

TEACHING ON-CAMPUS AND ONLINE SIMULTANEOUSLY

As countries and campuses begin to open up after being closed due to the Covid-19 pandemic, questions are being asked about how to support effective teaching in a socially-distanced way. Institutions have developed a variety of approaches to combining online and on-campus support that suit their particular context and student cohort. At Heriot-Watt we developed the Responsive Blended Learning approach. A key aspect of this is offering equivalent online on-campus opportunities. One of the essential questions that emerges in such discussions is whether – and how – to combine simultaneous online and on-campus teaching. This guide explores the rationale for teaching online and on-campus simultaneously and some points to consider if you choose to use it.

Teaching simultaneously online and on-campus requires a substantial degree of planning and co-ordination of student learning activities, and staff time and focus. Addressing the needs of on-campus and online students is challenging and can cause an excessive cognitive load (making more demands on your working memory than it can process), even for the most experienced teachers (Bower et al, 2015; Zydny et al, 2019). However, with careful planning and access to relevant technology and campus learning spaces, and confidence and skills in facilitating dual mode interactions, it is possible.

When planning teaching, it is important to consider what will be the most effective and efficient approach for you and your students. It is useful to consider:

- Student experience across the whole course.
- Staff workload. (Bear in mind that teaching in dual mode requires a substantial amount of planning and preparation and is easier to deliver with two people, so it may not present the efficiencies that it might appear to offer at first glance).
- What is most appropriate to teach asynchronously and what is most appropriate for live sessions?
- When is it most effective to teach the whole cohort online?
- Where it is appropriate to offer both online and on-campus options?
- Where could simultaneous dual mode teaching provide the most appropriate solution?

A key aspect of this is offering equivalent online on-campus opportunities.

WHAT DO THESE TERMS MEAN?

You may have come across terms such as ‘blended learning’, ‘dual mode’, ‘hybrid learning’, ‘hyflex learning’ and ‘Responsive Blended Learning’ which came to the fore during the pandemic. Despite few of these being new terms, they are not clearly defined and are often used interchangeably which can lead to confusion.

Blended – A method of teaching and learning that integrates face-to-face and online delivery methods. The blend may comprise of different proportions of each method depending on context.

Dual Mode – When online and classroom-based instruction in a course is provided at the same time this may be described as ‘dual mode’. This is sometimes used synonymously with hyflex. At Heriot-Watt it is used to describe teaching live sessions simultaneously online and on-campus.

Hybrid – This is most often used synonymously with ‘blended learning’, although it is sometimes used interchangeably with hyflex. This guide considers it as being synonymous with blended learning.

Hyflex – Short for ‘Hybrid Flexible’. An approach where students have flexibility of choice to select the mode which suits them for any particular session and are not tied to any specific mode. This approach is based on 4 principles: learning choice, equivalency (between the participation modes), reusability and accessibility (Beatty, 2019)

Responsive Blended Learning – Combines active, supported online learning with contextually appropriate face-to-face learning opportunities responding dynamically to the changing external context. This is the flexible model used by Heriot-Watt. Simultaneous dual mode teaching is one mode which may be used within this model.

DECIDING WHETHER TO TEACH SIMULTANEOUSLY ONLINE AND ON-CAMPUS

When deciding whether to teaching simultaneously online and on-campus, start by considering the **motivating factor**. For example:

- Teaching across multiple campuses.
- Limitations in campus space e.g. due to social distancing.
- Students unable to be on-campus e.g. still shielding, not currently in the country.
- Capacity and capability to teach online from the on-campus classroom.

This may influence how important it is for you to adopt this approach and to what extent you may be able to use it.

Then consider the quality of the **student experience**. It is important that students have a comparable and equitable experience whichever location they are in i.e. a simultaneous session should not be students online watching those on-campus being taught, or those on-campus just joining an online session from the on-campus classroom. Careful consideration needs to be given to how to enable effective participation and engagement with and between both groups. This includes considering what activities students will undertake during live sessions and what they will do outside of those sessions.

Consideration also needs to be given to ensure that students will have **access to the relevant technology** to support this participation and engagement. You do not want to spend the teaching time providing technical support, constantly saying 'you're on mute' or having connections dropping in and out affecting engagement. Is the technology sufficient to link up the on-campus students with the online students?

Consider who will be on-campus and who is online?

Is this a deciding factor in offering sessions simultaneously online and on-campus? If teaching in both modes, can students choose? Will there be any changes? For example, some students may be online only because they still need to shield; however for others they may wish to be on-campus some but not all of the time, or space may only allow a certain number to be on-campus. If so, will who is on-campus rotate so all get that opportunity?

A sense of **community and belonging** is important not just to student wellbeing but also to their learning. Consider how will the different groups of students connect with each other, and you, during live sessions and outside of those sessions?

It is essential to consider **staff workload**. Dual mode teaching works best with team teaching in each session. It also requires more planning and preparation than teaching only online or only on-campus as you need to co-ordinate across both modes. Consider how make best use of staff time across the whole course.

POINTS TO CONSIDER IF TEACHING SIMULTANEOUSLY ONLINE AND ON-CAMPUS

- How will online and on-campus students interact? E.g. verbally in class, through chat in the online platform? How will you ensure all students are engaged? Online students often feel disconnected or overlooked compared to on-campus students (Huang et al., 2017), and may even learn less (Weitze et al. 2015).
- How will you ensure that you can respond to students e.g. if they have questions, if there are visual cues of engagement / lack of engagement. For example, could students take on a role of ensuring questions are flagged up, or reporting on the session afterwards?
- If you are undertaking class or group activities how will all students be able to participate?
- How will students be able to hear (and see) you and other students?
 - Consider carefully whether students need to be able to see as well as hear each other and you. Remember, that some students may not have, or be in a position to use, a webcam. If students online can be seen, then students on-campus should also be visible. This helps ensure equitable experiences and to build community.
 - Consider you and your students' positions in the on-campus location, does this affect interaction with those online (and vice versa).
 - Do students on-campus need to be logged into the online platform too?
 - Does this change if you are also recording the session?
- How will students see any visual presentations (by you or each other)? Do they need to be able to see you / other students and a presentation, if so, is that possible?
- How will students access and use resources needed during the session e.g. shared Office 365 documents.
- If you are using groupwork, how will this happen e.g. divide into on-campus and online groups, or mixed and making use of the online platform?
- How long will be needed to set-up and close-down the session i.e. does it take longer than if teaching in just one mode? Remember to build this time into your session plan.
- Will the session be recorded? This mitigates against any connectivity issues for students joining online. It also has the benefit of providing a study resource for all students.
- If your session is recorded, how will you ensure that you are visible and audible for the full recording e.g. do you need to stand in a specific place, wear a mic etc.

SUPPORT

If you are considering teaching simultaneously in dual mode, the Learning and Teaching Academy can provide support to think through whether this is the most appropriate option for you and your students. They can also provide support to design simultaneous dual mode sessions.

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REFERENCES

Bower, M., Dalgarno, B., Kennedy, G. E., Lee, M. J. W., & Kenney, J. (2015). Design and implementation factors in blended synchronous learning environments: Outcomes from a cross-case analysis. *Computers & Education, Vol.86*, pp.1–17.

<https://doi.org/10.1016/j.compedu.2015.03.006>

Beatty, B.J. (2019). *Hybrid-Flexible Course Design*. EdTech Books. Available at: <https://edtechbooks.org/hyflex/Acknowledge>

Huang, Y., Shu, F., Zhao, C., & Huang, J. (2017). Investigating and analyzing teaching effect of blended synchronous classroom.

In *6th International Conference of Educational Innovation Through Technology (EITT)* (pp. 134–135). <https://doi.org/10.1109/EITT.2017.40>

Weitze, C. L. (2015). Pedagogical innovation in teacher teams: An organisational learning design model for continuous competence development. In Jefferies, I. A. & Cubric, M. (Eds.), *Proceedings of 14th European conference on e-Learning ECEL-2015* (s. 629–638). Reading, UK: Academic Conferences and Publishing International.

Zydney, J. M., McKimm, P., Lindberg, R., & Schmidt, M. (2019). Here or there instruction: Lessons learned in implementing innovative approaches to blended synchronous learning. *TechTrends*.

<https://doi.org/10.1007/s11528-018-0344-z>

FURTHER READING

Heriot-Watt Learning and Teaching Academy (2021) Top tips for staff teaching simultaneously online and on-campus.

Bruff, D. (2020) Active Learning in Hybrid and Physically Distanced Classrooms. [online].

Available at: <https://cft.vanderbilt.edu/2020/06/active-learning-in-hybrid-and-socially-distanced-classrooms/>

Centre for the Enhancement of Teaching and Learning (2020) *Dual mode teaching framework*, Hong Kong University [online].

Available at: <https://www.cetl.hku.hk/dualmode/framework/>

Centre for instructional technology (nd) Hybrid instruction, University of Alabama [online].

Available at: <https://cit.ua.edu/flexible-instructional-modes/hybrid/>

Miller, K. (2020) Trying out Hybrid Teaching on Campus [blog] Centre for Innovation in Education 29/9/20.

Available at: <https://www.liverpool.ac.uk/centre-for-innovation-in-education/blog/general/trying-out-hybrid-teaching-on-campus/>

University of North Carolina (2021) Hybrid-Flexible (or hyflex) implementation guide, [online].

Available at: <https://keepeteaching.unc.edu/modes-of-teaching/hybrid-flexible/>

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