ASSESSMENT FOR LEARNING: DESIGNING ASSESSMENT AND FEEDBACK PROCESSES TO INSPIRE LEARNING

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This guide provides an introduction to the idea of 'Assessment for Learning': why it's a good idea, what it looks like, and how to put it into practice.

1. WHY IS ASSESSMENT FOR LEARNING A GOOD IDEA?

Assessment really matters to students, and research tells us that it exerts a powerful influence on students' approaches to study. Developing 'learning to learn' capabilities is at the heart of the vision of the Heriot-Watt graduate outlined in the **Inspiring Learning** strategy, and the approaches we take to assessment and feedback have an extremely important part to play in this. The impact of assessment has been recognised by pedagogic scholars for decades:

> *"Assessment defines what students regard as important, how they spend their time and how they come to see themselves as students and graduates"*
>
> **(Brown & Knight, 1994, p.12)**

Assessment and feedback practices therefore should inspire students' deep approaches to learning, enabling their engagement in valued ways of thinking and practising within their chosen discipline (Sambell, 2016), both within and beyond the university, rather than resulting in surface approaches and perfunctory responses in a relentless short-term chase for marks (Wass et al., 2015).

An Assessment for Learning (AfL) approach helps us to achieve our goals as educators, but also requires some fresh thinking as we design and adjust our assessment and feedback practices accordingly: this resource encourages course leaders and programme teams to review their approaches to make sure that, as far as possible, they are addressing the fundamental principle that assessment prompts and promotes effective learning, as well as measures it. It draws on evidence-based practice, pedagogic research and key initiatives, including work undertaken by the Assessment for Learning Centre for Learning and Teaching (CETL) at Northumbria University (Sambell et al 2013) that have impacted significantly on how assessment has been viewed and enhanced in recent years (HEA, 2012, 2016), all of which point to assessment as an important catalyst for transforming and inspiring student learning in valued ways.

What are the main purposes of assessment in higher education?

For some time, conceptions of assessment have been dominated by the idea of assessment as measurement, which is normally associated with summative assessment (that is, for the purpose of summing up what has been learned and generating grades). This idea - the assessment *of* learning - has outweighed, and in some cases eclipsed, the role that assessment can play in helping students to learn and develop.

To address this issue, Assessment for Learning has become a broad term which highlights the benefits of rebalancing staff and students' understandings of the **multiple** and **educational** roles assessment can play, so that the immediate and long-term benefits to learning are exploited as fully as possible.

It is worth remembering that effective educational assessment processes simultaneously perform several purposes, as Sambell et al (2013) proposed.

These are broadly outlined in Figure 1.

Ensure and assure
Ensure that important learning outcomes have been met by carefully designing tasks which promote, develop, measure and assure highly valued learning, skills and attributes.

Prompt and scaffold learning
Support and enable students to learn and develop during the course via carefully designed activities which support the achievement of learning outcomes.

Challenge and extend
Build students' capacities to take control of their own learning and develop the skills and dispositions to gauge the quality of their own work, to enable learning in the longer term, beyond the degree.

Figure 1: The Multiple Purposes Assessment Plays

This presents us with three related challenges:

The first is to design more **authentic assessment tasks** which motivate and enthuse students such that they learn through spending time on task, inspired by a commitment to genuinely understanding the subject. With authentic assessment the tasks themselves are carefully designed to act as a driver for developing high order thinking skills, and ensure students are developing a range of skills and higher-order attributes that are meaningful and relevant and at an appropriate level. Authentic assessment aims to promote in students a sense of worthwhile endeavour and personal interest beyond simply acquiring marks, and key features include realism, cognitive challenge and evaluative judgment. Realism means that learners feel that the assessment tasks have high fidelity and are directly linked to the kinds of things that practitioners do in civic or professional settings or research communities; things they might envisage themselves doing in future, rather than tasks they feel they have to perform in an isolated, formulaic or unconnected way simply because they are required to respond to a test question.

Secondly, there is a challenge in designing manageable but effective learning-oriented assessment that can also fulfil a *developmental* (formative) purpose. This entails helping students see how they're doing and what they need to work on in the run-up to the summative assessment task. Broadly speaking, these are often activities, discussions and feedback opportunities that are planned into our learning and teaching approaches. They aim to involve students in meaningful activities which enable them, **before** the summative task to, for example:

- actively develop appropriate skills, knowledge and qualities;

- practise making sense of subject-material;

- discuss their developing interpretations, concepts and ideas;

- gain new insights from feedback which helps them see how they are doing and where else they need to place effort.

Thirdly, we need to ensure that assessment and feedback serve a **longer-term purpose**. When they work well, they support and develop students' capacities to learn and gauge how they are doing *beyond* the immediate task, thereby challenging them and extending their capabilities to judge what counts as quality work, in their own future practice and that of others. As a result, learners are empowered and fully equipped to monitor their own work effectively, in various contexts beyond the university, rather than relying on their teachers to fulfil this role for them. From this standpoint, well-designed assessment and feedback practices enable students to learn to become actively involved in the inter-related processes of **making evaluative judgments** and **seeking and using feedback**, as well as seeing the **relevance and application** of the subject-matter and associated discipline-based skills.

All three aspects of AfL are catalysts for learner engagement, motivation, inclusive practice, autonomy and the development of a range of graduate attributes for longer-term learning after university and throughout the life-course.

2. WHAT DOES ASSESSMENT FOR LEARNING LOOK LIKE?

Carless (2015: 964) has synthesised the key aspects of Assessment for Learning in higher education, drawing upon significant studies of assessment and distilling them into three core inter-related features. He uses the helpful term 'learning-oriented assessment.'

For Carless, key features of Assessment for Learning include:

- Learning-focused **assessment tasks**, which stimulate productive student learning and the development of valued dispositions;

- Student **engagement with feedback**, with ample ongoing opportunities for interaction and dialogue around students' work;

- Explicit opportunities for students to **develop their evaluative expertise**, so that learners are gradually supported to better understand what quality looks like in their discipline. This helps them make informed evaluative judgments about the quality of their own work, which is critical for self-monitoring and the uptake of feedback information.

The Northumbria approach to Assessment for Learning (AfL)

While at Northumbria University I worked with others who, like me, were all-too familiar with the challenges of supporting large and diverse student groups of students, especially when resources and time were fairly tight. We developed and implemented a pioneering model of AfL which built on our deep scholarship in the field of assessment. This approach (outlined below) connected assessment fully to the teaching and learning activities, rather than seeing it as something bolted on. We also found it was much more helpful to think of integrating formative and summative approaches holistically. In other words, rather than dropping-in different interventions, we found it most helpful - and most manageable - to consider how best the whole package (including both formative and summative assessments) might fruitfully contribute to helping students to learn and to succeed, both now and in the longer term.

Putting the principles of Assessment for Learning into practice can often be daunting, because of its association in some people's minds with just formative assessment, which they see as doing more marking to provide more feedback. It's important to emphasise, though, that AfL is not all about doing more marking - quite the opposite! Instead, AfL is about thinking carefully about how assessment, learning, teaching can all pull in the same direction on a course or programme, and how best to ensure that, as far as possible, students are involved as active and informed participants in our assessment and feedback processes, rather than seeing themselves as victors or victims of a testing culture where their role is simply to submit themselves to others' decisions.

This all suggests that AfL should not be seen simply as a set of tips and strategies: it is more helpful to step back and consider the principles and how you might put them into practice in your local context.

Our approach (Sambell et al., 2013 *op cit*), building on more than a decade of research into the impact of assessment on students' approaches to learning, proposes that Assessment for Learning environments (at course and programme level) are underpinned by six interrelated conditions. These are shown in Figure 2.
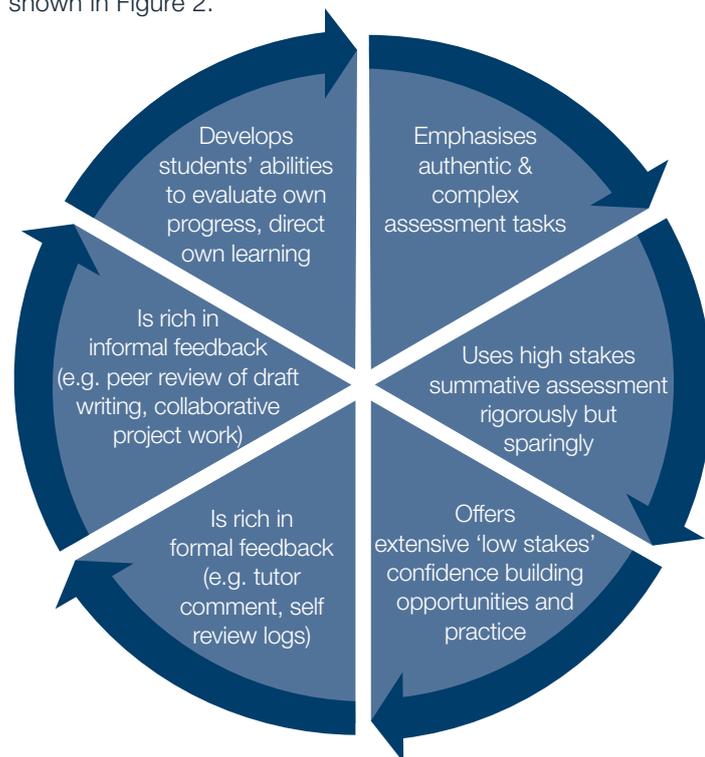

Figure 2 : The six conditions of Assessment for Learning

Detail on the practical applications of this approach can be seen in the Watt Works leaflets: **Assessment and Feedback - Learning and Teaching Academy**

3. HOW CAN YOU PUT ASSESSMENT FOR LEARNING INTO PRACTICE?

The six AfL conditions just described are best considered in combination, so it is useful to think of them as lenses through which to review your assessment practices or questions to ask yourselves (and your students) - rather than a menu from which to choose only one dish. The framework can usefully be used by course leaders and programme design teams as discussion points, as a basis for regularly reviewing and enhancing approaches to assessment and feedback. What follows is a checklist for such a review process:

How engaging, authentic and productive are your assessment tasks?
Do students feel like they are 'going through the motions' when they are completing assessments in your course? Or do they enthuse and engage them, so they can see the point of doing them beyond just getting the marks? Does your assessment task have an authentic audience (so students feel they are doing the task 'for' someone - whether that audience is actual or simulated - rather than just handing in work for the lecturer to mark)? Using types of assessment that are much more like the 'real things' that academics or professionals in the field do, can engage students in much more meaningful ways than those which students assume require them to cram short-term knowledge, which is quickly forgotten, or topic spot to pass a test, rather than build foundational knowledge that they can apply in an analytical and thoughtful way. Assessment tasks which help students

to develop an identity (becoming an architect, or a physicist) rather than simply learning content, is a powerful motivating factor. Authentic assessment is one of the best tools we have in our teaching toolkit to fuel this sense of becoming a member of a discipline or professional community. This feeling of developing identity isn't simply tied to training for work, it can also be clearly associated with assessment which feels relevant to the individual student, to subject-experts and to other stakeholders (Ashford-Rowe et al, 2014).

A useful way to help you ascertain how authentic your assessment is could be, for instance, to ask yourself where in the programme do you help students answer questions in job interviews like 'Can you describe an occasion on your course when you have had to work pragmatically with incomplete information?', 'Can you talk about an experience of group work that didn't go well, and what you did to resolve the problems?', 'Could you tell us about how you have used data from a diverse range of resources to help you decide how to address an issue in the world/community/a particular area of practice?' or 'Can you talk us through a time when you worked on a task which required you to work out which calculation or formula you needed to perform the task, and how you weighed up the relative pros and cons of different approaches you could have adopted?'

Do you achieve a good overall balance between summative and formative assessment?
Summative assessment – assessment designed to measure students' learning – must be carried out effectively but not allowed to dominate and drive the whole of the teaching, learning and assessment process. An over-focus on marks and grades leads to student engagement which is qualitatively different to engagement in genuine learning (Wass et al, 2015). Time, space and energy must be found to infuse the student experience with formative opportunities designed to help them learn; and, as far as possible, reduce the dominance of summative assessment, so students can have a go, take risks and learn by making mistakes rather than always playing safe because it 'counts'. It's important, though, to help students see the links between the formative activities and the summative task.

Do you create opportunities for practice and rehearsal?
Students benefit from having opportunities to try out their learning, practice and improve, building competence and confidence before they are summatively assessed. We should try to avoid the situation where the first opportunity students get to do something and receive feedback and guidance on it is in the high-stakes context of being marked. It is possible to build in a variety of formative group and individual low-stakes tasks and activities which give students a chance to 'have a go' and learn by doing, rather than simply listening, within active and social learning environments. Where students are doing an assessment format that is (for them) unfamiliar, it is good practice to discuss and, ideally, try out the format before it 'counts' for marks.

Designing formal feedback to improve learning.
Well-designed and planned feedback is essential to students' learning. However, there are limitations in the conventional ways that universities provide feedback. Often it is in the form of tutor-written feedback on each individual student's work at the end of a course, but many students seem disinterested because, for example, they feel it is too late to impact on that assignment, or they find the information difficult to transfer to subsequent tasks, or they struggle to

interpret the terminology or to appreciate what they should do to implement it (Jonsson, 2013; Winstone et al, 2017). We need to address the limitations of this approach (Winstone & Boud, 2020) by building in other kinds of formal feedback from tutors, more frequently and at earlier stages so that, for instance, comments and guidance are made available before the fact and they can 'feed forward' (Hounsell et al, 2008) directly into refinements and revisions of future work. Rather than focusing too much on the quality and quantity of the input message, to improve learning it's important to focus equal attention on students' active engagement with feedback processes, framing feedback as a future-facing process in which they have an active role to play. Good feedback designs incorporate ample dialogue and feedback loops which provide the opportunity for students to take up and apply feedback to adjust and change their future performance or learning strategies (Boud and Molloy 2013, Henderson et al, 2018). There are suggestions for efficient and effective tactics for teachers to provide developmental feedback opportunities in **Watt Works Quick Guide #3**. It's also important to draw on other sources of feedback including self and peer review and reflection (Carless et al., 2011: Carless, 2016, Winstone and Carless, 2019).

Designing opportunities for informal feedback through participation and via developing students' inner feedback

Active, collaborative and dialogic approaches to teaching, learning and assessment bring with them an intrinsic supply of informal feedback to benefit student learning (Sambell et al, 2013 op cit). Students benefit from ample opportunity to enter into tutor-facilitated discussions and interactions around the work they're doing, so they can gauge their progress. As students work together, discuss ideas and methods, and interact with teachers they can test out their own ideas and skills, see how other students go about things and begin to absorb the standards and requirements of their subjects. This approach is very common in studio-based subjects and design subjects, but students may need help to see this as 'feedback'. This type of feedback can also be generated through participation beyond the formal curriculum.

Interestingly, according to Nicol (2020) improving feedback processes to guide learning does not necessarily have to rely on providing more timely, more targeted or more detailed instructor comments. Instead, Nicol argues, we can productively activate students' 'inner feedback' by designing opportunities which harness student-comparison-making, which he sees as a "natural, ongoing, pervasive and cyclical process that underpins learning" (Nicol, 2021).

"Internal feedback is the new knowledge that students generate when they compare their current knowledge/competence against some reference information"

(Nicol, 2020 p2).

This can be unlocked by curriculum designs which enable students to make deliberate comparisons of their work against information from a range of sources other than comments, and to make the outputs of their comparisons explicit in writing, discussion or action. Comparators may include, for example, a textbook explanation, videos of an expert performing something, or criteria, as well as others' comments. This approach helpfully links formal and informal

feedback practices and can result in students generating higher quality feedback than could otherwise be provided (Nicol 2021).

Developing students as self-assessors and effective life-long learners

If students are to be active agents in their own learning, they need to be able to make decisions for themselves, decide what approaches to take, reflect on what counts as quality and evaluate their own progress. There should be opportunities for students to be active participants in assessment and feedback processes and develop assessment literacy (Smith et al, 2013). Ultimately, as graduates and professionals, students need to take over for themselves much of the assessment that lecturers currently do for them and become skilled at drawing on the resources of workplace colleagues and practice environments to support their ongoing development.

Conclusions

The Assessment for Learning approach has significant advantages for both students and staff: students are more likely to engage fully and thoughtfully with assignments if they can see the point of them and if they feel their teachers are using assessed activities to support rather than just judge them. The careful design and embedding of feedback as a process that is threaded throughout a course also usefully places emphasis on the importance of dynamic, dialogic feedback processes rather than simply the transmission of feedback information. This helps to develop trust and confidence.

As Clouder et al. (2012, p2) claim, AfL has the potential "… to enable students to engage with peers and tutors, to gain personal insight, to feel valued and supported and above all feel that they 'fit in' as part of a learning community, and, as such, can succeed in higher education". Staff too are more likely to find assessment stimulating and worthwhile if they recognise its value to students as an ongoing process, rather than just what happens at the end of a block of teaching. The systematic and structured approach to assessment design and delivery implied in the approach ensures that assessments are more interesting to mark and the whole task becomes more manageable and streamlined. **Watt Works Quick Guide #22** outlines a practical step-by-step system for readily developing authentic Assessment for Learning tasks.

REFERENCES AND FURTHER RESOURCES

All the Watt Works guides are available for reading and download at: https://lta.hw.ac.uk/resources/assessment-and-feedback/

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