

Feedforward: a student-centred approach to bridge the feedback gap and improve student engagement and success

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Access to higher education is meaningless if support is not provided to engage, retain and promote lifelong learning attributes. Students, especially those who are first in their family to attend University, require a range of supports as they navigate their way through unfamiliar territory and become independent, lifelong learners. This presentation draws on recent literature which argues for the need to align approaches to assessment feedback with the concept of student-centred learning (Nicol and McFarlane-Dick, 2006; Evans, 2013; Carless, 2006). In so doing, the presentation conceptualises assessment feedback as a continuous dialogue between student and academic, rather than a simple transmission process from expert to novice. Drawing on the findings of an action research project, the presentation outlines the introduction of a feedback/feedforward tool at Western Sydney University, The College to demonstrate what a dialogic approach to feedback might look like in practice and its impact on students and staff.

INTRODUCTION

For almost a decade the Australian higher education sector has demonstrated a strong commitment to increasing participation and outcomes for students from traditionally under-represented groups. Known colloquially as the Bradley Review, an Australian government sponsored review of higher education in 2008 contended that the nation required far greater numbers of well qualified citizens to meet the needs of a dynamic global economy (Bradley et al., 2008). In order to increase the number of well qualified citizens, the review recommended that the nation “look to members of groups currently under-represented within the system, that is, those disadvantaged by the circumstances of their birth: Indigenous people, people with low socio-economic status, and those from regional and remote areas” (Bradley et al., 2008, p.xi). The Bradley Review’s expansion agenda established two key targets. First, 40 per cent of 25-34 year olds were to have a bachelor degree or higher by 2025; and second, 20 per cent of undergraduate enrolments were to be from low socio-economic backgrounds by 2020 (Bradley et al., 2008, p. 19). The case study discussed in this paper is best understood within the context of the Bradley Review and its impact on first year University cohorts.

The case study focusses on the development and impact of an assessment feedback and feedforward tool within the Diploma in Social Science at Western Sydney University, The College (known as The College). The College is situated within the Greater Western Sydney region of New South Wales which is traditionally an area of low participation in higher education. Students in this region have typically experienced educational disadvantage. The majority of students studying at The College are the first in their family to study at tertiary level. In 2016, first-in-family students comprised 70 per cent of enrolled

students. In addition, many students are from low socio-economic backgrounds (29 per cent in 2016) and from non-English speaking backgrounds. Students enrolled at The College generally have not met the entry requirements to commence a university degree. Hence, they enrol in a higher education diploma at The College from which they articulate into the second year of a prescribed degree. As such, The College is an institution whose very existence is a product of the Bradley Review's expansion agenda.

Widening access to higher education by providing alternative pathways is, however, meaningless if academic support is not provided to engage, retain and promote lifelong learning attributes amongst those students from previously under-represented groups. As Engstrom and Tinto contend, "access without support is not opportunity" (2008, p.46). Students, especially those who are first in their family to enrol in higher education, require a range of academic and non-academic supports as they navigate their way through unfamiliar territory and become independent, lifelong learners.

To support the participation of students from traditionally under-represented groups, The College's diplomas include academic skills and academic English units explicitly designed to induct students into academic culture and independent, lifelong learning. In addition, all units scaffold student learning and assessment as a means of supporting students in their first year of tertiary studies. However, until 2014 very little had been done to support students in interpreting, engaging with, and applying assessment feedback despite the fact that national and local student surveys consistently reveal a lack of student satisfaction in regard to learning from assessment feedback.

Employing an action research methodology, this presentation considers the impact on student results, student satisfaction and engagement within two diploma units at The College since the development and implementation of an assessment feedback and feedforward tool in 2014. The paper takes as its central premise the need not only to scaffold students into assessments, but to scaffold them into interpreting and learning from assessment feedback as well.

DISCUSSION

The extent of student dissatisfaction with feedback processes is documented in Australia via local and national student surveys conducted since the Bradley Review heralded an era of expanding higher education that, in turn, spawned governmental and institutional concerns about deteriorating student engagement and student outcomes.

A snapshot of the views of 2400 first year students from nine universities surveyed in Australia in 2009 showed that 77 per cent thought the quality of teaching was generally good, but only 35 per cent thought teaching staff gave helpful feedback on student progress (James et al., 2010). A report issued from this survey concluded that "the persistence of student perceptions of lack of adequate feedback is an ongoing issue for the sector" (James et al., 2010, p.69). Improvements have been made across the sector in this area since 2009, largely as a product of regulation and evaluation conducted by the Tertiary Education Quality Standards Agency which was established in 2011 to assure the quality of Australia's higher education sector. However, it is still the case that national and local student surveys generally reveal less student satisfaction in relation to learning from assessment feedback than other indicators of student satisfaction included in such surveys.

In 2014, the University Experience Survey (UES) elicited feedback on levels of student engagement and satisfaction across a range of measures, including learning from assessment feedback. The UES captured 108,322 responses from 99,112 students representing 40 higher education institutions across Australia (Australian Government, department of education and training, 2015). When asked whether teachers commented on student work in ways that help the student to learn, 48 per cent answered in the negative. This was despite the fact that in the same survey only 23 per cent of students felt that teachers had not set assessment tasks that challenged students to learn (Australian Government, department of education and training, 2015). Clearly improvements have been made in the quality and impact of assessment feedback given the reduction in negative responses between the 2009 survey of first year university students referred to previously and the 2014 UES. However, this aspect of teaching and learning continues to underperform relative to other indicators of student engagement and satisfaction.

At The College, student feedback on unit (SFU) surveys reflected a similar trend in the period 2010 to 2013. Even units with favourable student responses in relation to the quality of teaching received poor ratings in relation to questions concerning assessment feedback. The College SFU mean, for example, in 2013 for the question related to learning from feedback was 3.8 out of 5 compared to 4.2 out of 5 in response to a question related to the quality of teaching (Report: Student Feedback on Unit (SFU), 2010 – 2013). A snapshot of SFU comments between 2010 and 2013 include such responses as: ‘feedback needs to be more clear in order for me to understand where I went wrong and how I can improve’; ‘feels pointless... don't get much feedback, doesn't seem useful’; ‘I did not receive a great deal of feedback on assessments, making it difficult to track progress or correct any errors’; ‘following assessment tasks, verbal and written feedback was minimal or unrelated to the content’ (Report: Student Feedback on Unit (SFU), 2010 – 2013).

In recent years, much of the literature concerning assessment feedback and its role in supporting student learning has drawn attention to two inter-related issues: first, where a student-centred approach to teaching and learning is employed, there is a need to align feedback practices with this student-centred approach. Second, there is a need to bridge, or close, the feedback gap. That is, the gap between the feedback *given* to students and the feedback *used* by students. The feedback process is limited in its efficacy when students do not read their feedback or, if they do, they do not understand it or act on it.

As Nicol and MacFarlane-Dick (2006) observe, despite moves to student-centred approaches to teaching, approaches to assessment feedback have been slow to embrace a similar shift. It is not uncommon for feedback to be treated as an end product, a corrective to a discrete student performance. This is the traditional cognitivist view of feedback; “feedback as a gift from the teacher to the learner, where feedback is a one-way communication” with a passive recipient (Askew and Lodge, 2000, cited in Price et al., 2010, p.280). However, if we align feedback processes with a student-centred approach to teaching, we shift the focus to students as pro-active agents seeking out and acting on feedback rather than reactive novices. The invitation, then, is to approach feedback as a “supported sequential process rather than a series of unrelated events” (Archer, 2010, p.101). In this way, feedback itself is reinterpreted as a complex meaning-making process requiring dialogue and interpretation. This socio-constructivist approach to feedback encourages students to take control of their own learning, becoming self-regulated learners actively interpreting feedback in relation to their goals. I would argue that this

conceptualisation of feedback as dialogic and dynamic is necessary if we are to address the second issue: the feedback gap.

Feedback can only be effective when the learner understands the feedback and is willing and able to act on it. In the absence of this, we have a feedback gap. From the teacher's perspective, the inability of students to benefit from assessment feedback leads to frustration and despondency with the feedback process (Evans, 2013). The long hours spent marking and providing feedback seems wasted on students who take a cursory glance at their mark only, or read the feedback but repeat the same mistakes in their next assessment. Moreover, if teachers see feedback as the end product of a discrete assessment performance, then little attention is given to the impact of that feedback.

In a recent study of students and staff in the UK, Price et al. found that, in regard to assessment feedback, most teachers live with "dissonance about its benefits and their beliefs about the limited extent of student engagement but rarely attempted to measure the effect of the feedback they provide" (Price et al., 2010, p.282). Hounsell et al. add to this perspective with their analysis of 782 student questionnaires and 23 group interviews about assessment feedback undertaken in 2008. They contend that some teachers appear to "take it for granted that their expectations of academic work were relatively self-evident, that their feedback comments were transparent in their meaning...or that students would know how to remedy any shortcomings identified" (Hounsell et al., 2008, p.56).

If we maintain a cognitivist, one-way transmission approach to feedback, we will continue to assume that the corrective messages from teacher to student are easily decoded and translated into action by the student. However, as Nicol and MacFarlane-Dick demonstrate, "there is strong evidence that feedback messages are invariably complex and difficult to decipher, and that students require opportunities to construct actively an understanding of them before they can be used to regulate performance" (2006, p.201). As one student interviewed by Price et al. remarked: 'What does clarify your aims and objectives mean?' (2006, p.284). Although such feedback seems clear and concise to those of us immersed in academic culture, we need to be cognisant of the fact that for students – especially first year students from traditionally under-represented groups – such comments are not self-evident. A feedback gap exists. The challenge for educators, therefore, is to bridge the feedback gap and help to turn access into success.

The concept of assessment feedforward has been promoted in recent years in various guises. Sometimes referred to as assessment *for* learning rather than assessment *of* learning, the concept is premised on the view that feedforward offers constructive guidance on how the student can improve. Drawing on this premise, I introduced teaching staff within the Diploma in Social Science at The College to the concept of feedforward and together we developed an assessment feedback/feedforward tool which was first implemented in 2014. As the impact on student results and student satisfaction within the Diploma in Social Science became clear, and a similar impact was seen over three consecutive years, the practice of feedforward was rolled out across The College from 2016 and is now being implemented in a range of ways, dependent on the discipline area and assessment modes.

I first want to focus on the tool itself and demonstrate its impact on student success and engagement in two core Social Science units for which longitudinal data exists. Although the tool is used now across a range of units at The College, especially in the Humanities and

Social Sciences, the data for other units has not yet been analysed fully, although anecdotal evidence from teachers is positive.

The feedback/feedforward tool requires students to engage actively with the feedback they receive on each assessment within a particular unit, with the exception of the final exam. Time is provided in class for students to review their feedback on an assessment and complete the first part of the feedback/feedforward tool. This involves the student distilling from their feedback three key areas for improvement and identifying the strategies they will use to improve in those three areas in the next assessment. When the next assessment is written, but prior to submission, the final part of the feedback/feedforward tool is completed by the student. This involves the student reflecting on, and evaluating, how well they implemented the strategies for improvement in the new assessment. The feedback/feedforward tool is then attached to the assessment and submitted for marking. The assessment criteria include the use and efficacy of the feedback/feedforward tool by the student.

By spending time in class on the tool, feedback is integrated into the teaching environment and involves students more actively in the planned use of their feedback. The tool scaffolds students into appreciating the importance of feedback, how to interpret it, and how to act on it. It also supports a socio-constructivist approach to feedback as a continuous dialogue between teacher and student and not a simple, one-way transmission, contained within a single assessment performance.

Carless (2006) refers to feedback as conversation and collaboration. This is a useful way to view the approach taken at The College. Through the use of the feedback/feedforward tool, students are able to engage the teacher in a verbal dialogue regarding their feedback during class, if necessary, followed by a written dialogue that continues between teacher and student as each assessment is completed and the feedback/feedforward tool is attached to the subsequent assessment submission. This dialogic process helps to establish a shared purpose for feedback between student and teacher and shared expectations around its use and applicability.

The feedback/feedforward tool has become part of a feedback loop with students and teachers listening to, and engaging with, each other. In this way, the feedforward component of assessment feedback is made explicit as a way of improving learning and helping students get a sense of 'where to next'; of how to close the gap between their current and their desired performance. The tool, therefore, assists students to become self-regulated, independent learners by helping them to develop skills in monitoring, reflecting on, and evaluating their learning.

The value of the tool is not confined to students. Teaching staff within the Diploma in Social Science have reported to the author that the tool itself encourages them to reflect on the quality of their feedback. They now tend to structure their overall feedback in terms of prioritising areas in which the student can improve. Likewise, their feedback practices centre more on the forward looking nature of their comments. As one teacher noted in an e-mail correspondence with the author:

Personally, I found that the way I ended up structuring/presenting assessment feedback this term changed as a direct result of wanting to make it appropriate for

inclusion in students' Feedback/Feedforward sheets (Roffey, 2015, e-mail, 13 May).

EVALUATION

This evaluation will be confined to the two core units in which the tool has been systematically applied since 2014 and for which data analysis is possible: a sociology unit called *Understanding Society* and a human geography unit initially called *Geographies of Social Difference* and re-named *People, Place and Social Difference*.

In relation to student results, the impact of the assessment feedback/feedforward tool on student results from one formative assessment task to a major assessment task has been evaluated in the unit, *Understanding Society*. In this unit, students submit an early, low risk assessment of 300 words (referred to as assessment task one) which measures student understanding of a key concept to be applied in the major essay of 1500 words (referred to as assessment task two). Traditionally, student results have either remained similar from assessment task one to assessment task two, or slightly declined due to the increased level of difficulty of the second task. However, following the introduction of the feedback/feedforward tool, sixty-five per cent of students in 2014 and 2015 improved their results from assessment task one to assessment task two; in 2016, sixty-nine per cent improved. Of those whose results improved in 2014 and 2015, the improvements were in the following range: 6.25 per cent of students improved their marks by 25 to 30 per cent from assessment task one to assessment task two; 6.25 per cent improved by 19 to 24 per cent; 28 per cent improved by 13 to 18 per cent; 21 per cent improved by 8 to 12 per cent; and 37 per cent improved by 1 to 7 per cent. In 2016, 6 per cent improved their marks by as much as 31 to 44 per cent; 7 per cent improved by 25 to 30 per cent; 13 per cent improved by 19 to 24 per cent; 19 per cent improved by 13 to 18 per cent; 22 per cent improved by 8 to 12 per cent; 33 per cent improved by 1 to 7 per cent. These improvements are illustrated for 2016 in diagram 1 below.

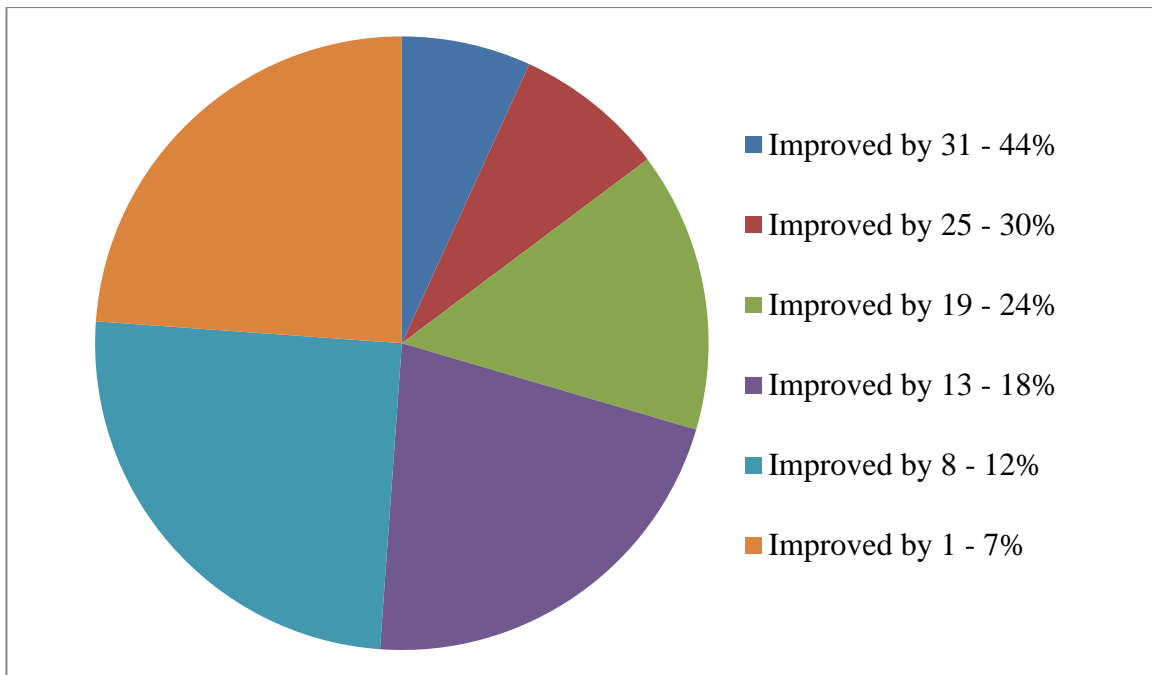


Diagram 1: Improvement in student results from assessment task 1 to assessment task 2, 2016

In the unit, *Geographies of Social Difference/People, Place and Social Difference*, final grades have been compared across the two years prior to the introduction of the feedback/feedforward tool and the three years since to determine if it has impacted student results in an overall sense. In 2012 and 2013, prior to the introduction of the feedforward tool, no students gained a final High Distinction grade; 4 per cent of students gained a Distinction; 20 per cent of students gained a Credit in 2012 and 24.5 per cent in 2013; 72 per cent of students gained a Pass in 2012 and 63 per cent in 2013; and 4 per cent of students failed the unit in 2012 and 8.5 per cent in 2013. If we contrast these results with 2014 when the feedforward tool was introduced we find the following: 3 per cent of students gained a High Distinction; 17 per cent of students gained a Distinction; 32 per cent of students gained a Credit; 48 per cent of students gained a Pass; and no students failed the unit. In 2015 and 2016, overall results for this unit depict a similar upward trend. In both 2015 and 2016, 3.5 per cent of students gained a High Distinction; 20.3 per cent of students gained a Distinction in 2015 and 19.3 per cent in 2016; 44 per cent of students gained a Credit in 2015 and 36 per cent in 2016; 29 per cent of students gained a Pass in 2015, and 38 per cent in 2016. In 2015, 2.8 per cent of students failed the unit, and in 2016 3.5 per cent failed.

It appears from this data that the feedback/feedforward tool significantly impacts results at the highest and lowest ends of the grade range. Prior to the introduction of the feedback/feedforward tool, no High Distinctions were awarded in this unit and only 4 per cent of students gained a Distinction. However, in the 3 years following the introduction of the tool, 3 per cent of students gained High Distinctions and 17 to 20 per cent of students achieved a Distinction. Similarly, the tool has positively affected students who would normally sit in the Pass grade range by supporting them to perform at Credit level instead. The number of students in the Pass grade range more than halved from 2013 to 2016, with the number of students gaining a Credit increasing by between 50 to 100 per cent.

Although the uptake of the feedback/feedforward tool has been significant across many units within Humanities and Social Science courses since 2014, The College has more recently been identifying ways in which the feedforward concept can be applied across all diplomas. The STEM area is of particular interest since there are fail rates in excess of 30 per cent in many STEM units at The College and it is hoped that a focus on feedforward will positively impact student results. Further data analysis for other units in which the feedforward concept has been applied needs to be conducted. However, the indicators seem to point favourably to the application of the feedforward concept having a significant impact on student results as students become genuinely involved in the feedback process.

The positive impact on student results has had a corresponding impact on student satisfaction and engagement. As Coates argues, “national [and local] surveys on student experience and engagement draw clear links between the nature and quality of assessment feedback and student satisfaction with university learning” (Coates, 2010, cited in Krause and Armitage, 2014, p.29. Since the introduction of the assessment feedback/feedforward tool, a noticeable improvement in student satisfaction with assessment feedback is demonstrated by student responses to the student feedback on unit survey (SFU). As diagram 2 indicates, in the unit *Understanding Society*, satisfaction levels with assessment feedback and its contribution to student learning increased from 3.6/5 and 3.9/5 in the years 2012 and 2013 prior to the introduction of the tool to 4.1/5, 4.2/5, and 4.29/5 in 2014, 2015 and 2016 respectively. Of particular note in 2016 is the fact that students rated their learning from feedback higher than their overall satisfaction with the unit and the development of skills in the unit.

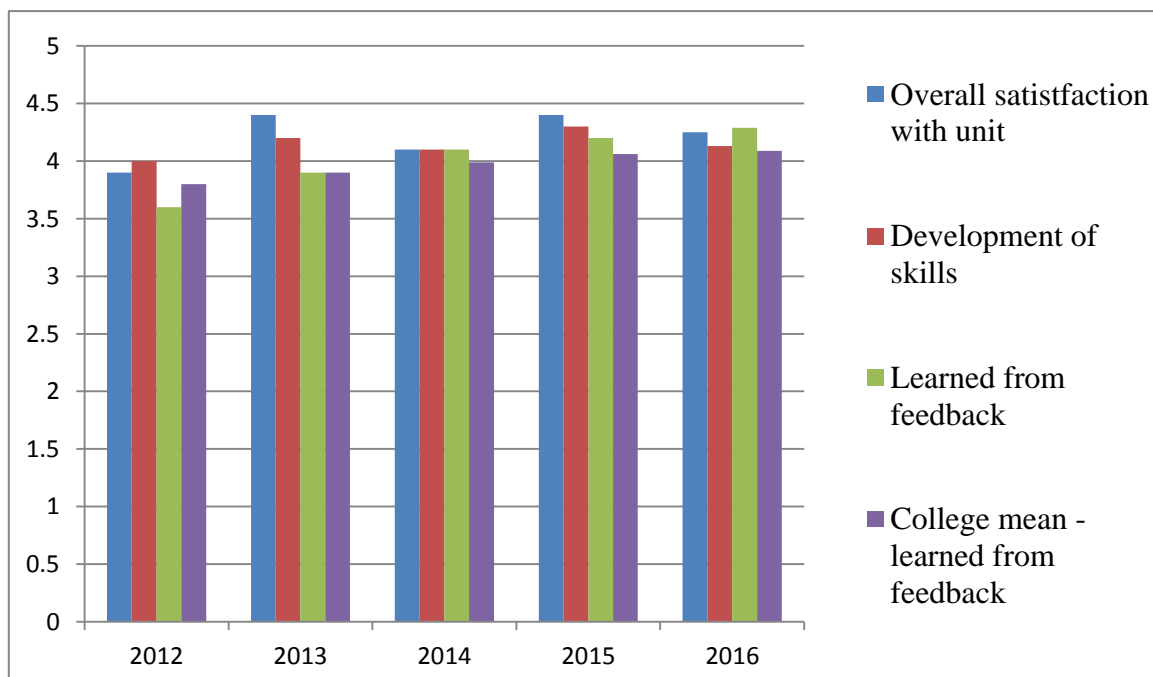


Diagram 2: SFU responses in the unit Understanding Society from 2012 to 2016

A similar trend is witnessed in the second unit, *Geographies of Social Difference/People, Place and Social Difference*. Satisfaction levels with assessment feedback, increased from 4.3/5 and 4.1/5 in the years 2011, 2012, and 2013 to an outstanding 4.6/5 in 2014 when the tool was first introduced. Indeed, every year since the introduction of the tool, students

have rated learning from feedback slightly higher than the other two indicators of student satisfaction.

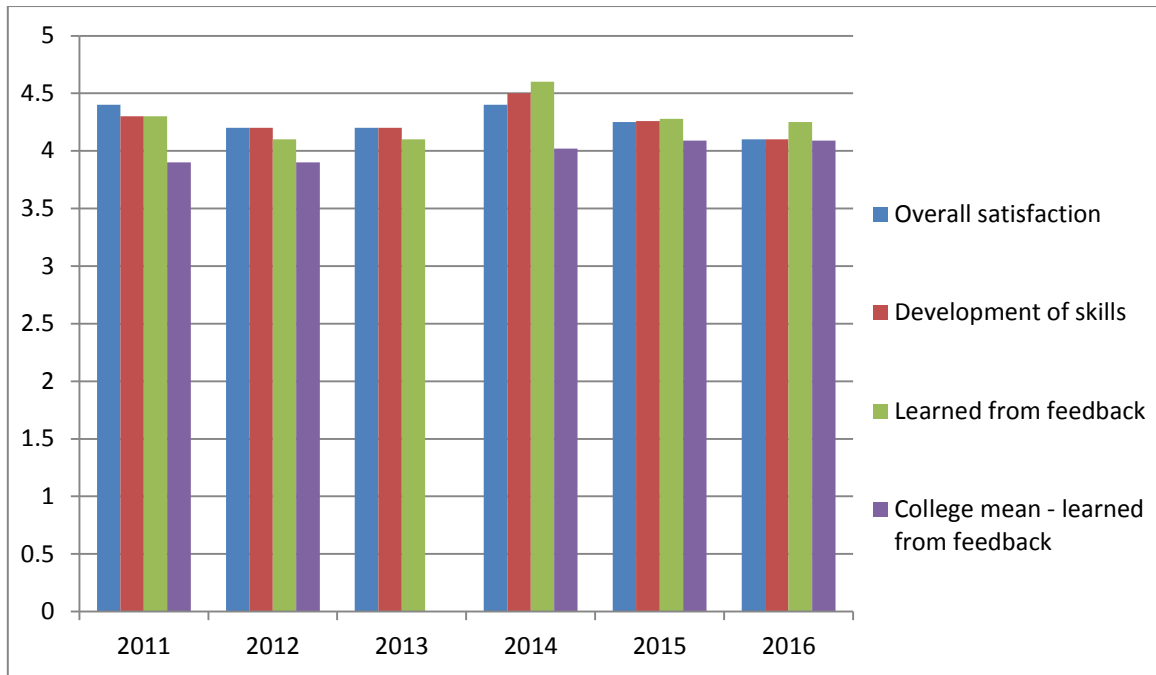


Diagram 3: SFU responses in the unit Geographies of Social Difference/People, Place and Social Difference from 2011 to 2016

Although the implementation of a feedforward approach across The College as a whole was only formalised in 2016, a more sustained focus on the quality of feedback and the uptake of the feedback/feedforward tool in a number of courses since 2014, has seen a steady increase of The College SFU mean in relation to the question related to learning from assessment feedback. Between 2013 and 2016, there has been an almost 8 per cent improvement in relation to student satisfaction across The College as a whole in relation to learning from assessment feedback. It is anticipated that this will rise further as the feedforward approach is integrated across all courses at The College.

It is hoped that this paper has highlighted the fact that scaffolding students into interpreting and learning from feedback is just as important as scaffolding students into other aspects of their learning. A dialogic approach to feedback helps to build a learning community in which both tutor and student learn from each other through a shared experience. It also bridges the feedback gap and, in turn, increases student outcomes, student satisfaction and engagement. The development and implementation of the feedback/feedforward tool at The College is one way of supporting students to turn access to higher education into success.

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