

2023-10-10

Student's Experience Of Feedback Practices And Recommendations For Improvement

Keith WILLEY

The University of Technology Sydney, Australia, keith.willey@uts.edu.au

Anne GARDNER

The University of Technology Sydney, Australia, Anne.Gardner@uts.edu.au

Follow this and additional works at: https://arrow.tudublin.ie/sefi2023_respap



Part of the [Engineering Education Commons](#)

Recommended Citation

Willey, K., & Gardner, A. (2023). Student's Experience Of Feedback Practices And Recommendations For Improvement. European Society for Engineering Education (SEFI). DOI: 10.21427/X6CP-YF46

This Conference Paper is brought to you for free and open access by the 51st Annual Conference of the European Society for Engineering Education (SEFI) at ARROW@TU Dublin. It has been accepted for inclusion in Research Papers by an authorized administrator of ARROW@TU Dublin. For more information, please contact arrow.admin@tudublin.ie, aisling.coyne@tudublin.ie, vera.kilshaw@tudublin.ie.



This work is licensed under a [Creative Commons Attribution-NonCommercial-Share Alike 4.0 International License](#).

STUDENTS' EXPERIENCE OF FEEDBACK PRACTICES AND RECOMMENDATIONS FOR IMPROVEMENT

K. Willey¹

Faculty of Engineering & IT, University of Technology Sydney
Sydney, Australia

<https://orcid.org/0000-0003-1478-0346>

A. Gardner

Faculty of Engineering & IT, University of Technology Sydney
Sydney, Australia

<https://orcid.org/0000-0003-2764-591X>

Conference Key Areas: *Innovative Teaching and Learning Methods, Engineering Skills and Competences, Lifelong Learning for a more sustainable world*

Keywords: *feedback, feed forward, learning*

ABSTRACT

There have been numerous research studies and recommendations as to what feedback should look like to improve student learning and the learning experience. These recommendations include being timely, fed forward, provided using different modes and sources and to support students to know how to best use the feedback they are given.

The Faculty of Engineering and IT (FEIT) at The University of Technology Sydney (UTS) is currently focusing on improving the quality, effectiveness and delivery of feedback provided to their students on their learning and demonstrated achievement in a variety of settings.

¹ K. Willey
K.Willey@uts.edu.au

This paper reports the first stage of this project where students were asked about their previous experience of receiving feedback, how they are able to use it and their preference as to the type and timing of the feedback they prefer. Students reported feedback was often non-existent, extremely limited, non-specific, or too late to be useful. They found feedback was most useful when it was specific, could be used for improvement and was not just focused on correction.

1 INTRODUCTION

Not surprisingly, good feedback has a positive impact on learning (Hattie and Timperley 2007, 81–112). While there is considerable literature reporting how to make feedback effective, student surveys often report that the feedback they receive as being unsatisfactory and or of little use (Carroll 2014). In fact, looking at the average results for the student satisfaction surveys (SFS) for UTS in the spring semester 2022, 10% of students disagreed and 14% of students chose neutral in response to the statement:

Overall, I received constructive feedback throughout this subject.

While one could interpret this as being a good result, in that, only 10% of students disagreed with the statement (although 14% were neutral) it could be argued that this is a simplistic view.

Firstly, only 497 of the 1168 subjects taught in the University that semester (43%) included a question about feedback in their SFS and hence contributed to this result. Secondly, the question is rather simplistic and as described by Dawson et al (2019, 25-36) is based on an outdated understanding of feedback.

Similar to questions in other student surveys that tend to ask if students are satisfied with the amount and quality of feedback they receive (Winstone and Pitt 2017) the question does not ask and hence indicate whether the feedback was effective in helping students learn and improve. Work by Sadler, Carless and Molly and Boud suggests feedback to be a process that leads to learning (Dawson et al 2019, 25-36; Sadler 2010b, 535–550; Carless et al. 2011, 395–407; Molloy and Boud 2013, 11–33).

Hence, to investigate whether our feedback practices are effective we first had to decide on the characteristics of feedback that promote learning and improvement.

2 METHODOLOGY

A review of the research on feedback revealed an Australian Office of Learning and Teaching (OLT) project conducted by Deakin, Monash, and Melbourne universities (OLT Project, 2018). The project's aim was to "improve learner, educator and institutional approaches to student feedback". It considered feedback to be "a process through which learners make sense of information from various sources and use it to enhance their work or learning strategies" (OLT Project, 2018).

The project team found that to facilitate successful assessment feedback one needs to consider the capacity, design and culture for feedback (OLT Project, 2018).

More specifically, the Centre for Research and Assessment in Digital Learning (CRADLE) at Deakin University Australia, recommended the following nine strategies for feedback to make a difference in student's learning (CRADLE 2023):

1. Design follow-on tasks so that learners can apply the information received
2. Move feedback earlier in the subject so learners have time to act
3. Have learners judge their own work against criteria before they submit it
4. Support learners to know what feedback is and how they can make it work for themselves
5. Focus on comments for improvement rather than corrections
6. Initiate peer feedback activities that focus on producing improved work
7. Invest time in developing your teaching/ marking team
8. Personalise feedback comments to individual learners
9. Consider different modes of providing feedback comments

A research survey based on the OLT Project and the nine recommendations by CRADLE was produced to evaluate the experience of FEIT students with the Faculty's feedback processes. The survey was refined through pilot testing to improve validity and remove ambiguity. The survey was made available to students in April and May 2023 after obtaining ethics approval.

While the survey is still open, monitoring of the results suggest that they are sufficiently stable (have approached saturation in that additional responses are not indicating any new variations) to inform the preliminary findings presented in this paper.

The analysis preliminary findings and recommendations from this survey were subsequently released and discussed with staff in the Faculty. They have also been used to develop workshops for all academic staff, aimed at improving the Faculty's feedback processes. These are planned for late July and early August 2023.

2.1 Method

The anonymous survey consisted of 15 questions.

The first four questions (one Likert scale, three open ended) gathered data about students' beliefs about the feedback they received. These included questions that asked students how satisfied they were with the feedback they received over the last 12 months, the reasons for their answer and describing what feedback they regarded as helping them the most and the least. The three open ended questions were analysed using a thematic analysis.

The next three questions were multidimensional in that they used a Likert scale to ask students how frequently 12 statements (four statements in each question, grouped to reflect three themes) occurred in their subjects. The statements were derived from the effective feedback strategies recommended by CRADLE presented earlier in this paper. The Likert scale used was:

Never	This happens in less than 25% of subjects	This happens in 25% to less than 50% of subjects	This happens in 50% to less than 75% of subjects	This happens in 75% or more of subjects
-------	---	--	--	---

The final seven questions gathered demographic data. They were included to analyse the results for different groups of students. The questions asked about gender, age, year of study, current weighted average mark (WAM), whether students were domestic or international and which Engineering or IT degree they were studying.

The analysis findings and recommendations from this survey were released and subsequently discussed with Faculty staff who provided feedback on the findings and recommendations.

3 PRELIMINARY RESULTS

Overall, about half (47%) of the 178 student respondents were at least somewhat satisfied with the feedback they received on their learning in FEIT subjects in the last 12 months.

Table 1: Results from the question: Think back to the feedback you received on your learning in FEIT subjects in the last 12 months. Overall, how satisfied are you with this feedback?

	Percentage
Extremely dissatisfied	4%
Somewhat dissatisfied	24%
Neither satisfied nor dissatisfied	26%
Somewhat satisfied	37%
Extremely satisfied	10%

When students described the reasons for their dissatisfaction with the feedback they received or the characteristics of feedback that help them the least, the dominant themes (from the thematic analysis) were that the feedback was non-existent, extremely limited, non-specific, or too late to be useful as indicated by the sample of responses presented below.²

3.1 Limited or non-existent

we did not receive any feedback on our assessment items, just the mark. This meant that we did not get any indication of why we received that mark and how to improve. . (Male, Second Year Undergraduate, WAM ≥ 85)

there was little to no written feedback, I was only provided my marks according to a rubric – (not usually obvious where I went wrong). (Female, Undergraduate, Third Year, 75 ≤ WAM < 85)

3.2 Non-Specific

the marking rubrics are often poorly defined, having multiple overlapping criteria or are unclear, and the associated comments typically do not explain much of the reasoning behind the grade, if there is even a comment at all. (Male, Undergraduate, Third year, WAM ≥ 85)

² Note: the grammar and spelling in some of the presented student responses has been corrected, to both protect any contributing student who may read their comments in this paper from embarrassment or discomfort and to improve readability.

Often the feedback is short and non-constructive. I have often received feedback like "yes", "good", "interesting", "no", "more", and "elaborate". Non-specific feedback is not useful and doesn't help me grow. It especially becomes confusing when you are given a low mark but the feedback is not proportionate. (Gender identity not shared, Undergraduate, Third year, WAM ≥ 85)

Feedback that is not helpful are general comments such as "Well done but this section could be improved." This comment does not say what specifically needs to be done to improve, so is not actionable. (Male, Undergraduate, Second year, WAM ≥ 85)

The markers only leave positive and encouraging comments on my work, but I see that marks have been taken off. They follow the rubric and highlight the score I received for each question. However, when I lose marks on the rubric, there is no indication of how I can improve, or why I lost marks. (Female, Undergraduate, Fourth year, 75 ≤ WAM < 85)

Often the feedback is extremely limited or generic (sometimes classmates compare the feedback comments for an assignment and realise we've all received the same comment!) - you're left not really understanding where you went wrong (for example, the comment won't point to specific sections to help show you where you made the mistakes), or thinking that you DID do whatever the comment says you didn't do correctly! It means that you haven't really learned what mistakes you made, let alone how to improve upon them the next time. The flipside is that feedback very rarely points to what you did really well with either, so even if you get a good mark, you're not entirely sure why, or how you could continue to improve. This is, of course, assuming that you get feedback at all. (Female, Undergraduate, Third year, WAM ≥ 85)

3.3 Too Late

Most feedback takes too long to get to be useful or is just very minimal. (Male, Undergraduate, Second year, 75 ≤ WAM < 85)

Sometimes feedback, if provided, is released very close to the due date of the next assignment, so it's very difficult to make improvements for the upcoming assignment. (Male, Undergraduate, Fourth year, WAM ≥ 85)

3.4 Good Feedback

Unsurprisingly when students were asked to describe the characteristics of the feedback that helped them the most, the most dominant themes were feedback that was specific, could be used for improvement and was not just focused on correction:

whenever marks are deducted good detailed feedback on improvement is provided and not just why marks were deducted. (Male, Undergraduate, Fourth year, WAM ≥ 85)

Feedback that describes exactly in detail what I did wrong/right and what I can improve /change to make my work better. (No demographic details provided)

Well-structured and easy to read, it got to the point and gave things to improve. (Male, Undergraduate, Third year, 75 ≤ WAM < 85)

Actionable - the feedback helped guide you to action you could take to improve (Male, Undergraduate, Third year, 75 ≤ WAM < 85)

Feedback that thoroughly listed what I had done well, what I could improve to receive a better grade, and what I could do in general to improve. (Female, Undergraduate, Third year, 75 ≤ WAM < 85)

Another common theme of good feedback was feedback that was provided in person and through conversations with their tutors and academic staff.

In-person feedback about what things, I can improve on and what things I should work towards. (Male, Undergraduate, Second year, 65 ≤ WAM < 75)

The feedback that I enjoy the most would be 1 on 1 talks with the tutor/teacher where they get to know me, and why I did what I did. This feels more engaging when talking to a human in person. (Male, Undergraduate, First year, I don't yet have a WAM)

Getting in-person feedback whilst being able to view the marked assessment is cool. (Male, Undergraduate, First year, I don't yet have a WAM)

When asked to rate against a five-point Likert scale how frequently a series of statements about feedback occurred in their FEIT subjects in the last 12 months, at least 60% (59% in the case of statement five) of the student respondents reported the following statements occurred in less than 50% of subjects:

1. Lecturers explain how they will give me feedback, and how to use it to improve my future work and learning.
2. Feedback activities are used early in the semester so I can use the feedback to improve my work within the semester.
3. The feedback comments I receive are focused on improving my future work not just correction of my submission.
4. The feedback comments I receive about my work are personalised and at least some are specific to my work.
5. I am asked to self-assess my work against the assessment criteria before submission, to develop my ability to judge my progress.
6. I am asked to evaluate the work of my peers (other students) to develop my judgement and benefit from peer feedback about my work.

4 DISCUSSION AND RECOMMENDATIONS

As stated earlier, the survey is still open and results have yet to be examined for different demographic groups to determine more nuanced findings. However, the preliminary findings show there are several feedback strategies for improvement recommended by CRADLE in which we are underperforming.

As a first step to improving the Faculty's feedback processes we will be holding a series of all staff workshops that will focus on facilitating the immediate implementation of the following to improve feedback effectiveness.

1. Improving learning and assessment activity scaffolding through lecturers and tutors specifically explaining how they will provide feedback, and how it is recommended to be used for learning and improvement.
2. Personalise feedback comments to individuals. Students are more motivated to engage with feedback and improve when they are treated as individuals and feedback is personalised to their own work (Dawson et al. 2019). The minimum improvement being to use a student's name at the beginning of their feedback.
3. Ensure that feedback comments are specific and focus on improvement rather than simply correction and/or justifying the awarded mark including:
 - i. what was good about the submission and why
 - ii. what needed to be demonstrated to achieve a higher grade
 - iii. how the student could use the feedback in their next task
 - iv. what the student should focus on in their skill development and future learning
4. Ask students to self assess their work against the assessment criteria before submission. This is easily achieved by having students indicate in an assessment rubric included with their submission, the level of achievement they believe they have demonstrated against each criterion.
5. Design subject learning and assessment activities to enable students to learn and check their progress/understanding/judgement from feedback that can be utilised later in the subject.
6. Require all subjects to include an improved question about feedback in their student surveys. For example,

Overall, I received specific feedback in this subject that helped me learn and/or will help in my future learning.

These recommendations have been released and discussed with Faculty staff to seek their feedback.

It was discussed with staff how improving scaffolding, ensuring feedback comments are specific and actionable and asking students to assess their own work (recommendations 1, 3 and 4) and modifying learning and assessment activities to include early feedback for improvement (recommendation 5), should contribute to both improving academic achievement and feedback literacy.

Feedback literacy is the understanding, capacity and disposition needed to make sense of feedback and use it for improvement including changing behaviour, response, enhance/improve work or learning strategies. In explaining and scaffolding feedback literacy to both staff and students Carless and Boud's (2018, 1315-1325) framework depicting four inter-related features: appreciating feedback; making judgments; managing affect; and taking action will be used.

Academics reported that students often expect mark inducements to take action and/or to engage and comply with processes. Several academics felt that without such inducements many students would not engage and/or participate in the recommended feedback processes. Other issues discussed include the importance of scaffolding to students that mark inducements often result in awarding marks for activities not listed as a learning outcome and can facilitate the accumulation of marks for early work that is below the level of a subject's satisfactory achievement (Sadler, 2010a, 727-743).

5 CONCLUSION

Feedback provided to students often focuses on correction and justifying the awarded mark. To make feedback more effective it needs to be forward looking and focus on helping students learn and improve. In this paper we have evaluated students' experience of feedback processes within an Engineering Faculty and recommended processes to improve its effectiveness to facilitate learning and improvement.

Students reported currently feedback was often was non-existent, extremely limited, non-specific, or too late to be useful. They found feedback was most useful when it was specific, could be used for improvement, was not just focused on correction, and delivered in person.

REFERENCES

- Carless, D., Salter, D., Yang, M., and Lam, J., 2011. "Developing Sustainable Feedback Practices." *Studies in Higher Education* 36 (4): 395–407.
- Carroll, D. 2014. *Graduate Course Experience 2013: A Report on the Course Experience Perceptions of Recent Graduates*. Melbourne: Graduate Careers Australia.
- Carless, D. and Boud, D., 2018. "The development of student feedback literacy: enabling uptake of feedback", *Assessment & Evaluation in Higher Education*, 43:8, 1315-1325
- CRADLE 2023, "Feedback Strategies to Make a Difference", https://www.deakin.edu.au/data/assets/pdf_file/0012/1853886/03-cradle-feedback_v2.pdf last viewed 5th of May 2023.
- Dawson, P., Henderson, M., Mahoney, P., Phillips, M., Ryan, T., Boud, D. and Molloy, E., 2019. "What makes for effective feedback: Staff and student perspectives". *Assessment & Evaluation in Higher Education*, 44(1), pp.25-36.
- Hattie, J., and H. Timperley. 2007. "The Power of Feedback." *Review of Educational Research* 77 (1): 81–112.
- Molloy, E., and D. Boud. 2013. "Changing Conceptions of Feedback." In *Feedback in Higher and Professional Education: Understanding It and Doing It Well*, edited by D. Boud and E. Molloy, 11–33. London: Routledge.
- OLT Project. (2018), "Feedback for learning, closing the assessment loop" <https://feedbackforlearning.org/> last viewed 2nd of May 2023.
- Sadler, D.R., 2010a. "Fidelity as a precondition for integrity in grading academic achievement". *Assessment & Evaluation in Higher Education*, 35(6), pp.727-743.
- Sadler, D. R. 2010b. "Beyond Feedback: Developing Student Capability in Complex Appraisal." *Assessment & Evaluation in Higher Education* 35 (5): 535–550.
- Winstone, N. E. and E. Pitt. 2017. "Feedback is a Two-Way Street. So Why Does the NSS Only Look One Way?" *Times Higher Education*, September 14.