

## Planning a HyFlex Teaching session

Is your subject conducive to being taught 'HyFlex'?

What you might consider	Technology considerations	Suggested 'good practice'	Further reading/delve deeper
Are you teaching a subject that may require extensive use of multiple whiteboards?	Whiteboards will likely not be adequately captured by available cameras in SU teaching rooms.		
Are you teaching labs/ have an activity that require students to be 'hands-on'?	Technology will unlikely be a suitable effective replacement for these activities.		

Consider the quality of the student experience

What you might consider	Technology considerations	Suggested 'good practice'	Further reading/delve deeper
Be inclusive of both f-f and online learners – their technology, accessibility of materials and opportunities for engagement.	Keep the technology simple to start with. You may need to adjust what can be undertaken depending on available technology  Bandwidth – may limit participation in f-f situations.	Zoom is best platform for interaction between all participants.  Use online engagement tools that all can access e.g. Mentimeter/Slido/Kahoot	What platforms are best at Swansea? See: <a href="#">Remote Lecturing Technology - Swansea University</a>  Comparison of 'Audience Responses Systems' to enable engagement - see <a href="#">Polling Technology (aka Clickers) –</a>

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	<p>Device variations – may not enable full engagement, e.g. in writing for group activities. User stats at Swansea reveal that most students use mobile devices to access Canvas.</p> <p>Do rooms have enough power points – for device charging?</p> <p>Are my support materials (presentations etc) accessible for online learners? Consider font size, colour contrast etc</p>	(using Zoom Chat or Mentimeter, students online can see questions from students.)	<p><a href="#">Swansea Academy of Learning and Teaching</a> (NOTE: these are not core institutional tools which may have a charge and limits of participants. Staff should check accessibility)</p> <p>See guidance from: <a href="#">Columbia University</a>.</p> <p>Heriot Watt University –<a href="#">how to combine online and in-person teaching simultaneously</a></p> <p>Are you scheduled to teach in a room that has cameras? See this webpage: <a href="#">centrally bookable lecture theatres</a>.</p>
<p>How will students be able to hear (and see) you and other students?</p> <ul style="list-style-type: none"> <li>Some may not have webcams.</li> <li>Ideally online students should be able to see on campus students - helps build community and develop equity of experience</li> <li>How will students see any visual presentations (by you or each other)?</li> </ul>	<p>Most rooms will not have cameras on attendees.</p> <p>Panopto will not enable online participants to be visible to those 'broadcasting' the session.</p> <p>Use Zoom sessions rather than Panopto (ALL f-f attendees to be connected to the session, but consider device availability/alternatives, bandwidth</p>	<p>You may need to attach a webcam/ use a device with inbuilt camera and 'swivel' the camera around to show f-f attendees</p> <p>You may have to repeat questions/contributions and/or ask f-f students to summarise in chat for online participants.</p>	

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<ul style="list-style-type: none"> <li>How will students hear one another's contributions/questions?</li> <li>Will technology enable online students to e.g. share screens for presentations?</li> </ul>	and power supply limitations noted above)		

### Maintain a teaching presence

What you might consider	Technology considerations	Suggested 'good practice'	Further reading/delve deeper
<p>What support do you need to prepare? What is your back up plan in the event of technical issues?</p> <p>When recording the session, you may need to stand in a specific place, wear a microphone.</p> <p>Is it necessary for online learners to see the instructor?</p> <p>Communicating what to do in case of tech failure at start of each session/on VLE</p>	<p>Do you need to capture the whiteboard output? Most room cameras will not and most 'mobile' camera will not capture at high enough resolution.</p> <p>Do you know how to use the document cameras?</p> <p>Will a camera attached to your device be sufficient to promote belonging with online students?</p> <p>Is there a microphone? (Note: if you use your own device, you will also be relying on your device</p>	<p>Having a view of you the lecturer as well as the learning materials is best. Note: Some teaching rooms will only have one output – usually your shared screen.</p> <p>Follow-up message via Canvas to the remote students if technology fails. Plan alternate activities to be undertaken online asynchronously.</p>	<p>Contact <a href="#">AV Services - Swansea University</a> for advice, email: <a href="mailto:AVsupport@swansea.ac.uk">AVsupport@swansea.ac.uk</a></p> <p>Are you scheduled to teach in a room that has cameras? See this webpage for details: <a href="#">centrally bookable lecture theatres</a>.</p> <p>Book equipment at least 2 days in advance via Media Resources' online booking system: <a href="#">Swansea University - connect2</a>. However cameras available via AV Services are currently not capable of</p>

	microphone. Audio output will not be connected to the university systems to capture this on a recording)		capturing output at a sufficiently high resolution.
<p>What technology does your teaching space have to support HyFlex?</p> <p>If possible, know the space and familiarize yourself with the technology beforehand</p> <p>Allow yourself more time for set up/close down</p>		Enlist a student/colleague to help test what it is like to be an in-person and online participant	

### Select appropriate learning activities

What you might consider	Technology considerations	Suggested 'good practice'	Further reading/delve deeper
<p>Consider the learning activity types - why you are doing these, where they occur (environment), what tools are needed to support it and any alternatives.</p> <p>Use activities that will both face to face and online students will be able to do/engage with.</p>	How will you distribute the shared task?	<p>Sharing materials via Canvas – Word format is recommended for screen readers etc.</p> <p>Zoom is the preferred platform over Panopto for interactivity and/or groupwork purposes.</p> <p>Most teaching rooms have document cameras</p>	<p>See <a href="#">How to Prepare for the Next Phase of Hybrid Teaching   teachonline.ca</a></p> <p>Slides: <a href="https://teachonline.ca/sites/default/files/webinar-series/slides/how_to_prepare_for_the_next_phase_of_hybrid_teaching.pdf">https://teachonline.ca/sites/default/files/webinar-series/slides/how_to_prepare_for_the_next_phase_of_hybrid_teaching.pdf</a></p>

<p>Consider if you will do group work. Do you want f-f and online learners as separate groups, or if you want to 'mix' attendees?</p> <p>When is it most effective to teach the whole cohort online rather than offer HyFlex?</p>		<p>which could be used in place of a whiteboard– and capture writing/annotations 'live' which can be saved and uploaded to your Canvas course</p>	<p>Be 'space Agnostic' – see University of Sydney <a href="#">blogpost</a>.</p> <p>Some sample session plans: from Kevin Kelly at San Francisco State University  <a href="https://docs.google.com/document/d/1gokdljWbfERADiswIUBL4hE81hEnNiEYmBzRUeDfUdk/edit#heading=h.uemmrqypk4zd">https://docs.google.com/document/d/1gokdljWbfERADiswIUBL4hE81hEnNiEYmBzRUeDfUdk/edit#heading=h.uemmrqypk4zd</a></p> <p>Depending on your discipline, consider paired work e.g. programming: <a href="#">Alex et al. 2021</a>.</p> <p>Other suggested activities via <a href="#">Kings' College London</a> and also via UWE: <a href="https://fetliu.net/blog/an-introduction-to-hybrid-teaching/">https://fetliu.net/blog/an-introduction-to-hybrid-teaching/</a></p>
<p>Is it possible to teach the topic using a HyFlex approach?</p> <p>(It may be less effective for traditional laboratory sessions or those that require demonstration of hands-on activities for remote learners.)</p>	<p>If available, using the document camera in the teaching rooms is advised to broadcast (and capture) your 'live' writing.</p> <p>You might be able to use simulations for <b>specific</b> topics, but the nature of your subject may require actual handling of objects etc which simulations will not achieve.</p>		

### Do less in your sessions – prioritise

What you might consider	Technology considerations	Suggested 'good practice'	Further reading/delve deeper
<p>Consider the intended learning outcome - what are the high value items that may impact assessments?</p> <p>Know your content well (it is harder to teach in HyFlex mode with new material/courses as there are more things to think about and consider).</p>			See webinar recording from <a href="#">Cohn (2021)</a>

### Know your classroom and set-up early

What you might consider	Technology considerations	Suggested 'good practice'	Further reading/delve deeper
<p>What technology does your teaching space have to support HyFlex?</p> <p>If possible, know the space and familiarize yourself with the technology beforehand</p> <p>Allow yourself more time for set up/close down</p>		Enlist a student/colleague to help test what it is like to be an in-person and online participant	

Communicating what to do in case of tech failure at start of each session/on VLE		<p>Follow-up message via Canvas to the remote students</p> <p>Recording of any key instructions and posting afterwards to VLE</p> <p>Alternate activities to be undertaken online</p>	
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### Arrange support for your delivery

What you might consider	Technology considerations	Suggested 'good practice'	Further reading/delve deeper
<p>What are your options? More staff? PhD student, Tutor, TA, or appoint students to monitor chat, for example?</p> <p>Decide roles beforehand-who is testing the set-up, supporting the learning (e.g. monitoring online chat and question responses, launching and monitoring breakout rooms (if used), technical difficulties etc. How will you communicate with each other?)</p>		<p>You might appoint students as champions of monitoring the chat/summarising questions? (Providing guidelines/expectations may be helpful beforehand)</p> <p>Set expectations of how chat will operate beforehand, with ability to 'stop' chat if necessary.</p>	<p>See blogpost from <a href="#">Martin Compton</a> on the potential role and responsibilities of a co-pilot in this scenario.</p>

## Delivering a HyFlex Teaching session

Have a balance of students engaging across methods

What you might consider	Technology considerations	Suggested 'good practice'	Further reading/delving more deeply
Encourage student attendance face to face as a priority.		If not all students can attend, then having a good proportion of the expected class numbers online as well as face to face maximises the benefits of the technology. (Ideally roughly equal numbers of in-person attendees as online).	

Be positive about the approach

What you might consider	Technology considerations	Suggested 'good practice'	Further reading/delving more deeply
You may be anxious but be open with students and try to be positive - students will be more inclined to 'join' with you on this journey.			See blogpost by <a href="#">Laura Patricia Zepeda Orantes</a>



## Communicate and Manage Student Expectations

What you might consider	Technology considerations	Suggested 'good practice'	Further reading/delving more deeply
<p>Do an induction with the students:</p> <ul style="list-style-type: none"> <li>○ Use of University rather than personal accounts to connect to the session</li> <li>○ set expectations,</li> <li>○ explain what your approach will be, the structure of the session,</li> <li>○ keeping to the timing of group activities</li> <li>○ how to communicate and engage,</li> <li>○ tech requirements – including bringing and using their own devices and muting mics within the teaching space;</li> <li>○ Communicating what to do in case of tech failure at start of each session/on VLE</li> <li>○ what your back up plan is in the event of technical issues.</li> <li>○ requests made in class for amendments to e.g. assignment deadlines - this</li> </ul>	<p>Set up the session to record - you may need to stand in a specific place in the teaching space, wear a microphone</p> <p>Allow time to mute mics during main teaching.</p> <p>Use of Chat/nonverbal approaches to communicate.</p>	<p>Follow-up message via Canvas to the remote students</p> <p>Recording of any key instructions and posting afterwards to VLE</p> <p>Alternate activities to be undertaken online</p> <p>Set expectations of how chat will operate beforehand, with ability to 'stop' chat if necessary.</p>	<p>Immediate action, e.g. equipment breakdown – phone 01792 604000 or Ext 4000.</p> <p>Non-urgent enquiries and fault-reporting, email: <a href="mailto:AVsupport@swansea.ac.uk">AVsupport@swansea.ac.uk</a></p> <p>See blog from Newcastle University: <a href="https://blogs.ncl.ac.uk/fmstel/2021/09/07/the-hyflex-teaching-model/">https://blogs.ncl.ac.uk/fmstel/2021/09/07/the-hyflex-teaching-model/</a></p> <p>Also reflections by Alex B et al '<a href="#">Ten things we Learning about Fusion Teaching</a>'</p>

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may not be technically possible in the Canvas VLE for online learners.			See blogpost by <a href="#">Laura Patricia Zepeda Orantes</a> - she calls this 'the butterfly effect'

### Promote interaction, community and belonging

What you might consider	Technology considerations	Suggested 'good practice'	Further reading/delving more deeply
<p><b>Don't deliver a class where remote or on in-person students are simply just observing you teach the other group.</b></p> <p>Use simple engagement approaches regularly through the teaching session</p>	See Planning a HyFlex Teaching session regarding appropriate learning activities and quality of student experience for things to consider	<p>Engagement approaches -e.g. Kahoot/Mentimeter/Zoom chat/reactions.</p> <p>Looking at the camera will have the effect of giving eye contact to remote students as well as in –person students</p>	See blog from Newcastle University: <a href="https://blogs.ncl.ac.uk/fmstel/2021/09/07/the-hyflex-teaching-model/">https://blogs.ncl.ac.uk/fmstel/2021/09/07/the-hyflex-teaching-model/</a>
All students, remote and in-person, are recommended to	There may be bandwidth issue for in-person students.		

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<p>'connect' e.g. via Zoom to engage</p> <p>Connect by using names (all students if possible), and remote students having video on.</p>	<p>Face to face students should mute microphones to prevent feedback.</p> <p>If verbal interaction is needed with remote attendees, in-person students may need headsets/headphones.</p> <p>Do rooms have enough power points?</p>		
<p>Connect the in-person and remote students in activities if possible, especially in smaller class sizes</p> <p>Try to stick to group work timings so they all know what to expect</p>			<p>Be 'space Agnostic' – see University of Sydney <a href="#">blogpost</a>.</p>
<p>Involve students in monitoring chat, answering questions, feeding back, paraphrasing, etc.</p>		<p>Set expectations of how chat will operate beforehand, with ability to 'stop' chat if necessary.</p>	<p>See some possible solutions from <a href="#">Martin Compton at UCL</a>.</p>

## Do less in your sessions – prioritize content and learning

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<p>Consider the intended learning outcome -what are the high value items that may impact assessments?</p> <p>Know your content well (it is harder to teach in HyFlex mode with new material/courses as there are more things to think about and consider).</p> <p>Allow yourself more time for set up/close the devices used.</p>			See webinar recording from <a href="#">Cohn (2021)</a>
Reinforce key points		<p>Repeat and summarise more often</p> <p>Check for understanding and how the students are doing (e.g. use of polls/quizzes - note accessible to all learners)</p>	
Don't be afraid to pause and give yourself some breathing time.		Take specific breaks to review "Chat" questions and respond.	See webinar recording from <a href="#">Cohn (2021)</a> for a practical example of specific Chat breaks

## Create Connection in your session

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<p>How will students be able to hear (and see) you and other students?</p> <ul style="list-style-type: none"> <li>Some may not have webcams.</li> <li>Ideally remote students should be able to see on campus students - helps build community and develop equity of experience</li> <li>How will students see any visual presentations (by you or each other)?</li> </ul>		<p>You may wish to turn your camera round periodically to 'show' the "in person" students</p> <p>If session set up as Zoom, enable screen sharing for students needing to present – in person or teleconference</p>	<p>Thomas Groll at Columbia University gives useful tips <a href="#">VOICES   Thomas Groll on Hybrid/HyFlex Teaching   Voices of Online Teaching and Learning</a></p> <p>See also tips from UCLs <a href="https://www.ucl.ac.uk/teaching-and-learning/publications/2021/sep/basic-hybrid-teaching">https://www.ucl.ac.uk/teaching-and-learning/publications/2021/sep/basic-hybrid-teaching</a></p> <p>Centre for Teaching and Learning at Oxford: <a href="https://wwwctl.ox.ac.uk/hybrid-teaching#/">https://wwwctl.ox.ac.uk/hybrid-teaching#/</a></p>
Include virtual office hours for in-person and remote students			

## Ongoing Reflection

What you might consider	Technology considerations	Suggested 'good practice'	Further reading/delving more deeply
Use this as a learning opportunity for yourself and students, be open about the experience  Gather feedback throughout the session, your course and at the end		You can use polls and other tools, e.g. Mentimeter or AnswerGarden to gather feedback from all students	