

Show me the Feedback: A Multi-Institutional Project Exploring Technology-Enabled Feedback Approaches for First Year

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The [Y1Feedback](#) project is a partnership between four Irish Higher Education institutions, which aims to enhance feedback dialogue in first year undergraduate programmes through the use of digital technologies, to better support student transition. The project has conducted a review of feedback practice across partner institutions and a synthesis of feedback literature. Informed by this work, the project has identified a set of features of effective feedback for first year together with a set of technology-enabled feedback approaches. Currently, there are 20 case studies in progress to pilot these approaches. This paper reports the findings from the review of feedback practices and outlines features of effective feedback and approaches that educators can implement to better support first year transition.

Keywords: feedback, first year, transition, technology-enabled feedback

Introduction

It is well established that the provision of timely and useful feedback has significant potential to support and improve student learning (Hattie & Timperley, 2007; Merry, et al., 2013; Sadler, 2010). Moreover, in the context of supporting transition, effective feedback can play a pivotal role in fostering student motivation, confidence, and success in the first year, as well as in improving retention rates (Kift, 2015; Nicol, 2009; Tinto, 2005). In recent years, feedback has increasingly become the focus of research and Higher Education (HE) policy, partly due to national surveys in the United Kingdom (UK), Australia, Asia and Ireland, which have consistently identified low levels of student satisfaction about feedback practices (Carless, 2006; HEFCE, 2015; Radloff & Coates, 2010). In Ireland, while the need to support student transition into Irish HE has been foregrounded by the Higher Education Authority (HEA, 2015), there would appear to be a disconnect between the potential of feedback in supporting transition, and feedback practice in Irish HE institutions. Mirroring international findings, successive student surveys in Ireland have revealed concerns surrounding feedback practices, particularly in relation to first year. For example, the Irish Survey of Student Engagement (ISSE), found that nationally, 23.3% of first year undergraduate students never and 44.9% only sometimes received timely written or oral feedback from teachers on their academic performance (ISSE, 2014). These findings emerge in the context of political and contextual challenges, most notably, the massification of Irish HE against the backdrop of austerity, which has largely been accommodated through larger teaching workloads and growing class sizes.

Project Overview

Supporting Transition: Enhancing Feedback in First Year Using Digital Technologies (Y1Feedback) is a two-year project (January 2015-January 2017) funded by the Irish [National Forum for the Enhancement of Teaching and Learning in Higher Education](#). The project is led by Maynooth University in partnership with Athlone Institute of Technology, Dublin City University and Dundalk Institute of Technology. The project seeks to directly respond to concerns around student transition and feedback in first year by enhancing feedback dialogue in first year undergraduate programmes through the use of digital technologies. In particular, the project seeks to identify and develop case studies of technology-enabled feedback approaches that might be particularly useful in supporting students in their first year of study. The project consists of three main phases of activity: a review of current feedback practices within partner institutions, a synthesis of the literature in relation to feedback in HE, and case study development of feedback approaches.

Phase 1: Feedback in First Year - A Landscape Snapshot

This review of current feedback practice was undertaken to increase our awareness of feedback practices in first year within participating institutions. It was conducted from April to June 2015 and utilised a mixed methods approach consisting of a staff online questionnaire and student focus groups across all four institutions. Semi-structured focus groups were conducted, one in each of the four participating institutions with 36 first year class representatives participating from across a wide range of disciplines. In total, 213 (30% of target population) staff participated in the online questionnaire, which sought to explore staff perceptions of feedback and feedback practices in first year. Due to the qualitative nature of the study and the self-selecting nature of participants, it is acknowledged that it may not be possible to generalise the findings to a wider population. High level findings are as follows:

- **Students' experience of feedback in first year is inconsistent.** While there were positive feedback examples, there seemed to be considerable variation in the student experience, from references to delayed feedback, to the absence of feedback entirely. Moreover, students often perceived feedback practices to be lecturer dependent. In contrast, the majority of staff reported providing feedback within two weeks or less.
- **Feedback approaches are lecturer dependent.** Considerable diversity of feedback approaches was evident among staff, often related to individual preferences. Written and oral methods (e.g., grades and comments returned on papers, one-to-one discussions or collective reviews), particularly those provided in-class, were commonplace. Limited use of rubrics was evident; where rubrics were employed, students did note advantages, especially in signposting what was required in the assessment task.
- **Grade as feedback.** Grades are recognised as a form of feedback by students and staff. However, the staff perception that students are exclusively interested in the awarded grade would seem to be incorrect. Rather, students view grades alone as insufficient, with a strong preference for more comments to clarify exactly where they are going wrong, and how they can/could improve.
- **Low use of peer feedback.** Few staff or students described any use or experience of formal peer involvement in feedback. Students viewed peer feedback apprehensively, with the perceived academic standing of the peer determining the value of the feedback. In addition, there appeared to be low levels of awareness of the potential benefits of peer feedback among staff.
- **Limited use of technology.** E-submission was utilised more widely than e-marking or e-feedback. Examples of technology-enabled feedback approaches were limited to a small number of explicit examples such as online feedback comments, audio feedback, and screencasts.
- **Challenges.** Staff highlighted several challenges in relation to the provision of timely, individual and quality feedback in first year including: lack of time, large classes, heavy workloads, and lack of student engagement with feedback.
- **Student recommendations.** Student recommendations for improvements to feedback practices centered around three main themes: greater consistency in feedback practices across first year modules, more feedback to support ongoing academic improvement, and more timely feedback.
- **Shared value of feedback conversations.** Students and staff valued the opportunity to engage in a dialogue about the academic work. Interestingly, both staff and student recommended a combination of written and oral feedback from lecturers as the ideal feedback approach.

Phase 2: Effective Feedback in First Year: Features & Approaches

The project conducted a synthesis of the literature in relation to feedback in HE, feedback and first year transition, and feedback and technology (Y1Feedback, 2016b). The project found that contemporary perspectives on feedback in HE highlight that feedback should: take place in formal and informal learning settings beyond assessment, feedforward to future work, and be a dialogic process that ultimately supports learners to become self-regulating. Furthermore, in the context of the first year, fostering competence, motivation, and a sense of belonging was identified as key to student success and retention. It is also essential to scaffold the development of students' assessment and feedback literacies as they adjust to the challenges of learning at in HE. Moreover, technology-enabled feedback provision can play an important role in supporting the development of students' digital literacies. From the synthesis of the literature, the project has identified eight features of effective feedback in the first year:

- promotes feedback both within and beyond assessed work;
- supports the embedding of student assessment and feedback literacies;
- fosters student competence, motivation, and belonging;
- provides opportunities for dialogic feedback among teachers and peers;
- feeds forward to future work;
- supports the development of digital literacies;
- employs consistent and co-ordinated approaches to feedback across programmes of study; and
- fosters sustainable feedback practices that encourage self-regulated learning.

In conjunction with the identified features, a number of formal and informal feedback approaches were identified:

- **Peer feedback.** Peer feedback gives students the opportunity to construct and receive feedback, which can support and improve learning (Falchikov, 2004; Nicol, Thomson & Breslin, 2014). It also engages students with issues in relation to quality and standards, thus scaffolding the transition towards self-regulation (Nicol et al., 2014).
- **Marking guides, rubrics and exemplars.** Marking guides, rubrics and exemplars can help students to understand the expectations and standards associated with a particular assessment, and with their subject discipline (Carless, 2015; Panadero & Jonsson, 2013). They can also support transparency, consistency, and efficiency in provision of feedback (Carless, 2015; Reddy & Andrade, 2010).
- **In class dialogue and feedback.** Many first-year students can feel uncomfortable contributing to a large class. However, it is suggested that approaches such as ‘boot grit’ feedback (Hounsell, 2015) are less intimidating ways to encourage discussion and feedback both within, and beyond, the classroom, and thus may be particularly useful in the context of the first year. Other approaches include the use of audience response systems and social software tools such as Padlet or Twitter.
- **Separating grades and feedback.** While grades and feedback are typically simultaneously issued to students, several authors have argued that grades can act as a distraction from feedback (Gibbs, 2015; Sutton & Gill, 2010). Recent studies have shown that separating grades and feedback can encourage student engagement with feedback, and has been demonstrated to increase the perceived value of feedback by students (Hepplestone et al., 2010; Jackson & Marks, 2015).
- **Feedforward strategies.** Ensuring that links between assessment tasks are explicit is essential to supporting feedforward between assessment tasks (Price et al., 2010). A number of strategies for promoting feedforward can be employed, including flipping feedback, multi-stage assignments, and linked assignments. These approaches enable the locus of feedback to shift from end of task, to in-task meaning feedback becomes “prospective rather than retrospective” (Hounsell, 2015: 2). This can be an effective way to promote engagement with feedback, as well as generating an opportunity for students to utilise it (Carless, 2015; O’Donovan et al., 2015).
- **Generic feedback.** Generic, whole-class feedback on draft work in progress can be an effective way to provide timely feedback, particularly in the context of large classes. It is argued that this approach can be more effective than individualised feedback that comes too late for students to engage with or apply (Gibbs, 2015; O’Donovan et al., 2015).
- **Anticipatory feedback.** End of semester exams continue to play a major role in the assessment of student learning in Irish HE and the grade that students receive may be the only form of feedback they receive on their work. Anticipatory approaches to feedback on exams in the form of class and peer discussion around past papers can enable students to identify gaps between their current and required level of performance.
- **Programmatic approaches.** Programme-wide approaches to feedback could complement programme assessment strategies by promoting feedforward between assessment tasks across a programme (Boud & Molloy, 2013; Carless, 2015; O’Donovan et al., 2015). Both Gibbs (2015) and Jessop et al. (2014) point to the need for programme teams to work together to develop a shared culture in relation to issues such as consistency and timing of feedback. While the literature suggests a number of ways in which programmatic approaches to feedback might be actualised, there is scant evidence of their application.

Phase 3: Case Studies of Technology-Enabled Feedback Approaches

Phase three focuses on how technology support implementation of identified feedback approaches. Suggested potential affordances of technology for feedback include: support for the provision of a greater volume of timely feedback; improved student understanding of, and engagement with, feedback; greater variety in feedback formats and approaches; support for dialogic feedback opportunities; and greater flexibility and accessibility in relation to feedback access and use. (Y1Feedback, 2016a). Technologies that may support the feedback approaches above include online written feedback tools, audio-visual feedback, peer feedback technologies, e-portfolios, automated feedback tools, audience response systems, and learning analytics.

Currently, 20 case studies are in progress across the four partner institutions, which are due for completion in January 2017. The case studies are being developed in partnership with 32 academic staff across 16 different

disciplines with class sizes ranging from 10 to 750 students. A selection of the case studies is listed below:

- Real-Time Feedback in Engineering Using a Graphical App-Based Audience Response System
- Embedding Dialogic and Sustainable Approaches to Feedback in a First Year Critical Skills Module
- Use of E-portfolios to Map Student Competences and Enable Timely Dialogic Feedback for Work-based Learning in a Social Care Setting
- Using Screencasting for Rich Summative Feedback on Handwritten Lab Reports in Science and Engineering
- Using PeerWise for Student Feedback in an Online Distance Module
- Providing Feedback through Learning Analytics in First Year
- Using Rubrics to Promote Engagement with Formative Feedback in Applied Social Care
- Using Screencasts to Promote Engagement with Formative Feedback as part of a Multi-Staged Assessment in a Sports, Exercise and Enterprise Module

Reflections on Phase 3

While the project is ongoing, there are a number of reflections on case study implementation to date:

1. **Approaches not Technology.** The project began with the assumption that our main focus would be on identifying appropriate technologies and developing staff capability in these. In reality, the project has found that to enhance feedback dialogue in first year, the primary focus needs to be on raising awareness on contemporary perspectives of feedback and feedback approaches, and in developing staff capability in this area.
2. **Investment in Time vs. Learning Benefits.** The project has found that implementing dialogic feedback approaches, while pedagogically beneficial, can be considered more time-consuming by staff, and outside of pilot project, potentially unsustainable.
3. **No Grade = Lower Engagement.** Engagement by students in ongoing and informal feedback activities has been significantly lower than in graded activities or assignments, in some cases less than 40% student engagement. A key challenge is how can we better engage students in on-going non-graded feedback activities.
4. **EdTech Maturity?** In implementing technology-enabled feedback approaches, we have found that the maturity, flexibility and sustainability of the best-available technology can be an issue, particularly in the case of peer feedback technologies for large groups.
5. **Beyond Champions.** A key challenge and question for future work is 'How do we progress beyond working with innovation champions on modules towards programme team collaboration and buy-in?'

Future Work

This paper provided a set of features of effective feedback for first year together with approaches to support the implementation of these features. The need for programmatic approaches to feedback was highlighted as particularly important towards embedding feedback approaches that can support effective feedback strategies in first year. While the evidence of programmatic feedback approaches is scarce, it is sufficient to encourage further research, which could focus on the development and evaluation of approaches, processes and tools to support programme teams in developing programmatic approaches to assessment and feedback.

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