# Y1Feedback - The Story so Far: Progress and Reflections from an Irish Multiinstitutional Learning and Teaching Enhancement Project\*

Lisa O'Regan,† Nuala Harding,§

Mark Brown,<sup>‡</sup> Moira Maguire,<sup>#</sup>

Geraldine McDermott, §. Seamus Ryan, §

Orna Farrell, David Cranny,#

Gerry Gallagher,# Conor McKevitt.#

†Maynooth University

†Dublin City University

§ Athlone Institute of Technology

# Dundalk Institite of Technology

### **Abstract**

The Y1Feedback Project is a multi-institutional learning and teaching enhancement project that aims to support the transition to Higher Education by using digital technologies to enhance feedback in the first year. The project is funded by the National Forum for the Enhancement of Teaching and Learning in HE under the 2014 Enhancement fund. This paper outlines the project development and progress, with particular focus on identification of the feedback approaches that we are developing case studies of as part of this initiative. Although the project is not complete, the outcome of initial evaluations is reported and we reflect on the process and challenges encountered.

Keywords: Assessment, Digital Technologies; Feedback; First year; Higher Education, Transition.

<sup>\* (</sup>Insert Article type via "File|Properties|Custom Properties"). URL: http://ojs.aishe.org/index.php/aishe-j/article/view/299





## 1. Background

The role of feedback in supporting and enhancing learning is widely recognised (Carless, Salter, Yang, & Lam, 2011; Hattie & Timperley, 2007; Merry, Price, Carless, & Taras, 2013) and feedback is central to Assessment for Learning. By identifying the gaps between performance and expectation and offering advice on how to close this gap, good feedback facilitates student success and supports students as they develop academic identities within their disciplines. Students themselves have identified feedback as essential to the development of academic writing (e.g. Everitt-Reynolds et al., forthcoming). It is also clear that feedback has the potential to play a key role in supporting and enhancing the transition to Higher Education (HE). In particular, good quality feedback can promote a sense of belonging (Bird & Yucel, 2015) and this is recognised as a key element in transition (Thomas, 2012). Despite this, evidence indicates that students in HE are often dissatisfied with their feedback (or lack thereof) (e.g. Carless, 2006). The Irish Survey of Student Engagement (ISSE) indicates that this is also an issue in the Irish context. In the 2014 and 2015 ISSE surveys students were asked how often they received timely written or oral feedback on their work. In 2014 23.3% of first-year students responded 'never' and 44.9% 'sometimes' and in 2015 it was 21% and 47% respectively. These findings do suggest that the potential of feedback in supporting transition is not being harnessed and clearly there is scope to improve students' experiences of feedback.

This paper reports on a two-year multi-institutional project, Y1Feedback, funded by the National Forum for the Enhancement of Teaching and Learning in Higher Education. A guiding principle of this project is that enhancing feedback supports 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 (Tinto 2005, Poulos and Mahony 2008, Nicol 2009, Kift 2015). Despite this, the student experience of feedback remains problematic, as is the case outside of Ireland (Carless 2006, James and Carless 2006, James, Krause and Jennings 2010, Price, Handley, Millar and O'Donovan, 2010, Radloff and Coates 2010, Jessop, El Hakim and Gibbs 2014, Mulliner and Tucker 2015, cited in Y1Feedback, 2016b).

The gap between the potential and practice of feedback in first year, has been influenced by a number of political, contextual, and practical challenges. In particular, Irish HE has been operating under resourcing constraints. Between 2008-2014, Irish HE accommodated 25,000 extra students, while at the same time core expenditure by student was reduced by 15%, with staff number reduced by 2000 (HEA, 2014) The consequence has been higher

staff-student ratios and significant workload increases for academic staff. Given this context, the project set out to harness the potential offered by digital technologies to improve the experience from the perspective of both students and staff. The project aims to identify and develop case studies of technology enabled feedback approaches approaches for first year. In this paper, we discuss the work and findings to date and we reflect on the process of being involved in a multi-institutional enhancement project.

#### 2. The Project.

The National Forum for the Enhancement of Teaching and Learning in Higher Education (NFETL) was established in 2012 to facilitate the implementation of the recommendations of the National Strategy for Higher Education to 2030. The NFETL consulted widely, albeit over a relatively short period, on enhancing digital capacity in HE and published the insights and principles that emerged in the Digital Roadmap, Building Digital Capacity in Higher Education (NFELT, 2014). In 2014, the National Forum launched the Teaching and Learning Enhancement fund. The first phase of this fund seeks to strategically lever collaboration and partnership to promote innovation and transformation within the sector, particularly in terms of addressing the Digital Roadmap recommendations. The Y1Feedback project was one of seven projects funded under the 2014 Enhancement Fund. It is a two-year project and, at time of publication is almost complete, having a further 4 months to run. 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 supportingstudents 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 the identification and development of a range of technology-enabled feedback case studies (see Figure 1).

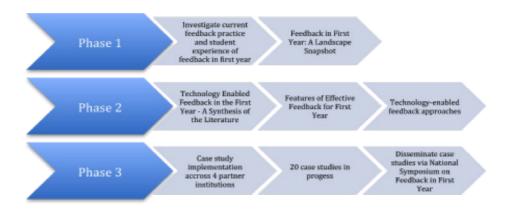


Figure 1: Y1 Feedback Project Phases.

The project phases are illustrated in Figure 1. The initial phase of the project was concerned with establishing the team and the scope of the project. We realised that, in order to identify appropriate approaches and enhancements, we needed to develop our understanding of beliefs and behaviour around feedback across our institutions. Between April and June 2015, we undertook a review of current feedback practice and experience in first year across the four partner institutions, looking at both staff and student perspectives. This is reported in detail in Feedback in First Year: A Landscape Snapshot Across Four Irish Higher Education Institutions (Y1 Feedback, 2016a) and we offer only a brief summary here. It was clear from our findings that both staff and students valued feedback and considered it to be integral to learning and both consider dialogue to be very important. While this is encouraging, it was also clear that, for both, their experiences often fell short of this ideal. Students reported very inconsistent experiences of feedback and perceived feedback provision and quality as dependent on individual lecturers. The feedback practices reported by lecturers were also variable and lecturers highlighted time and workload as major barriers to giving timely and quality feedback. Many also felt that students were uninterested in feedback and/or not adequately prepared to engage with it.

Interestingly, while many staff felt that students were interested in grades rather than feedback, the evidence from students does not support this. When asked how to improve feedback, students recommended greater consistency, more feedback content and faster feedback. Formal peer feedback was rarely reported by either students of staff and students were sceptical of its value. That said, they reported a good deal of informal, unstructured peer feedback particularly through informal or online social network spaces; certainly their concerns seem to be focused on formal peer assessment and feedback, perhaps because they perceive themselves as having less control in these situations that in the informal ones that

they themselves initiate. This is certainly something that we feel is worth exploring further research. It was notable that technology-enabled feedback approaches were little used, despite the fact that it was relatively common for students to submit work via the online virtual environment, namely Moodle. In summary, the review of current practice found that feedback was valued by students and staff but that, for both parties, the potential benefits were often not realised.

In next phase of work, we conducted a synthesis of the contemporary literature in relation to feedback, first year, and technology-enabled feedback approaches to inform the project and provide an evidence-based framework for identifying and developing the case studies. The study, Technology-Enabled Feedback in the First Year: A Synthesis of the Literature is available as a report (Y1Feedback, 2016b), and, as before, we include only a synopsis of the key points. Current perspectives on feedback emphasise feedback as a dialogic and ultimately sustainable process that supports self-regulated learning. Particularly in terms of the first-year, evidence indicates that support is needed for students to develop assessment and feedback literacy and this chimes with the views of many staff in our review of current practice. Importantly from the perspective of the project, the evidence shows that technology-enabled feedback provision can play an important role in supporting the development of students' digital literacies. From the synthesis of the literature we identified eight features of effective feedback in the first year, which are detailed in Table 1.

- · 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;
- Fosters sustainable feedback practices that encourage self-regulated learning.

Table 1: Features of effective feedback in the first year.

Both the review and literature synthesis became bigger pieces of work than originally envisaged, and consequently took longer to implement. However, the depth and breadth of both studies was essential in terms of developing a framework for exploring feedback within our local contexts. The review of current practice allowed us to open dialogue around feedback with staff and students within our institutions and it increased awareness of the project. While the staff who participated were obviously a self-selected sample, it seemed

reasonable to assume that those willing to participate in the survey would be among those more likely to become involved with the project (as the survey was anonymous we were not able to check this). From this perspective, the review provided us with useful information about their technology use to inform the case studies. Given the low use of technology reported, and the barriers to increasing this (IT infrastructure, support etc.) we felt it was important where possible to focus using technologies, such as the Moodle VLE or Turnitin text matching software, that were already familiar to staff even if they themselves did not use them for feedback. It was also important that any technologies used would be sustainable beyond the life of the project - to this end we were careful not to select technologies that required investment in infrastructure, significant IT support or expensive licenses that could not be maintained beyond the life of the project. Where possible we were careful to identify free-touse technologies. When identifying technologies we focussed on the potential affordances they offered. These 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, 2016b).

Drawing on the principles and evidence identified in the literature synthesis and the findings of the current practice review, we identified a number of specific approaches that we wanted to explore. These are identified in Table 2 overleaf.

While this work was ongoing we were also actively seeking academic partners within our institutions to pilot and develop case studies of specific feedback and technology-enabled feedback approaches. As mentioned previously, the current practice review played an important role in raising awareness of the project; however we also ran information sessions and feedback focused staff development sessions and initiatives, for example Feedback Fridays. Once staff expressed an interest in the project a member of the local team held an exploratory meeting with them. If a potential case-study was identified, the team then worked with the member/s of staff to identify appropriate approach(es) and supporting technology where appropriate and to plan the case study implementation. As part of this we identified training or development needs around the technologies, but also in good practice around feedback.

Approach.	Current Practice Review.	Evidence from the literature.
Generic Feedback: Timely whole class feedback on drafts or work-in-progress.	Heavy workloads and large classes are a barrier to timely individualised feedback.  Students report that feedback is too late to be useful	There is evidence to suggest that timely generic feedback may be more beneficial that individual feedback that is too late to apply (Gibbs, 2015; O'Donovan et al., 2015).
Anticipatory feedback	End-of-semester exams are widely used yet students rarely receive feedback on them.	An example of anticipatory feedback, is by facilitating class and peer discussion around how past papers can be approached. However, as Carless (2010) points out that this approach needs to go beyond exam tips and engage students in mastering material.
Feedforward Strategies: Strategies that make the links between assessments explicit, e.g. multi-stage.	These would support the development of assessment literacy particularly as staff feel that students need support to engage with feedback.  Feedback would be provided in time for students to apply	(Hounsell, 2015: 2). This can be an effective
Marking guides, rubrics and exemplars.		These have been shown to facilitate student understandings of expectations and standards (Carless, 2015; Panadero & Jonsson, 2013). The support transparency, consistency and efficiency (Carless, 2015; Reddy & Andrade, 2010).
Feedback (Including	These approaches would provide ongoing, timely and efficient feedback.	These may provide unthreatening opportunities to engage in discussion and (Hounsell, 2015). They provide opportunities for dialogic feedback and can support the development of digital literacy.
Separating grades and feedback.	This would support students to engage with feedback  Address the staff perception that they are more interested in the grade.	Several authors have argued that grades can act as a distraction from feedback (Gibbs, 2015; Sutton & Gill, 2010). Recent studies have shown that this approach 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).
Peer Feedback.	Despite the resistance to formal peer feedback, students engage in considerable informal peer feedback.	construct and receive feedback, which can

Table 2: Approaches to feedback as informed the literature synthesis and review of current practice.

At the time of publication, 27 case studies are in progress or complete across the four partner institutions. All are due to complete by January 2017. The case studies are being developed in partnership with 32 academic staff across 18 different disciplines with class sizes ranging from 10 to 750 students. A selection of the case studies is outlined in Table 3. There was a good deal of interest in the project across the institutions however not all the pilots initiated became case studies. The attrition rate was between 30 and 50%, generally because of lecturer workload, although personal circumstances also played a role in some cases.

Partner Institution	Case Study Title
Maynooth University	<ul> <li>Real-Time Feedback in Engineering Using A Graphical App-Based Audience Response System</li> <li>Embedding Dialogic and Sustainable Approaches to Feedback in a First Year Critical Skills Module</li> </ul>
Athlone Institute of Technology	<ul> <li>Use of E-portfolios to Map Student Competences and Enable Timely Dialogic Feedback for Work-based Learning in a Social Care Setting</li> <li>Using Screencasting for Rich Summative Feedback on Handwritten Lab Reports in Science and Engineering</li> </ul>
Dublin City University	<ul> <li>Using PeerWise for Student Feedback in an Online Distance Module</li> <li>Providing Feedback through Learning Analytics in First Year</li> </ul>
Dundalk Institute of Technology	<ul> <li>Using Rubrics to Promote Engagement with Formative Feedback in Applied Social Care</li> <li>Using Turnitin to provide formative feedback on use of information as part of the 2016 Information Literacy Prize for First-years.</li> </ul>

Table 3: Selection of Y1 Feedback case studies.

### 2.1 Focus and impact of the project.

Perhaps unsurprisingly, the focus on the project changed as the work developed. Initially we had assumed that the project would focus on identifying technologies and supporting digital literacy among staff. However, as we began to work with staff on the case studies we realised that we needed to take a 'step back' and focus on the principles of good assessment and feedback. In some cases, particularly where the technologies themselves were familiar to staff (e.g. Moodle, Turnitin) little support was needed on the digital side. Essentially, what began as an e-learning project evolved into an education development one. For us, perhaps the biggest lesson has been that 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. To support this we ran professional development sessions on assessment and feedback in all participating institutions. It is difficult to estimate the impact of this work, particularly at such an early stage. However, in terms of promoting good practice and building capacity at the broader institutional level and influencing institutional practices and policies, it is likely that this aspect of the project will be at least as influential as the individual case studies. The issue of impact is an important one. All of the case studies include an evaluation that focuses directly on the impact of the project on the beliefs and behaviour of students and staff. The evaluations available to date indicate that the approaches piloted have had a positive impact. In particular, students report that the feedback was accessible and that they were able to apply it. They have also been generally positive about the various digital formats (online written, audio, video) used to convey the feedback. However, the first round of case-studies also indicate that student engagement in purely formative activities is low, in some cases below 40% on informal, non-graded activities. While this is may not be surprising to many lecturers, engaging students in formative assessment and feedback remains a significant challenge.

Staff too have reported positive effects of the approaches, particularly in terms of student learning and engagement. Workload remains a significant challenge to transforming practice. Quite a few lecturers who were interested in piloting approaches found themselves unable to commit to following this through. In some other cases it is clear that implementing dialogic feedback approaches, while pedagogically beneficial, can be time consuming to the point where they are not sustainable without the support available as part of the pilot. This is particularly the case in relation to peer-feedback activities, where the technologies used to support feedback could not support the process. On the other hand, it is encouraging that a number of case study partners plan to continue to implement the approaches piloted in first year modules. While it is difficult to draw conclusions at this stage when approximately two—thirds of the cases are yet to be evaluated. In terms of impact and sustainability it is important that these approaches progress beyond individual modules and 'champion' lecturers. A key challenge is 'How do we progress beyond working with innovation champions on modules towards programme team collaboration and buy-in?'

#### 2.2 Reflections and further work.

A key area for further research and work, that we have identified through the project, is the area of programme wide approaches to assessment and feedback. Unfortunately, it was not possible within the scope and timeline of the project to identify a case study to explore a programme wide approach. Implementing such approaches involves considerable negotiation and co-ordination between programme teams. This is obviously challenging for large teams, but even on programmes with small core team there is usually input from a great many other colleagues who are involved with many other programmes and have limited capacity to focus on one. It is clear that developing a programmatic approach and securing lecturer commitment to this needs space, structure, and senior management support within the institutional context and these are beyond the scope of this project. For example, in the Institute of Technology (IoT) sector, the 5-yearly programmatic review cycle offers programme teams an opportunity to reflect on and enhance their programmes. Given current workloads though this is not something that colleagues can realistically consider outside of this cycle however there is certainly potential for the project to feedforward into this process. However, the Y1Feedback team is currently working with colleagues to explore ways to support programme teams to begin to discuss programmatic approaches in a structured way. We hope that this work will inform wider discussions around assessment policies and procedures. Realistically, the full impact of this project will not be clear until well after its completion. While very much an emerging area, there is increasing interest in examining and evaluating the impact of learning and teaching projects and a number of frameworks have been developed. One of these is 7 ID Framework (Brown, Brunton & Costello, 2016), which identifies seven dimensions of impact and recognises that impact can be positive, negative and unforeseen. Currently there is no funding framework for assessing impact of these enhancement projects (beyond the very immediate impact), but this is something that would be of great benefit to the sector.

## 2.3 Ethics and enhancement projects.

Learning and teaching enhancement projects such as this one usually involve some data collection, as part of the evaluation process and, as in our case, as part of the preparatory work. This project is not a pure or conventional research project; the goal is to enhance learning and transition in first year. We hope that the work will also contribute to scholarship in the field, but this is a secondary aim. Nonetheless the project (i) has the potential to directly impact students' learning experiences and (ii) involves lecturers, so the power differential may affect students' capacity to freely consent. Given these features it was essential that all data

collection was ethically approved. This was an important stage of the process and was very helpful in developing an approach to the work that prioritised the student experience. However we were struck by how long and difficult this process was for this type of project. We had to obtain ethical clearance separately in each institution. Only one Research Ethics Committee was prepared to accept applications approved elsewhere for expedited review. Committees varied considerably in how frequently they met and how they approached the project. This is an issue that is likely to be faced by many more as the number of collaborative learning enhancement projects increases. Given the contexts and approaches are similar in many of these, we suggest that this is an issue that is worth exploring at a national level, perhaps with a view to developing an ethical framework for enhancement projects, or guidance at the very least.

#### 3. Concluding Comments.

This paper summarised the work to date of the Y1Feedback project and highlighted some of the key challenges and lessons learnt. It is difficult to assess the impact of the project and others like it, at such an early stage, but the early indications are positive. However, the real challenge is to identify ways to support the development of programmatic approaches to feedback within our resource poor contexts and to develop ways to evaluate them. Such an approach is likely to remain a challenge beyond the life of this project.

## 4. References.

- Bird, F.L. and Yucel, R. (2015). Feedback codes and action plans: Building the capacity of first-year students to apply feedback to a scientific report. Assessment & Evaluation in Higher Education, 40(4), pp.508-527.
- Boud, D., & Molloy, E. (Eds.). (2013). Feedback in higher and professional education: Understanding it and doing it well. Oxon: Routledge.
- Brown, M, Brunton, J. & Costello, E. (2016). *The 7 ID Evaluation Framework.* Dublin: National Institute for Digital Learning, DCU.
- Carless, D. (2006). Differing perceptions in the feedback process. *Studies in Higher Education*, 31(2), 219-233.
- Carless, D. (2010). From testing to productive student learning: Implementing formative a ssessment. Routledge.
- Carless, D. (2015). Excellence in university assessment: Learning from award-winning practice. Oxon: Routledge.
- Carless, D., Salter, D., Yang, M., & Lam, J. (2011). Developing sustainable feedback practices. *Studies in Higher Education*, 36(4), 395-407.
- Everitt Reynolds, A E, Maguire, M & Delahunt, B. (forthcoming). 'They don't want my opinion d o they?': Authorial identity and the transition into Higher education. In Spelman Miller, K. Lindgren, E. & Stevenson, M. (eds). Transitions in Writing. Brill.
- Falchikov, N. (2004). *Improving assessment through student involvement: Practical solutions for aiding learning in higher and further education* Routledge.
- Gibbs, G. (2015). 53 powerful ideas all teachers should know about. SEDA.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81-112.
- HEA (2014). Higher Education system performance. First report 2014 -2016. Report of the Higher Education authority to the minister for education and skills. Dublin: Higher Education Authority (HEA).
- Hepplestone, S., Parkin, H., Irwin, B., Holden, G., Thorpe, L., & Burn, C. (2010). Using t echnology to help students engage with their feedback. A best practice guide for academic staff. Sheffield Hallam University.
- Hounsell, D. (2015). Commenting constructively: Feedback to Make a Difference. Wise assessment briefing no. 11. Retrieved 12/2, 2015, from http://www.cetl.hku.hk/wise-assessment-forum/wp-content/uploads/2015/08/wise-assessment-briefing11.pdf
- ISSE. (2014). The Irish survey of student engagement (ISSE) 2014. Dublin: Higher Education Authority (HEA).
- Jackson, M., & Marks, L. (2015). Improving the effectiveness of feedback by use of assessed reflections and withholding of grades. Assessment & Evaluation in Higher Education, 41(4), 1-16.
- James, R., Krause, K. and Jennings, C. (2010). The first year experience in Australian universities. Findings from 1994 to 2009. Canberra, Australia: Department of Education, Employment and Workplace Relations (DEEWR).

- Jessop, T., El Hakim, Y., & Gibbs, G. (2014). The whole is greater than the sum of its parts: A large-scale study of students' learning in response to different programme assessment patterns. Assessment & Evaluation in Higher Education, 39(1), 73-88.
- Kift, S. (2015). A decade of transition pedagogy: A quantum leap in conceptualising the first year experience. *HERDSA Review of Higher Education*, 2, 51-86.
- Merry, S., Price, M., Carless, D., & Taras, M. (2013). *Reconceptualising feedback in higher education: Developing dialogue with students.* Routledge.
- NFETL. (2014). Building digital capacity in Higher Education. Principles and first insights from the sectoral consultation with preliminary recommendations and actionable first steps. Dublin: National Forum for the Enhancement of Teaching and Learning in Irish Higher Education (NFETL).
- Nicol, D. (2009). Assessment for learner self-regulation: Enhancing achievement in the first year using learning technologies. *Assessment & Evaluation in Higher Education*, 34(3), 335-352.
- Nicol, D., Thomson, A., & Breslin, C. (2014). Rethinking feedback practices in higher education: A peer review perspective. <u>Assessment & Evaluation in Higher Education</u>, 39(1), 102-122.
- O'Donovan, B., Rust, C., & Price, M. (2015). A scholarly approach to solving the feedback dilemma in practice. *Assessment & Evaluation in Higher Education*, 41(6), 1-12.
- Panadero, E., & Jonsson, A. (2013). The use of scoring rubrics for formative assessment purposes revisited: A review. *Educational Research Review*, 9, 129-144.
- Poulos, A. and Mahony, M.J. (2008). Effectiveness of feedback: The students' perspective. Assessment & Evaluation in Higher Education, 33(2), 143-154.
- Price, M., Handley, K., Millar, J., & O'Donovan, B. (2010). Feedback: All that effort, but what is the effect? *Assessment & Evaluation in Higher Education*, 35(3), 277-289.
- Radloff, A., & Coates, H. (2010). Doing more for learning: Enhancing engagement and outcomes: Australasian survey of student engagement: Australasian student engagement report. Camberwell: Australian Council for Educational Research (ACER).
- Reddy, Y. M., & Andrade, H. (2010). A review of rubric use in higher education. Assessment & Evaluation in Higher Education, 35(4), 435-448.
- Sadler, D. R. (2010). Beyond feedback: Developing student capability in complex appraisal. Assessment & Evaluation in Higher Education, 35(5), 535-550.
- Sutton, P., & Gill, W. (2010). Engaging feedback: Meaning, identity and power. *Practitioner Research in Higher Education*, 4(1), 3-13.
- Tinto, V. (2005). Taking student success seriously: Rethinking the first year of college. Paper Presented at the *Ninth Annual Intersession Academic Affairs Forum*, California State University, Fullerton, pp. 01.
- Thomas, L. (2012). Building student engagement and belonging in Higher Education at a time of change: final report from the what works? Student retention & success programme. The Paul Hamlyn Foundation.
- Y1Feedback (2016a). Feedback in First Year: A landscape Snapshot Across Four Irish HE Institutions. Available from http://y1feedback.ie/resources/publications/

Y1Feedback (2016b). *Technology-Enabled Feedback in the First Year: A Synthesis of the Literature*. Available from http://y1feedback.ie/resources/publications/