-type: none"> - students may feel less personally exchanged and less satisfied without the social interaction (peers and lecturers) - course material and tasks may be misunderstood by students
Combining synchronous and asynchronous	
<p>There is not necessarily a need to produce webinars for every topic – you can use these for the most discursive (for smaller groups) topics, or those where you wish to test larger groups in real time.</p> <ul style="list-style-type: none"> - for other elements of the course use asynchronous activities - use asynchronous tasks as pre-webinar preparation or post-webinar activities <ul style="list-style-type: none"> • Can you provide an asynchronous alternative to participation in a webinar for those who may be working from a different time zone or not have access to a suitable study space for webinar participation? 	

How? **5 Key ideas:**

- 1- Start with your **Intended Learning Outcomes:**
How can students achieve these online?
- 2- Active learning and interactivity can be synchronous or asynchronous.
- 3- How can we activate the social side of learning online?
- 4- Webinars can combine effectively with asynchronous activities
- 5- Do **what works for you** – keep it simple.

Remember:

Ever tried. Ever failed. No matter. Try again. Fail again. Fail better. (Samuel Beckett)

Tips and tools from colleagues:

First tip for switching to remote teaching - *find out where your students are at... this should help inform what you do differently...* devices, internet access, shouldn't be assumed, but also most importantly how they're going to manage through an unprecedented period like this.

... not all our students have dedicated places to study – which is why the library is so rammed ...logistical issues concerning 'good study conditions' are factors that need to be considered... how can you do a webinar when you share a bedroom and the living room is rammed?

Focus on the **essentials**: what is the primary nature of your course? if it's a discussion course, on discussion. If it's a writing course, on feedback and revision. If it's a lecture course, on providing lectures.

Figure out your expectations and make them clear – and be prepared to answer questions about them. Repeatedly. Be patient.

Students benefit from fundamental consistency (like expectations that they'll participate) but they don't need or want all classes to be the same. *Know your teaching style.* Your online class won't have the same feel as a colleague's.

Rather than perfect livestream sessions to see you through to end of term, focus on what is essential, don't overload students with lots of different activities, and remember the main thing they probably need is reassurance and some form of connection with you +

2. How will students engage?

How do you get the same level of engagement as in face-to-face teaching? How can you generate an interactive atmosphere?

Consider:

You need to think critically about the role of the students and teacher in online learning, and how to promote effective engagement between them (students-teacher, and students-students). Research shows that active learning and interactivity in online teaching enhances learning (Durrington et al, 2006; Croxton, 2014; Kent et al, 2016; Dailey-Hebert, 2018).

How?

Self-directed learning – students formulate investigative questions around your learning outcomes and test their hypotheses.

- design small assignments and videos around various outcomes and allow the students to pick and choose the ones they prefer;
- create opportunities for the students to develop a project incorporating several learning outcomes;
- ask students to come up with their own critical thinking questions around content and then providing answers.

Small group work – collaborative work

- encourage students work together to solve problems, share ideas, and discuss content;
- give each group a different topic;
- have them create a short video;
- suggest free tools that allow for group chats and interactions.

Discussion forums – interactive and truly facilitate participation

- set out guidelines for posting in the forum (number of responses required and behaviour expectations);
- identify an open-ended topic question;
- ask students to post meaningful insights in response;
- encourage students to post questions, comments, and insight;
- provide feedback;
- advocate for other students to provide input.

Tips and tools from colleagues:

Many will dive straight into creating videos and running webinars, *but think about the materials you already have and framing learning activities around them, open ended questions etc, then use video/webinars for feedback and finding out where everyone is at.*

Less is more. REALLY. No, you don't need to have a video for every lesson/unit. No, you don't need supplemental materials and an interactive quiz for each topic.

Discussion forums:

Figure out how you'll measure participation, and make sure that it's clear, moderate in amount, & easily measurable by you. Grade participation holistically by engagement, not mastery of the material. PRO TIP: You know how there are a few students who are great at participation & extra-responsible? Designate them as Discussion Leaders and give them a chance to exercise leadership in the classroom.

Please critically understand that students may have unreliable internet, slow/ old hardware, steep learning curves, share devices/ bandwidth with siblings & parents, take care of family members.

References:

- Croxton, R.A. (2014) The role of interactivity in student satisfaction and persistence in online learning. *MERLOT Journal of Online Learning and Teaching*, 10(2), 314-325.
- Dailey-Hebert, A. (2018) Maximizing Interactivity in Online Learning: Moving beyond Discussion Boards. *Journal of Educators Online*, 15(3).
- Durrington, V., Berryhill, A. and Swafford, J. (2006) Strategies for Enhancing Student Interactivity in an Online Environment. *College Teaching*, 54, 190-193.
- Kent, C., Laslo, E. and Rafaeli, S. (2016) Interactivity in online discussions and learning outcomes. *Computers & Education*, 97, 116–128.

Online lectures: tools for interactivity (these ideas draw on the tools in Blackboard Collaborate but can also be used in other platforms)

- Student response systems (e.g. Kahoot or Mentimeter) – used to chunk or break up lecture, or at start and/or end
- Quiz integrated into Blackboard / your platform
- Polls
- Show of (virtual) hands
- Chat
- Sharing screen – videos etc

Online seminars: tools for interactivity

Same as for lectures, plus

- Breakout rooms (in Blackboard Collaborate) – enable small group discussion, but there is no screen sharing so you may need to post discussion questions / task into the chat, or send a link to any handouts via an online file sharing site (Google docs / one drive etc)
- Google forms – set up in advance and post a link for:
 - Peer feedback – students write feedback for each other and you collate and distribute this after the session
 - Surveys – set up and get students to complete survey in advance, or during the session. Summary results can be shared and discussed via screen sharing
 - Evaluation – for a quick evaluation of teaching and to see how students are finding the new format
- Students annotate slide/ whiteboard
- Student presentations
 - Students can be made ‘presenters’ in Collaborate in order to present to the group

Advice on presenting and delivery

- Use video and audio where possible
- Leave longer silences than in face to face teaching
- Quiet time for students to think / work individually is ok
- You may need to take more active role in moderating discussions
- Blackboard Collaborate converts PPT into images which are shared (animations etc don't work)
- Keep it friendly and personal – even though the students know each other already, have some online ice breakers, perhaps around where people are logging in from (explain what we can see in the background) or introducing pets (always a hit!)

Advice/ground rules for your students

- Keep mics muted when not speaking
- Use headphones
- Use google chrome on a PC/tablet – not a phone
- Use ‘raise hands’ to signal you want to talk (a must for larger groups).

Tips and tools from colleagues:

Moving lectures online:
Keep it simple with lectures.

Do **AUDIO** not video by default. Video can be hard to get on a weak connection. Also, it's harder to do well.

“Keep lectures under 15 (or 5) minutes” is a commonplace of advice. I agree in general: **do multiple short lectures** so students can easily find and review what they need & the file size is manageable.

But remember: audiences differ & the interest factor is key. There is no one length that is ideal. Your students may well be watching hourlong YouTube videos on topics that they care about & listening to long complex podcasts.

Don't assume your students have weak attention spans. A short lecture is great for the PROF as it forces us to focus! We don't have a captive audience in class! They can turn it off if it's rambling and not useful.

DO NOT lecture extemporaneously. Much harder than it looks. Write your text & read it. (Or at least have notes.)

The biggest issue for me is students having private-ish physical space to participate.

3. How will you interact and communicate?

The nature of the interactions between teacher and students (providing feedback, answering questions, or guiding students) is one of the most noticeable differences between synchronous and asynchronous teaching.

Feedback & communication

How?

Synchronous:

- provided immediately whenever required:
 - face-to-face: allows visual cues.
 - online: needs to proactively make opportunities for feedback.

Asynchronous:

- given some time after a learner has asked a question (may need several iterations and can take some time). Peer feedback is often used to allow learners to aid each other without having to wait for the next input by the teacher.

How?

E-mail – use institutional account (secure, quick, easy to archive)

Consider just using email for individual communication that is more private in nature (follow the set response times as per your institution)

Announcements (via learning management software - automatically sends emails to the students) - communicate dates, assignments, readings.

Virtual office hours (set up office hours and keep a virtual video meeting software open). Students can then drop in and ask you questions.

Social media - Your existing social media channels may also offer a direct conduit to your learners. However, it is worth bearing in mind that these will also be followed by non-students, thereby potentially broadcasting any messages to a wider, public audience.

Motivating and supporting

Face-to-face environment: your personal enthusiasm for the subject will keep learners motivated and attentive.

Online environment: you will likely have learners who are more self-motivated, learners who are more comfortable with online learning, and learners who are less certain of how to interact.

How?

- provide a structured set of tasks in the opening stages of the course, with discrete outputs, which enable you to see very quickly which learners are completing the tasks on schedule and in the manner that you desire.
- follow up individually with those who are not engaging in the expected manner
- offer advice on how they should approach the tasks and their online learning experience.

Tips and tools from colleagues:

Embrace the positive aspects of online.

You can require ALL your students to participate, including the shy introverted ones who never raise their hand in class.

ALL the students can have a voice, not just the ones who process quickly enough to respond on the spot.

You can ask students to “go deep”: discuss an idea at length over a whole week.

You can make forums for group work and, because you can see their posts, you can ensure that everyone participates. Students can post rough drafts or outlines & get feedback.

Students need CONSISTENT responses but NOT instant ones. Have time daily for logging in & responding to messages. This is healthy for you (so you’re not “on” 24/7) & students relax as they learn your response time.

Ask students to share briefly in class how they’re managing/ what their circumstances are.

This reassures students that you care & helps you assess if your expectations are reasonable or need adjustment.

Developing skills and confidence

How?

- often both teachers and learners needed guidance and training in communicating online.
- set aside time to play and familiarise yourself with the tools you expect to use
- online teacher should have a greater pastoral focus
- learners can feel isolated and unsupported
- initiated via online communications, can help reduce that feeling of isolation and develop a more 'comfortable' experience for the learner
- familiarity with the common technical issues your learners may face can be a very useful
- advise on the common techniques to resolve audio issues during synchronous online sessions (save time and stress for learners and build their confidence).
- make teaching and learning online a pleasurable experience.

Maintaining control of a class

How?

Face-to-face classroom - individual learners can disrupt the lesson or distract other learners

Online - combine existing classroom skills with the features of the environment (such as the teacher controlling whose microphone is enabled at any given time) to avoid any one learner dominating discussions.

Asynchronous teaching - discussions, inappropriate or tangential comments can be moderated or, if appropriate, challenged publicly, as with a face-to-face teaching setting.

Dealing with lack of engagement

How?

- encourage students to connect with you.
- keep a (general) record: who is (not) attending, (not) participating and (not) accessing information (if possible and applicable to your context).
- try emailing documents/ assignments to students in addition to having it on the platform.
- if a student doesn't reply to your emails or does not submit an assignment, then reach out individually.
- when responding to students (discussion forums or emails), use their names (as much as possible).

Consider: Webinar Etiquette

In webinars, you can provide a set of ground rules (ideally, at the beginning of the session). **Depending on your ILOs and context**, students should be told they may be asked to engage in through – for example:

1. Voting in **polls**
2. Written discussion by entering text in the **chat area**
3. Talking in **discussion groups**
4. Entering text in the **interactive whiteboard**

Explain the purpose of recording these engagements – for example:

1. to assess how effective the webinar is
2. to record your attendance
3. to share any good discussions after the webinar

You may include notes – for example:

1. You must engage with all activities to be marked as attended
2. You do not need to know all the answers, you may answer that you do not know or select NA in polls
3. Please note that all chat is automatically recorded – even private chat

Tips and tools from colleagues:

BE PATIENT. Students are unsettled by new things. (Aren't we all!?) They're worried about being able to do their work. They WILL ask questions about things that seem obvious. Answer them patiently. *Your calm and patient responses will shape their experiences.*

Use this as an exercise in empathy. How does it make YOU feel to have to teach in a new format, with anxiety about other things in your life? Well, that's what ALL our students feel like when they start classes – *just because we're used to how classes run, doesn't mean they are.*

Be honest with students about any difficulties you have with technology, etc. If you can't upload docs or get the videos working, admit it! The "we're all in this together" spirit helps make for a better classroom (and students appreciate a prof who's recognizably human.)

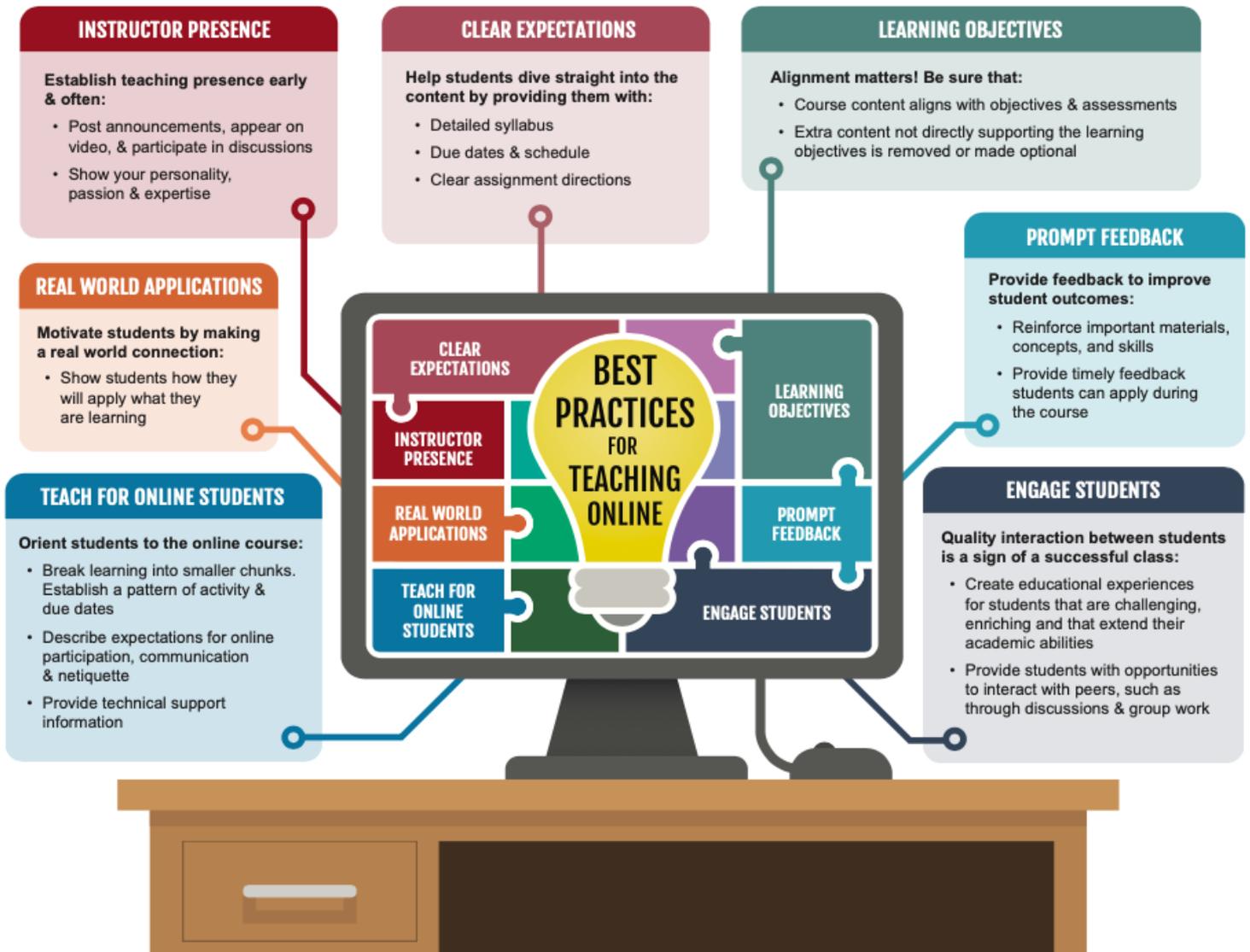
Be accommodating. Remember that some students may have **difficult/distracting home environments**; they may not have access to tech at home & have to use the library — and have to travel to get there; they may suddenly have small siblings at home to care for.

I think ground rules from the start are required.

Tips and tools from colleagues - sources (abridged):

- tweets from academics
- comments from academics in email correspondence
- comments from academics attending support webinars

BEST PRACTICES FOR TEACHING ONLINE



Salcido & Cole (2018): <https://teachonline.asu.edu/2018/09/best-practices-for-teaching-online/>

4. How will you assess?

Contingency planning: exploring rapid alternatives to face-to-face assessment

Sally Brown and Kay Sambell

Work in progress and provided as a stimulus to tweet chatting during the #LTHEchat 11 the team to enhance and improve it @Prof Sally Brown - <https://sally-brown.net/download/3122/>

What can we reasonably do?

Brown and Sambell (2020) consider five basic strategies programme teams might adopt:

1. **Defer or re-schedule deadlines:** allowing students more time to complete work, particularly if they themselves are ill. Deadlines for return of assessed work with feedback may also need to be relaxed beyond the normal 21 working days where assessors are affected. This might also mean that announced dates for awards may be delayed by weeks or months.
2. **Assess only what has been taught before the time of the campus-based restrictions.** If it is difficult to reschedule some teaching for the remainder of the teaching period with activities that are not possible to move online, it may be possible to adjust assessment so that you assess students only on material that has been delivered to date, so long as the course doesn't include exams that are required by professional bodies as exemptions for professional exams.
3. **Consider how much assessment is still outstanding and decide whether you can waive further assessment.** We might review what assessment has already taken place and, having considered whether it is essential that further assessments be undertaken, we could achieve a mark by averaging grades for work already submitted, rather than requiring the outstanding pieces to be completed. This is not likely to be possible in professional courses where there are requirements for all learning outcomes to be demonstrably met, but might be possible on some programmes.
4. **Change the mode of submission:** work that was formerly submitted in hard copy could now be submitted electronically, ideally through established university e-submission systems but also, in the final resort, via email to a named contact. Many of you are already using e-submission processes for coursework, including narrated PowerPoints or similar for submitting student presentations. Where students can make video recordings, these can be submitted electronically, however, some work, such as artefacts, will still be problematic.
5. **Offer alternative assessment formats:** the table below provides some manageable alternatives to consider, together with some important considerations. What are suggested here are some reasonable adjustments to be used in times of crisis, which will not exactly replicate the original assessments, but may offer your students some manageable alternatives in challenging times. Below the table we have included some links to resources* that you may find useful.

If you currently use....	You could instead consider using	To assure standards you might need to consider...
<p>Time-constrained unseen exams in invigilated exam rooms or in-class tests</p>	<p>“Take-away” exams, in which you set the questions or tasks virtually and ask the students to submit their responses electronically within a set period of time (see detailed advice leaflets from LSE* and Manchester Met below*).</p> <p>Remote proctoring often relies on students being able to use technology which can be problematic for home use, so is not a straightforward option. You may hear a lot about other forms of digital invigilation as used by universities working with UniWise* and others, and while these can be used as a long-term solution, please note that this not a quick fix.</p> <p>Google Educator exams link to your computer when sitting them and take photos every few seconds to check your identity</p> <p>Moodle can support the timed release of examination papers and corresponding submission facilities that can help support time-constrained exams. The Learning Technology experts advise though, that it’s not a good idea for students to be submitting long-form (essay length) questions into a Moodle quiz as if there is an internet interruption, their work would be lost. An alternative exam format would be to time the release of the exam paper on Moodle using Turnitin with a timeframe in which to complete the submission in the form of a document. For example, Turnitin dropbox with exam paper available at noon, with cut-off for submissions of a Word doc by 4pm.</p>	<p>As with normal take-away papers, because students have access to materials, the design of questions may need to be reframed to move away from recall-based tasks to questions that require students to demonstrate how they use information rather than reiterate what they have learned. It will be important, therefore, to provide guidance for students in the change in orientation of the task. It is also good practice to re-run any changes to question formats through the usual moderation processes.</p> <p>It is unlikely you will be able to put this in place for scalable numbers unless you already have systems in place, although various vendors are working hard to meet urgent demand.</p> <p>To deter cheating you could advise students that you will run ‘spot checks’ or mini-vivas with a sample of the student population, where you will discuss their reasoning for the answers they’ve provided.</p>
<p>In-class presentations where students speak to an audience of their peers/others and are assessed not only on the content but also their presentation techniques.</p>	<p>Ask students (individually or in groups) to submit a narrated presentation in electronic form which can then be tutor-marked and peer-reviewed.</p> <p>If you use Panopto* this can be undertaken off-line if there is poor bandwidth and submitted when completed.</p> <p>PowerPoint is familiar to most students, and offers a slide-by-slide voice-narration recording facility</p> <p>Ask students to prepare a podcast on the topic to be submitted electronically.</p>	<p>You will need to take account of the fact that, given the recorded presentation format, students can have multiple opportunities to prepare the item they are submitting, rather than having to cope with the one-off nature of a live presentation.</p>
<p>Portfolio, logbook or assessment notebook</p>	<p>It is likely that the best solution here is to move hard-copy portfolios to e-portfolios, for example in Moodle.</p>	<p>Where these have been partially completed already, assessors will have to use professional judgment to decide whether sufficient evidence of achievement of the Los has been achieved already by the time of university closure.</p> <p>For some students without ready internet access or lacking digital confidence the move to e-</p>

		portfolios might be quite challenging, and they may need extra guidance.
Viva Voce exams , e.g. for PhD examinations in person, or other forms of oral assessment (e.g. in language learning).	These could readily be undertaken by Skype or other electronic remote means (as indeed they already are on occasions when Doctoral examinations are undertaken transnationally).	Students may need significant support in developing confidence to work virtually where they have no prior experience.
Assessed seminars, group discussions and other similar activities.	It is likely these could be held in an online platform already used within your university such as WebEx or Microsoft Teams*.	Staff as well as students may need be supported to learn how to use this approach if it isn't currently part of their normal learning experiences.
Lab work	It may be possible to replicate some aspects of lab work through simulations in which students are presented with data sets and required to interpret them. Often this means focusing on <i>interpretation</i> of data rather than working in the lab to achieve the results personally Simulations can also be used remotely so students can 'see' data produced elsewhere and be asked to comment/interpret.	If students can be provided with <i>different</i> data sets for personal interpretation, this can mitigate the risk of 'over-sharing' or personation.
Posters	You can potentially use a digital infographic, mind map or other visuals which can be submitted via CourseWork tool in Moodle, for example, or posted in shared spaces, particularly if peer review is required.	To confirm authenticity of the submitter, you may wish to supplement this with a short online oral.
Objective Structured Clinical Examinations (OSCE) and other test requiring students to demonstrate a range of skills.	It may be possible for students to submit digital portfolios containing, for example, videos of themselves performing a range of practical tasks.	This may be problematic in professional disciplines where the achievement of specific capabilities is required at 100% eg Nursing, drugs calculations
Peer assessments and support.	Peers can email each other drafts for comments or use a virtual space within the university's VLE e.g. Moodle*.	
Theatre, dance and other performances	Individuals and groups can be asked to work off-site to prepare and submit videos of their work, alongside reflective commentaries/accounts	Group performances may well be complex to organise off-site Videos cannot replicate the authentic live performance element but may suffice in crisis times
Face-to-face feedback.	Individual and generic group feedback can be delivered by tutors via audio or online means.	

Further advice and support:

- QMUL Elearning unit: training, drop ins and online guides for technical support
- Free online training e.g. Epigeum: [moving to online](#)
- European Association of Distance Teaching Universities [Coronacrisis support materials](#)
- SEDA [google doc](#) composite of resources
- DCU [moving swiftly online](#) resources
- [#LTHEchat](#)
- [Box of Broadcasts](#)
- [Online icebreakers](#)