Getting started with course and assessment design

> As the new academic year approaches it is a good time to reflect on your course and assessment design and to consider whether it would benefit from any enhancements, as well as it being a time when you might be considering developing new courses.
>
> This guide will provide you with key points to get you started to ensure that your course assessment and activities are aligned with the learning outcomes.

When we plan a new course, or review an existing course, there are three things it is helpful to think about:

1. What do we want the students to learn? (What are the **learning outcomes**?)
2. How will we know whether the students have learnt those things successfully? (What are the **assessments**?)
3. What will students need to do to be in a position to demonstrate they have learnt those things successfully? (How will the course be **taught**?)

There will be many other things that matter: feedback from students and colleagues, particular teaching approaches we are comfortable with, restrictions generated by professional accreditation, workload and many more. But those are the three fundamental questions that we need to address in order to plan a new course, or to make amendments to an existing course.

Student-centred learning

Taking a 'student-centred' approach to how we deliver a course means that we focus on what our *students* will be doing on the course, and what they will leave the course with, as opposed to a 'teacher-led' perspective that focuses on what *we* will be doing. For example, rather than focusing on what information is outlined in our teaching materials, such as our PowerPoint slides, we focus on how students will engage with that information, and how we facilitate their learning.

Aspects to consider could include: what, how and when will students discuss course concepts with each other; will the students be able to make the connections to things they learned in previous courses in the programme; and will they apply that knowledge and skills real-world examples? The assessment strategy is also important to consider in terms of taking a student-centred approach. It is important that we think about how our students will demonstrate that they have attained the learning outcomes. This can be achieved through the constructive alignment of the assessments (Biggs, 2014). It is worth considering this for the formative assignments, as well as the summative assessments.

Learning and assessments

Thinking about the questions above – what things do we want students to learn, how will we know if they learnt them, and how will we help students demonstrate that learning – can help to make

sure that the different aspects of the course are all supporting student learning. If the learning outcomes, the assessments and the learning and teaching do not connect properly, students' energies are not directed efficiently. For example, if the learning outcomes are focused on the practical application of knowledge, but the assessment rewards rote learning, and the teaching concentrates on factual content, then probably no-one is happy. Those teaching the course are likely to be disappointed that students may focus on cramming information rather than gaining understanding through deep learning, while students may feel there is a gap between the rhetoric of real-world application and the reality of what they are being asked to do. However if the learning outcomes are written clearly and are aligned to the assessments, then the assessment process can more effectively facilitate the students' achievement of them.

Teaching for learning

As part of this process, effective teaching can better prepare students for deeper learning and for undertaking their assessments. By being clear about the learning outcomes at the outset of a course can be beneficial for the learners and those facilitating the learning.

Ensuring clear planning for a course by developing a course outline that is clearly and articulately aligned with the learning outcomes can be beneficial to everyone. Once developed, it is important to communicate this clearly to everyone involved in the course.

Summary

This approach – focused on aligning the learning outcomes, the assessment and the teaching – is not a revolutionary approach to planning a course. We will all start with a sense of what we want students to come out of the course with, whether we think about that in terms of formal learning outcomes or not. By being clear as a course team what we expect of our students, and what they can expect of us, then outlining these expectations to students at the outset of a course we can most effectively support their learning journeys.

The approach described here, of starting from the learning outcomes and planning the course from there, provides a reminder to go back to the fundamental question: how do we want students to be different – in what they know, in what they can do, in what they are interested in – when they leave our course?

Top tips for course and assessment design

The following top tips will help you to review existing courses or to design new ones to provide inspiring learning. When planning the course and assessment, remember to consider the student voice. This may come from previous feedback on the course, engagement with student representatives during the design or even co-creation with student partners. Also keep accessibility in mind throughout the design process. It is more effective to build in accessibility from the start of a course than to add it later (CAST, 2018).

1 **Plan your course learning outcomes.**
   Do they clearly articulate what students will understand and be able to do by the end of the course? Can the achievement of the learning outcomes be validly assessed? Are they directly aligned to, and all covered by, the assessments? Are they pitched at the appropriate level for the course? (The SCQF level descriptors are useful for benchmarking the level of study). If the learning outcomes are not appropriate, then seek permission to revise them following the Heriot-Watt approvals guidance.

2 **Plan the assessments.**
   Assessment and feedback should be planned to work together, and to fit with the learning outcomes, the teaching and learning.

   - Do the assessments enable students to demonstrate the **learning outcomes**? Is the method of assessment the most appropriate for assessing that learning outcome? If they do not, revise the assessments.
   - Do the assessments **help students to learn**? Make sure that you are not over-assessing students; give them space and encouragement to think about what they can learn from doing assessments, as well as the grades they can achieve
   - Do students understand the **purpose and value of the assessments**? If not, make clear how the assessments link to the aims of the course, and their relevance to what students may do when they graduate.
   - Do students **understand what you expect from them**? To help students develop a clear sense of the assessment requirements, give them clear criteria and/or rubrics, and examples of high- and low-quality work.
   - Do students get **feedback** that they can use to improve? Make sure that students receive feedback before the end of the course, so they have time to apply it. Feedback should be constructive and forward-looking, and linked to the criteria that were used for marking. Be realistic about how much time it takes to provide meaningful and constructive feedback. For example, you may need to reduce word counts so you have enough time to provide individual feedback, make more use of group feedback, or introduce peer feedback or automated marking.
   - Have you considered both the formative and summative elements of the assessment and feedback strategy for your course?

   Use the Getting ready for AY22-23 assessment overview to identify the assessment and feedback resources most useful to you.

3 Plan the learner journey.
Courses need to be designed to help students navigate their learning. Direct the students' journey through the course, making clear where activities are mandatory or optional, where they cover core knowledge or skills or extend these, and what needs to be done and when. For example, if students are watching a video, provide direction on what they should be thinking about whilst watching. This helps the student to make sense of the activity and ensures that they are actively engaged rather than passively consuming content.

Chunking learning (breaking it into smaller and/or shorter pieces) can support this journey by encouraging students to take breaks, leaving them time to process their learning and also supporting their wellbeing (Simon, 1974). Plan contact time to support the learner journey e.g. scheduling office hours or activities so that they support and consolidate learning. This includes not just live sessions but also engaging in discussion activities, responding to individual student contact and engaging in feedback conversations around assessment.

4 **Plan the learning activities and content**.
Plan any live sessions such as labs, studios, tutorials, seminars or lectures as well as the asynchronous activities which students undertake in their own time e.g. reading, viewing, listening to media, participating in discussions, quizzes, group projects, independent research.
- **Ensure the activities support the overall learning outcomes.** This may be by providing a building block towards the course learning outcomes, or it may be directly enabling them to demonstrate the learning outcome.
- **Scaffold the activities.** Designing the activities so that students develop knowledge, understanding and skills incrementally is called 'scaffolding' (Vygotsky, 1978). This approach enables students to develop greater independence and understanding through their learning journey, ultimately being able to complete the activity unaided.
- **Provide active learning.** Engaging students in active learning – for example, discussing, sharing and making rather than just reading or watching – supports them to develop higher order thinking skills. (See 'Embedding Active Learning in your Teaching Practice' for further guidance on active learning)
- **Choose the tools / modes / approaches** which are most effective for the activity. For example, does the activity work better synchronously or asynchronously; on-campus, online or blended; what tools or approaches will support it. For example –a discussion topic might be approached as an in-class verbal discussion online or on-campus; or an asynchronous discussion board activity, editing a shared document or wiki; or other form of discussion.
- **Plan / Review the timing.** Ensure that the timing of the activities supports the student to develop their knowledge and skills incrementally and to prepare for the assessments. For example, if an assessment requires students to write an essay or report, ensure that they have activities prior to the assessment which support them to develop writing skills; if the assessment requires them to apply a formula to a problem ensure that they have had practice doing so; if they will have to provide a presentation then provide opportunities to develop presentation skills.

5   **Review the volume of work.**
    It is important to ensure that the volume of work each week is appropriate and balanced (Whitelock et al., 2015). Consider not just the live contact time but the time needed to complete any directed activities or assessments and also time for independent study. Consider the actual contact hours and the notional learning hours too. For example, at Heriot-Watt, a standard undergraduate module is rated at 15 credits and a student will typically take 150 hours of study time (including class time, directed study and self-study) to complete each course.

6   **Keep the course under review and respond to feedback**.
    A course is not static but should develop in response to feedback. When planning the course and assessment, remember to consider both the student voice as well as those of colleagues.
    - **Student feedback.**
        - Keeping a course under review and revising and responding to feedback from students during, and upon completion of, the course can help to ensure that students are engaged and that the course supports them to achieve its learning outcomes.
        - Engagement with student representatives during the design, or even undertaking co-creation with student partners, have been proven to be highly effective approaches when it comes to curriculum design and development (Bovill, 2020).
    - **Feedback from Colleagues.** This may include formal or informal feedback from others involved directly in the course or the wider programme, as well as feedback from external examiners and stakeholders, including PSRBs.

References

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