

CADQ Guide

Formative assessment and feedback

Formative assessment can support meaningful learning by providing opportunities for students to:

- make sense of criteria;
- practice assessment skills/knowledge or entire assignments;
- receive and generate feedback on progression towards specific summative assessment tasks;
- engage with content and/or develop skills needed to achieve learning outcomes
- receive and generate feedback on general learning progression;
- create and experiment in a low stakes environment;
- foster a sense of scholarly identity.

The following distinction can be made between formative and summative assessment:

- *Formative assessment*: a formative task/assessment is one which is developmental for students' learning but does not contribute to credit points. We could call this **assessment for learning**.
- *Summative assessment*: assessment which results in a final grade (and feedback) which reflects the standard of achievement of the student work against intended learning outcomes. We could call this **assessment of learning**.

This resource will focus on formative assessment, characterised by Pryor and Crossouard as a set of practices which, '...sits at the intersection of teaching, learning and assessment and is produced by both teachers and learners' (Pryor and Crossouard 2010, p. 271). The main sections of the resource can be accessed directly to via the contents box above.

The value of formative assessment and feedback

The value of formative assessment and feedback for students' learning has been discussed extensively in the literature with conclusions such as the following relatively common '...by spending more time on formative assessment and less on summative assessment, the tutor's energy is used in a way that can make a difference' (Scaife and Wellington 2010, p148). Where there is an imbalance in assessment practice across a course it is likely to be that there is an over-emphasis on graded, summative work and less emphasis on formative assessment and feedback activities. Gibbs and Dunbar-Goddet (2007) researched the

Contents

[The value of formative assessment and feedback](#)

[Examples of formative assessment](#)

[Student engagement with formative assessment](#)

[Creating a culture of engagement around formative assessment and feedback](#)

[Further links on formative assessment](#)

[Detailed descriptions of formative tasks](#)

[References](#)

effects of course assessment environments on student learning in undergraduate degree programmes in science, humanities and applied social science in each of three types of university: Oxbridge, Pre-1992 and Post-1992 (9 programmes in total). They found that:

it is traditional assessment methods, that emphasised learning about goals and standards through frequent formative assessment and especially through oral feedback and prompt feedback, and that had little summative assessment of a limited variety of kinds, that were found to be associated with positive student learning responses, and with greater clarity of goals and standards (Gibbs and Dunbar-Goddet 2007, p. 24).

Examples of formative assessment

Below is a brief overview of some formative tasks, along with feedback suggestions:

Tasks	Feedback
Tests: diagnostic, progress tests, multiple choice, quizzes etc.	self, peer, tutor, computer
Drafts, plans, proposals	self, peer, tutor, Turnitin
Concept maps	peer, tutor
Reflective writing / learning journal	self
Role-play	peer(s)
Semi-formal discussion/debate	self, peer, tutor
Indiv/Group Presentation (ideas, poster, art, calculations, case study...) - conventional/pechakucha style	peers
*Crits – Students observe and critique the work of each other, local practitioners or students from different years	Peer, tutor, guest
*Online fora, discussions, blogs	peers, tutor
Online Q&A/peer support forum	peers
*Two-stage/multi-stage submission of assessments	tutor
*Cumulative coursework e.g. portfolio, log, workbook	tutor, peers, placement supervisors, work colleagues
*One-minute papers	tutor
In-class worksheets (graded)	tutor

Peer teaching (peer assessed)	peer, tutor
Interviews	peer, tutor
'Clicker' questions in class (e.g. using Mentimeter ** a tool for using mobile phones/tablets for voting)	tutor (class & individual level)
'Storying' – tell narrative from data	peer, tutor
Resource recycling – use same resource for different tasks	peer, tutor

*indicates further details available in a later section

**Please note NTU does not support this tool

The following examples focus specifically on facilitating knowledge of criteria and standards:

Tasks	Feedback
*Phase tests (in-class, online etc.) – similar to mock exam	self, peer, tutor, computer
*Vivas	self, peer, tutor
Students prepare revision questions for the class (e.g. using Peerwise ** a student tool for discussing assessment questions)	peers
Compare 'model' answer with marking criteria	self
Students critique/'mark' examples of varying quality against criteria	self, peer, tutor

*indicates further details available in a [later section](#).

**Please note NTU does not support this tool

Student engagement with formative assessment

Student engagement is key to the success of any formative learning activities and engagement may depend to a large extent on the value students place on formative activities. Scaife and Wellington (2010) concluded from their in-depth study of one university that students value formative learning activities provided that they give students opportunities for valuable feedback; a finding which is in keeping with those of Nicol and Macfarlane-Dick 2006 and Taras 2002. Scaife and Wellington note that a deferred instrumentalism may be at play here, namely that students perceive formative assessment to be of value when they view it as contributing towards summative assessment tasks, 'like practice without anxiety, analogous to hitting golf balls round a field or practising tennis shots against a wall. It (formative assessment) occurs in a no-failure/no lose context' (Scaife and Wellington 2010, p. 149).

Such findings emphasise how important it is to make the value of formative learning activities explicit to students. It may be useful to discuss with students the various

purposes and benefits of formative assessment. For example, Cho and Schunn (2007) showed that students made more complex revisions to their work when feedback received from multiple peers than from a single peer or single teacher. While students may readily identify the value of receiving feedback from multiple sources, the benefits of constructing feedback for someone else may not be as obvious to them. Nicol (2010 p.514) summarises the benefits:

'Producing feedback is more cognitively demanding than just receiving it: the construction of feedback is likely to heighten significantly the level of student engagement, analysis and reflection with feedback processes. From this perspective, one might argue that constructing feedback is at least as, if not more, beneficial than receiving it.'

Creating a culture of engagement around formative tasks and feedback

Pryor and Crossouard like others (e.g., Higgins et al 2001) highlight the significance of communication and meaning-making to formative assessment. This becomes all the more salient when we consider that staff are sometimes engaging in formative assessment without explicitly recognising it (Scaife and Wellington 2010, Yorke 2003).

Suggestions at planning level (integrated approach)

- . Formative assessment and feedback may constitute a cultural shift for students coming from school education; it will therefore usually be easier and more successful if introduced at Level 4 (Year 1).
- It is important that the tutor believes in the value of the tasks and communicates this to students. If formative assessment is presented as 'have a go if you want but there aren't any marks attached to it' then it will most likely fail. Moreover, it will likely be more effective when introduced as a holistic way of learning with high expectations set from the outset and a consistent approach being followed throughout the course.
- Assessment and feedback plans may be a useful place for indicating to students the connections between formative and summative assessments and feedback as well as the connections between different modules.
- Design formative tasks and feedback work into course/module overview so that students know from the beginning when these will happen and when work is due e.g. use idea of 'assessment weeks' to encourage students to view the end summative product as a culmination of all learning activities leading up to it.
- You may prefer not to use the terms 'formative' and 'summative' and perhaps not to differentiate between formative and summative tasks so as to try and encourage students to view assessment (formative and summative) as a progressive learning opportunity. If you prefer to use a specific term you may wish to consider some of the following depending on how you want students to perceive the task at hand, 'formative activity', 'formative task', 'practice assessment', 'practice activity'. One member of staff interviewed in Scaife and Wellington explained how they frame formative tasks with students, 'you hand in your work and I will give you an interim mark and guidance and they understand that word, that phrase, better than the phrase 'formative'' (Scaife and Wellington 2010, p. 143).

- You might include a (possibly graded) reflective element in the final summative end-product where students reflect on the formative activities they have undertaken to encourage engagement and a sense of coherence.
- Support students to understand the relevance of each formative task to their overall learning / summative assessment
- Incorporate tasks and feedback into class-work e.g. in seminars, labs, lectures, tutorials
- Provide grade based assessment criteria early in course and have students use them regularly throughout
- Be explicit about any formal expectations e.g. those in the student charter
- Be consistent as a course in your messages about assessment and feedback
- Create opportunities to link feedback to students' own academic goals
- Adopt a 'just-in-time' approach in terms of when you expect students to undertake formative work; in-session may work best
- Plan time for students to practise tasks
- Provide guidance and on-going scaffolded support with the practice of peer and self-feedback – consideration at course level will be necessary to ensure coherence and to avoid duplication
- Devise a series of regular tasks leading to a portfolio (dropbox and e-portfolio are useful tools for this)

Suggestions at task level:

- Provide clear instructions (scaffolding), especially for peer feedback tasks: make sure students understand purposes and procedure
- Model tasks beforehand and provide support/checking throughout
- Provide exemplars, e.g. of completed (part) assessments
- Provide clear criteria
- Negotiate criteria – students can be invited to discuss and propose the criteria by which a non-assessed task would be measured
- Incorporate feedback activities, e.g. ask students to rephrase the feedback obtained and create an action plan to incorporate it
- Release grades only after students have read feedback / planned feedforward
- Link tasks to professional frameworks where appropriate
- Assign project roles for group work

- Tailor tasks to students' level

Further links on formative assessment

- There are several examples of peer feedback in the [CADQ resource](#). Some are formative, others are summative but could be used in a formative way. Examples include peer feedback on poster presentations and draft plans for a report.
- [REAP](#) (Re-engineering Assessment Practices) project at the University of Strathclyde has a website which provides resources for teachers and senior managers in higher education wishing to redesign assessment and feedback based on a self-regulation model. The main goal of the project was to encourage the development of students' ability to monitor, manage and self-direct their own learning.
- [TESTA](#) (Transforming the Experience of Students through Assessment) is a National Teaching Fellowship Project which maps course-level data in order to devise targeted interventions to address any identified course-level assessment issues. The website has various tools and resources such as *The feedback guide for lecturers* and *Nine ideas for feedback week*.
- The [Integrative Assessment project](#) undertaken as part of the Scottish Higher Education Enhancement Themes sought to optimise the balanced between formative and summative. The website includes resources such as *Balancing assessment of and assessment for learning*.

Detailed descriptions of formative tasks

Some formative tasks listed in the 'Examples' table above are described in more detail here:

One-minute papers: near the end of a teaching session students are asked questions relating to the important topics of the session. The lecturer reviews the students' responses after class and addresses any misunderstandings through feedback in the next teaching session. Alternatively, the tutor could provide a 'model' answer for students to compare with their own or peers' papers.

Benefits: it is a simple way of providing quick feedback to large cohorts. Aids active listening, active learning, holistic thinking, questioning and persuasion skills

Notes: see [REAP website](#) for more on one-minute papers

Cumulative coursework: rather than being prepared and submitted once (like an essay) the assessment evolves over the span of a term or longer. May take the form of a portfolio, log or workbook.

Benefits: the work benefits from and reflects the student's evolving grasp of the subject matter and from ongoing feedback from tutors, fellow students or placement supervisors and work colleagues.

Notes: see [SOA 2007](#) page 6 for examples.

Phase tests: interim assessment similar to a 'mock' exam which provides formative feedback to students on their progression before summative assessments. May contribute towards the module grade

Benefits: provides an opportunity for students to practice their exam techniques and receive feedback. Students may prefer continuous assessment to end of year exams (Scaife and Wellington 2010, p. 145).

Notes: Computer-based assessments, once set up, could be used as a way of providing timely feedback and supporting progression

Two-stage submission of assignments: a method of front-loading assessment as described by Scaife and Wellington (2010 pp. 147-8):

- Stage 1 – student produces assignment which is then formatively self-assessed, tutor-assessed (detailed guidance but no grade) and possibly formatively peer-assessed. Student improves assignment based on feedback
- Stage 2 – student submits revised assignment for summative tutor assessment. Student receives a grade and summary feedback

Benefits: ensures that the students receive their main feedback in time to act upon it, benefits staff by spreading the workload (they give their main feedback at stage 1 and need only provide summary feedback at stage 2). Scaife and Wellington reported favourable comments from staff, students and external examiners on this method (Scaife and Wellington 2010, p. 148).

The viva: students are questioned individually about their work-in-progress, usually by two tutors.

Benefits: valuable for assessing 'practical' or theoretical modules, develops presentation skills.

Notes: some argue that vivas should not increase staff time demands as can be conducted during 'normal teaching time' (Scaife and Wellington 2010, p. 144), others have found that vivas present logistical problems (Miller 2002), it may depend on the size of the cohort. For more on vivas see 'oral examinations' in Miller (2002, p. 12). Peer vivas can also be effective if modelled and scaffolded appropriately.

'Crits': groups of students present their works-in-progress and receive comments from staff and fellow students. Can be done anonymously.

Benefits: develops critical awareness and presentation skills, opportunity to gain feedback from a number of peoples' perspectives.

Notes: There are several ways of conducting 'crits' and they can be used for different pieces of work such as essay plans, annotated bibliographies and posters. For more on group 'crits' see resource on [peer feedback](#).

Online discussion boards: using an online discussion board to post and comment upon work-in-progress and/or to discuss key course topics.

Benefits: safe environment for students to bring to light any misunderstandings, offers regular feedback from a variety of perspectives.

Notes: For more on using online discussion boards for formative assessment and feedback [see the NTU case studies](#) for an example from Spanish. In addition, Tina Byrom and David Hindley (NTU, School of Education) have conducted research with NTU students looking at student perceptions of feedback and how technology might be embedded within

pedagogical strategies to provide formative developmental feedback. Presentation slides and a summary of the research findings are available online from the [NTU Annual Learning and Teaching Conference 2011 Proceedings](#)

References

DELLI-COLLI, S., no date. *UCLan Good Practice Guide to Feedback*. Accessed online 19 February 2013 at:

http://www.uclan.ac.uk/information/services/ldu/files/Good_Practice_Guide_to_Feedback.pdf

GIBBS, G., 1999. Using assessment strategically to change the way students learn. In: BROWN, S., and GLASNER, A., (eds.) *Assessment matters in higher education: choosing and using diverse approaches*. Buckingham: SRHE and Open University Press, 41-53.

GIBBS, G., and DUNBAR-GODDET, H., 2007. *The effects of programme assessment environments on student learning*. York: Higher Education Academy.

MILLER, N., 2002. Alternative forms of formative and summative assessment. In HOUSTON, J. and WHIGHAM, D. (eds), *The Handbook for Economics Lecturers Section 2. Assessment*, University of Bristol: Economics LTSN. Accessed online 19 February 2013 at:

http://www.economicsnetwork.ac.uk/handbook/printable/assessment_v5.pdf

NICOL, D. and MACFARLANE-DICK, D., 2006. Formative assessment and self-regulated learning: a model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199-218.

PRYOR, J., and CROSSOUARD, B., 2010. Challenging formative assessment: disciplinary spaces and identities, *Assessment and Evaluation in Higher Education*, 35(3), 265-276.

SCAIFE, J., and Wellington, J., 2010. Varying perspectives and practices in formative and diagnostic assessment: a case study, *Journal of Education for Teaching*, 36(2), 137-151.

SQA (Scottish Quality Assurance Agency), 2007. Integrative assessment: balancing assessment *of* and assessment *for* learning (Guide 2). Accessed online 19 February 2013 at:

<http://www.enhancementthemes.ac.uk/docs/publications/guide-no-2---balancing-assessment-of-and-assessment-for-learning.pdf?sfvrsn=16>

TARAS, M., 2002. Using assessment for learning and learning from assessment. *Assessment and Evaluation in Higher Education*. 27(6), 501-510.

YORKE, M., 2003. Formative assessment in higher education: moves towards theory and the enhancement of pedagogic practice. *Higher Education*. 45, 477-501.