



A principles-based toolkit for effective assessment design

by Sally Brown and Kay Sambell

Introduction

This toolkit has been designed to provide course teams at Maynooth University with guidance on periodical review of their assessment and feedback practices in support of student success. The principles have been proposed by consultants Sally Brown and Kay Sambell and have been shaped and modified by the Maynooth University 'Assess for Success' Advisory Group.

The principles set a substantial agenda for action, but using this guide, local teams can set short- and longerterm prioritised targets to enhance assessment to focus activities that will help to ensure that assessment tasks, assignments and feedback can fully contribute to student engagement and ultimately positive outcomes. This guide can potentially be a key platform for progressing assessment for student success.

The toolkit is made up of twelve principles, each with a brief description and followed by prompt questions. The questions are designed to ignite discussion within course teams who may be seeking initial or subsequent validation/accreditation and/or during periodic course review (the annual 'Spring Clean'). We suggest that, while you might distribute this toolkit in its entirety to all team members, you agree in advance of your meeting which three, four or five areas you want the principles set a substantial agenda for action... to ensure that assessment tasks, assignments and feedback can fully contribute to student engagement

to focus on particularly, from which you can identify a small number (no more than three) targeted actions for the coming year and a couple more for longer term consideration.

There are companion worksheets available for each principle which might also be useful for teams engaging in the work of reviewing their assessment and feedback practices.

Twelve principles underpinning assessment and feedback enhancement

1. Assure inclusive practices for assessment.

Universities have statutory and moral responsibilities that all students of the university have equivalent if not identical opportunities to demonstrate their knowledge and capabilities notwithstanding any disabilities or other additional needs. You can ask:

- Have you considered from the outset the implications of students who will be seeking reasonable adjustments, for students with special or additional needs? It saves a lot of time ultimately if you do this from the outset rather than trying to retrofit alternatives for students for whom standard assessments may not work due to disabilities, specific learning difficulties, mental health concerns or other limitations.
- Have you planned in 'alternative and inclusive assessment practice, i.e. forms of assessment that do not necessitate the provision of "special arrangements" for disabled [and other] students' (Waterfield and West, 2008, p. 97)? More inclusive assessment designs look beyond simplistic categories (such as disability or social equity groups) which position students in deficit, moving instead toward considering and accounting for diversity on many spectra in an effort to ensure diverse students are not disadvantaged by assessment (Tai et al., 2022). For example, Ghandi, (2016) discussed the use of patchwork text assignments to replace a 3,000-word essay as a means of improving student engagement and found it had significant benefits in terms of inclusivity.
- Have you planned how to cope with students who miss an assessment timed for a particular date (for example, an unseen time-constrained exam, OSCE or on-site presentation) and what you are going to do about re-sits?
- Have you planned for business interruption resulting in the inability to run on-site exams? (Wood, 2020a, 2020b, 2020c; Brown and Sambell 2020-2021)

2. Carefully consider appropriate timing, ordering and pacing of assessed work and feedback.

The ways in which you implement your assessment strategy within a course or module can have a profound effect on how well your students navigate the process and ultimately to what extent they are successful. You can ask:

- Have you got the timing and sequencing of assignments right? For example, are you offering low stakes assessed activities early in a programme to support incremental preparedness for high stakes assessment tasks later on?
- Are your formative and summative assessed activities spread throughout the module or are they all bunched at the end?
- Are you asking your students to hand in work to the same deadline as those of colleagues on parallel modules, giving your students horrible clashes?
- Are you in a position to know this?
- Are the assessment activities timed to maximise the potential for learning from them (for example, so students can learn from feedback on one aspect before moving on to the next)?
- Where you have built in assessment activities that are new to your context or student cohort, have you built in sufficient time for briefings, risk-free rehearsals and Question and Answer sessions with both your fellow assessors and the students?
- Do you have a programme-wide view of where and how all the assessment in the different modules occurs, so it comes across as a coherent approach to students? (Whitfield and Hartley, 2019).

3. Ensure that assessment is integrated with learning activities.

Assessment activities should not just be stuck on to the end of the learning programme but ideally should be integrated throughout it. Where assessment is constructively aligned with learning outcomes and programme design and delivery (Biggs and Tang, 2011) many would argue that it has higher outcomes in terms of student engagement and achievement. You can ask:

- Do your assignments constructively align with the learning outcomes?
- Can we see the verbs of the learning outcomes represented in the activities you are asking students to undertake? (see Writing better assignments in the Post-Covid19 era: approaches to good task design)
- Do your assignments assess not just what students know and can do, but also how they have developed and matured personally and professionally throughout the course?
- Have you looked at how your colleagues in other HEIs assess your kinds of programmes and/or

published examples of interesting/authentic assignments to see if there are good ideas you can emulate?

4. Making assessment manageable for students and markers.

There are concerned nowadays that we are causing problems for our students and ourselves by overassessing. What we should be seeking is to maximise student time on productive task without making our own lives unworkable. Older programmes often have too many assessed tasks in total if new authentic tasks have been added without removing older ones like end-of-semester exams. Having several smaller incremental tasks within a module need not be problematic if some can be formatively assessed, for example, in a classroom setting, or if they are shared among a marking team. You can ask:

- Is the number/size/volume of your assessed tasks within the module appropriate?
- Are you over-assessing?
- Is the scope of your assessment right in terms of level (that is, not too hard for 1st Years or sufficiently challenging for Final Year students)?
- Have you considered how cumulative marking loads for different years of the course are going to mount up for individual assessors?
- Can you space assignment submissions out more evenly across the year so that students and assessors aren't crushed by multiple competing deadlines?
- Have you checked with your fellow assessors that the assignments you have designed are sensible and viable?
- Are you able to collaborate with colleagues and/or former students to 'destruction test' your assignments to see what might go wrong, so you can work out mitigations/alternative approaches?
- Have you built in sufficient time for you and your fellow assessors to mark work in time for your deadlines/moderation activities?
- Have you got a team of sufficient size to get through the workload in the time required to do justice to the students?

5. Balancing skills, knowledge and selfdevelopment throughout assessment.

Good assessment activities should help you gauge whether your students know, can do or have become what you promised in the programme learning outcomes, which is likely to include knowledge, skills and capabilities as well as professionalism in practice. You can ask:

- Are you confident that you have within your assessment activities a good balance of skills development and content knowledge?
- Do your assessed tasks include ones where students have to demonstrate 'can do' reliably (and not just as a one-off) as well as 'know'?
- Is there ever an over-reliance on memorisation and recall alone in any part of your assessment diet?
- Where do students develop critical thinking? (Webster, 2020).

6. Fostering good academic conduct.

Colleagues often worry that students are increasingly drawn to poor academic conduct, including purchasing from essay mills, and various forms of cheating and plagiarism. We need to balance these risks carefully with the dangers of excessively and intrusively scrutinising students (Uniwise, 2022), for example requiring them to have video cameras showing the room where they are working while writing assignments. You can ask:

- How open are your assignments to plagiarism and cheating, and have you taken steps to design out students' opportunities for poor academic conduct? (Lawrence, 2020; Bjerrum Nielsen, 2020; Hendry, 2020). For example, incremental assessment where assessors have a chance to see work in progress is less open to plagiarism/use of essay mills than oneoff final, big bang written assignments.
- Are you using tasks that are less open to abuse such as in-person or virtual in-class activities, reflections on practice and individual negotiated tasks?

7. Inbuilding assessment activities that foster employability.

The purposes of higher education include developing students as active citizens and rounded people, as well as preparing them for graduate employment. Both to help students engage with programmes and to foster their life-wide skills and capabilities to work, it's helpful if we directly address their potential abilities as employees. You can ask:

Are there clear links between the assignments you set and employability? For example, do you make it possible for students to answer questions at interview like 'Can you tell us about an opportunity where you have... worked as a member of a team... solved problems...worked with incomplete or conflicting information...presented your research via a variety of different media/for different audiences...' etc?

- Are the assessed tasks you are setting authentic and meaningful to the students? (Arnold, 2019; Sokhanvar et al., 2021).
- Are they fit-for-purpose? (Brown and Race, in Hunt and Chalmers, 2021).
- Is it likely that students will see the purpose and value of the assessments in terms of their future lives as employees, graduates and citizens?
- If you use lab reports, do you have a clear rationale for why students are being asked to write them and how this activity relates to what they are likely to be asked to do in future careers?
- Do they write up while in the labs directly onto PCs/laptops/phones or do you ask them to transcribe handwritten notes at home?
- Do they need to write up the methodology separately even if this has been provided for them as part of the brief? Where there are multiple markers, including perhaps demonstrators, how do you ensure inter-assessor reliability?

8. Including a balance of formative and summative assessment.

Summative assessment is principally concerned with summing up student achievement on programmes leading to marks and grades, often includes numbers and commonly is end point, whereas formative assessment aims to integrate assessment within the learning process to enable change and improvement, often foregrounds words of advice and encouragement rather than just numbers and is frequently incremental. You can ask:

- Is there a reasonable balance between formative and summative assessment that enables students to understand assessment requirements, see how well they are progressing towards desired learning goals, and use feedback information on their performance to improve the quality of their work or learning strategies? (Henderson et al., 2019; Winstone and Carless, 2019).
- Have you planned in opportunities for students to derive feedback early enough within the module itself, to enable them to do something constructive with the information, leading to action on their part?
- Have you planned to make formative assessment fully part of the learning process, so that students

can try things out in low stakes environments, accompanied by guidance and feedback which helps them understand what makes for good work in their subject?

Are there any processes in your programme, such as asking students to maintain a progress file or reflective log, which encourage students to turn assessors' comments and the marks awarded into action plans with a formative purpose, thereby helping learners monitor their own progress systematically?

9. Making feedback an ongoing process which involves students

As Sadler (1989; 2013) would advise, students don't necessarily learn just by us telling them things, no matter how carefully and kindly we craft the feedback message! We need to guide and enable students to be agents in their own learning rather than simply recipients of comments from assessors post hoc. For this, students need ample opportunity within the curriculum for active participation in interactive discussions about the quality of work. This helps them, for example, to clarify their sense of assessment expectations, grasp the meanings of criteria, and refine their sense of what 'good' work looks like. But dialogic feedback doesn't mean that assessors have to engage in lengthy one-to-one conversations; instead, students can review each other's work, compare their own work-in-progress outputs to exemplars of various kinds and discuss work collectively in class as part of the overall learning experience (Winstone and Carless, 2019). You can ask:

- Can students have a go at relevant activities in class, compare their work with others and share discussions about aspects that have gone well or elements to improve?
- Are you providing and discussing samples of materials of different quality so they can compare their own endeavours to work of the standard you would want them to produce and so they gain insight into your expert views of quality?
- Do you use approaches which encourage students to generate and act upon feedback inputs of different forms (for instance, nested tasks which scaffold learning incrementally, carefully-planned peer review exercises, or staged sequences which emphasise self-assessment)?
- Are fellow students involved in classroom-based activities so that everyone (not just the 'worried well') benefit from these kinds of dialogic feedback exchanges?

10. Assuring alignment with national, university and Professional, Statutory and Regulatory Body (PSRB) standards

Higher Education providers need to ensure that their standards are acceptable to quality assurers who accredit the qualifications, and/or to ensure that these are at a university, national/international or PSRB level. You can ask:

- Are you confident that when you mark work as a member of a team of assessors, you are all working broadly to seek the same standards of work for similar marks, assuring inter-assessor reliability?
- Are you confident that you are building a community of practice among assessors (HEA, 2012)? How do you assure this? It's far better to do this in advance of marking coming in, (or at least very early in the process), so you can agree what comprises a great piece of work worthy of a high mark, what looks as if it deserves good mark, what work merits a good enough mark and what looks like work that is not good enough and below the pass mark.
- Have you got systems in place to ensure that members of your assessment team who are novices have training and support to help them through marking their first assignments?
- How well do you know and consider any professional, statutory or regulatory body requirements in relation to assessment?
- Are you fully cognisant of your own university regulations, particularly how much flexibility you have within the agreed framework, for example in terms of what can be changed without requiring major processes?

11. Using technologies to support assessment

Using technologies to support, record and mange assessment is something universities have been doing for some time, but the Covid19 pandemic has significantly raised the game in many universities with the move away from campus-based assessment. Benefits many HEIs have experienced have included some time and resource-efficiencies and a marked improved effectiveness of outcomes, where students can benefit from more flexible approaches. You can ask:

- Have you explored ways in which diverse technologies might be useful to you in delivering and managing assessment and feedback (Glynn, 2012; Farrell et al. 2021)?
- Where you use computer-supported assignments, how do you ensure that they are useful at assessing students and differentiating between them?

If you use MCQs, who sets them? How do you pilot them? Who writes the distractors? Do students do them all sitting in a PC room at the same time? What do you do about people who miss the test and/or need reasonable adjustments? Do you give them any feedback? Do you ask students to do calculations in the tests or otherwise use information, rather than just repeat it?

12. Making assessment enjoyable for you and the students

It can seem counter-intuitive to seek joyousness in assessment for students or assessors, but students who are deeply engaged in authentic activities can on occasions describe them as the most productive parts of their time at university. For assessors too, seeing our teaching efforts rewarded by students' production of good or excellent quality work can be among the most satisfying aspects of our role, particularly when students who struggled at the outset achieve the qualifications for which they have worked so hard. You can ask:

- Are any of your assessment activities likely to make students say, 'That looks like a really interesting thing to do. I can't wait to start!', for example, see Radclyfe Thomas, N. (2012).
- When you are marking work, do any of the assignments make you feel happy that students are demonstrating genuine commitment, creativity and engagement?
- Can you map where your hard-won efforts supporting struggling students from disadvantaged backgrounds have been rewarded by successful graduation of students who felt at times destined to fail?

Using this toolkit constructively. Setting goals for assessment and feedback enhancement.

Having reviewed the suggestions in this guide, within your team, can you identify three or four or five areas that you know to be priorities for enhancing your programme assessment strategy in the next year or two? All areas are important, but selecting too many can make genuine actionable proposals unachievable which is demoralising.

Principle number	Principle focus e.g. inclusivity	What specific actions do you plan to take?	Who will take lead responsibility for this?	What help/resources do you need to make this happen?	Over what timescale will you work? (Milestones)	How will you know if you have been successful? (Performance indicators)

Setting longer term targets

Recognising that some of these principles are likely to require a more substantial investment of time and energy, over the next three years, what enhancement activities would you like to set in train to make positive changes leading to improved student outcomes. You can add more rows, but not too many

Principle number	Principle focus e.g. inclusivity	What specific actions do you plan to take?	Who will take lead responsibility for this?	What help/resources do you need to make this happen?	Over what timescale will you work? (Milestones)	How will you know if you have been successful? (Performance indicators)

You might also plan a progress review at the end of year one and after three years to consider your progress against your articulated targets, to see if you need to reprioritise any areas and to plan a celebration for any notable successes in enhancing your assessment strategy!

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How to cite this document: Brown, S. and Sambell, K. (2022) A principles-based toolkit for effective assessment design. A Maynooth University 'Assess for Success' Guide. Maynooth: Maynooth University.



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