7 Steps to:
Providing online formative feedback

Overview

Formative feedback is tutor or peer feedback, and self-reflection, that helps students to measure their own progress, reflect on learning, and support development. From a tutor perspective formative feedback enables the identification of problem areas and struggling students, so that targeted action and support can be given. Formative feedback has been shown to be effective in improving summative assessment performance (McLaughlin & Yan, 2017). Principals of good feedback practice (e.g. Nicol & McFarlane-Dick, 2006) provide a useful starting point for designing an online formative approach.

In online teaching, regular formative activities and assessment play a much more prominent role than in face-to-face teaching (Gikandi et al, 2011). This is because students need to: frequently engage in activities that scaffold and structure their learning; feel 'seen' and motivated by teacher presence (Rapanta et al, 2020) and; value rich feedback on their learning that helps their development in relation to summative goals. For these reasons, continuous formative assessment and feedback models help students learn in supported but self-regulated ways online (JISC, 2020). Such approaches have been shown to be successful in driving engagement and improving outcomes (Perets et al, 2020). Online formative activities and feedback are facilitated by a wide range of digital testing, reflective, and collaborative tools (Baleni, 2015). Disciplines and topics will influence what is appropriate, but in general, good design will include a mix of types of activities, including authentic and collaborative, as well as solo work, with associated feedback.

This 7 Steps examines the literature and good practice advice from online teaching professionals about how formative feedback can be used to enhance student learning and promote online engagement

1. Utilise automated feedback

Instant feedback through automated selective response questions (such as MCQs, true or false etc.) are a common and efficient formative approach and are popular with students for the immediacy of the feedback they receive (Furnham et al, 2011). Whilst not aimed at higher order thinking, such tests show if a student has understood a concept, can build learner confidence, and improve summative assessment performance (Baleni, 2015). Automated feedback is useful for dealing with large classes but in most module contexts, it is beneficial as part of a mix with other feedback mechanisms. Digital quizzes can be used in different ways. For example, short quizzes can be used at the end of a unit of study or interspersed amongst content (e.g. inserted into a video lecture) to require students to pause and think about an introduced concept. In setting up automated questions, consider allowing students multiple attempts as studies show that students find this beneficial (ibid) and think about getting students involved in developing formative questions.

2. Provide tutor feedback

Students really value tutor feedback so this has an important role to play online. If tutors are not actively engaging in giving online formative feedback then students can feel invisible. Whilst you may support students with regular automated quiz responses, it is good practice that you are also active in offering feedback, be it written, audio or via online tutorials. Provide group formative feedback to summarise key developmental advice by contributing to discussion forums or by recording short feedback videos which are quick and personable. Actively monitor and engage with students about their formative work and offer targeted and individual feedback where you can see it is necessary, be this corrective advice or praise and encouragement (see 7 Steps to: giving effective feedback & 7 Steps to: online summative assessment).

3. Embed and guide peer feedback

Online peer feedback has been shown to be effective in promoting active learning and meaningful engagement (e.g. Gikandi & Morrow, 2016). Both the act of giving as well as receiving feedback are useful (see 7 Steps to: peer and self assessment). Face-to-face, students experience challenges and discomfort in giving peer feedback. However, online, students appear better able to engage in peer feedback, in greater depth and with more criticality (McCarthy, 2017). This is likely due to asynchroneity, providing students time to consider their views and how these are expressed. This has been shown to be particularly beneficial for international students, helping to combat language and social barriers (ibid). Help structure peer feedback by giving clear guidance to support students' judgements, aided by marking criteria/rubrics. Your digital learning environment will provide tools for peer assessment (e.g. Moodle Workshop) so consult your learning technologists for support in this area.

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4. Integrate self-reflection

Well-designed online modules are rich in continuous assessment that prompts and requires students to self-regulate their learning (Cho & Shen, 2013). Because of this, many experts in online learning advocate assessment design that includes self-reflection. Students can be asked to develop e-portfolios or blogs that demonstrate ongoing engagement, learning and reflection. Students may not recognise this as feedback in the way that they value tutor feedback, but the process of reflection is nonetheless an important formative feedback mechanism informing their development. Reflection on learning should be supported by clear guidance such as exemplars, marking criteria and question prompts such as: Why are we studying this learning objective? What have I struggled with? What was most interesting? Consider inviting students to discuss their reflections as such dialogue gives valuable feedback between peers and to the tutor.

5. Support practical learning through feedback

Online practical activities, and the receipt of feedback on these, have obvious challenges. Whilst not every practical activity can be fully learnt and formatively assessed online, there are possibilities and even some benefits, such as giving students greater opportunity to repeat and experiment in the digital realm. Videos, virtual laboratories, simulations, and interactive tools can all be used to facilitate practical activities on which peers and tutors can provide feedback (Rutledge et al, 2020; Estriegana et al, 2019). Within medical disciplines, Mooney et al (2020) report that Covid-19 modifications to a fully digital year-end assessment created many advantages and provided a 'rich and impactful formative assessment' including reducing logistical and physical barriers, and increasing diversity in assessed patient encounters.

6. Link formative feedback to summative assessment

Formative feedback can have even greater effect if formative activities are designed to link closely to summative assessment in terms of form and/or content, giving feedback and feed-forward to support this link (De Kleijn et al, 2013). Ongoing formative activity can also be promoted by incorporating rewards and gateways for engagement. For example, it is possible to give a nominal award of marks that reflect engagement with formative work (Dermo, 2011), blurring the distinction between the formative and summative. Others have successfully required students to achieve a pass mark in online tests as a gateway to being able to undertake summative assessment (Voelkel, 2013).

7. Design for support and inclusivity

Use digital tools to ask students for their feedback so you can find out about and respond to difficulties. A module rich in digital activities will enable you to see which students are engaging. Contact any students who you have concerns about. Design your module with diversity in mind as good practice around inclusivity remains important in the digital realm (JISC, 2020) such as offering flexible ways for students to access content and making use of anonymous ways for students to interact (See 7 Steps to: considering neurodiversity in online learning). Whilst there are pros and cons to anonymity, studies show that being anonymous promotes inclusion in relation to both gender and nationality (Morales-Martinez et al, 2020; Sullivan, 2002).