Student satisfaction with feedback in a third year Nutrition unit: A strategic approach

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Recommended Citation

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Abstract

The feedback received by students on assessment tasks is a major source of their dissatisfaction with feedback generally, explaining why models of assessment continue to evolve to prioritise provision of useful feedback. Boud's notion of sustainable assessment is an example. We argue for conceptualising the sustainability of assessment practices from teachers' point of view as well. Assessment is a major component of teaching academics' workloads. The time and effort required to support particular practices should be considered *relative* to how well these are evidenced to support student learning outcomes and enhance their satisfaction with feedback. We report on a trial of this approach, from the second phase of action research examining student and staff experiences of targeted feedback on a draft assessment in a large, final year Nutrition unit. The aim of our intervention was primarily to improve student *satisfaction* with the extent to which feedback in the unit assisted them to achieve learning outcomes, but also to support student learning. Our findings indicate that, in some contexts, impactful practices like providing feedback on drafts *alone* may not enhance student satisfaction with feedback. Reflection on our findings led us to reframe the next phase of the project more strategically, by advocating for collaboration on course-wide, programmatic assessment, as a sustainable teaching practice and to support sustainable assessment. We call for models of assessment in higher education and course and unit evaluation to be strengthened through further research examining the sustainability of assessment practices for academics, relative to learner outcomes.

Keywords

programmatic assessment, scholarship of learning and teaching, student evaluation, staff experience

Cover Page Footnote

Introduction

This paper reports on an action research study to evaluate practice within a fully online, third-year Nutrition unit, at a large metropolitan Australian university. University-level student satisfaction survey results had indicated a relatively low rate of satisfaction with the extent to which provision of feedback in the unit was helping learners to achieve the unit learning outcomes. The teaching team implemented an evidence-based intervention (providing feedback on a draft assessment prior to submission) to improve satisfaction and support student learning. That intervention was evaluated using staff and student data collected over two years, from approximately two hundred students and the teaching team, including five casual markers. Here next steps are considered, after examining the findings in relation to insights from the generic and discipline- specific assessment literatures. The implications of our analyses include that unit and course evaluations may be strengthened by considering the sustainability of particular assessment practices for teachers, *relative* to student outcomes. Course-wide, programmatic approaches to assessment provide scope for assessment designs that address some of the issues that we describe at the unit level.

Evidence-based assessment and feedback practice

Students are quite often dissatisfied with the feedback that they receive from teachers on their university assessments (Carless & Boud, 2018; Henderson et al., 2019; Price et al., 2010). Influential ideas about assessment seek to address that dissatisfaction, by guiding teachers to create impactful learning experiences, with a particular stress on sound feedback practices. For example, sustainable assessment aims to assure learner progress on learning outcomes, while also developing skills in self-management of future learning needs (Boud & Molloy, 2013; Boud & Soler, 2016). Staff pressures resulting from resource-intensive assessment practices, are acknowledged, with cautions against an undue focus on "inputs" into education (Boud & Molloy, 2013, p. 700; Boud & Soler, 2016, p. 400).

Nonetheless, practices like "sustainable feedback" were developed partly to manage limited resources and large classes. Using "feedforward" to scaffold learner skill development over successive tasks and developing "feedback literacy" gradually reduces student reliance on educators (Boud & Soler, 2016, p. 403; Carless, 2013; Carless et al., 2016). "Dialogic" feedback promotes learner self-regulation and feedback literacy, via ongoing students and teacher exchanges, not one off, "corrective" feedback on what students "got wrong" (Boud & Molloy, 2013, p. 704). These practices support the development of evaluative judgement. The ability to assess others and one's own performance against external standards is significant in graduate employability (Boud et al., 2018, p. 10-11). A common thread is students' active engagement in critique and self-assessment, in collaboration with peers and teachers. These ideas shaped our decision to implement a practice of teachers giving feedback on a draft of the major assessment task in the unit (Carless et. al., 2011) to try to improve student satisfaction with feedback and support student learning.

We draw on the Assessment Design Decisions Framework, whose creators acknowledge the focus on "learners and their experiences of assessment" (Bearman et. al., 2016, p. 545) and address it in research that considers "work-as-done", or the actual experience of assessment practice, and…which supports "front line educators" to enhance their assessments (p. 546; See also Bearman, et. al. 2017). We apply some of their propositions (See p. 554) to examine assessment in the unit, particularly the advice to make 'strategic choices' based on specific circumstances and to engage "local leaders" (p. 554). Our later findings affirm this work, in implying that there is

further space to consider what sustainable assessment practice is for academics. Considering the inputs required to support assessment is not an adequate form of evaluation in itself, but it does allow for student outcomes to be considered *relative* to staff investments. Understanding the sustainability of assessment practices for all stakeholders allows for teachers' limited time and effort to be targeted closely to where it is most impactful. Sustainable learning is defined by students' longer term outcomes, not process inputs (Boud & Soler, 2016 p. 401) but sustainable *teaching* might usefully consider some inputs relative to the specific student outcomes that they support.

We advocate for further research on this topic, because assessment is a major component of teaching academics' workloads (Jessop, et. al., 2014, p. 81; OECD, 2008; Race & Pickford, 2007) Adachi et. al. (2018) note that "time saving and efficiency" as much as "student attainment of learning outcomes" motivate decisions on assessment design (p. 459) as do other authors (See Henley, 2003; Price et.al., 2010). Applying evidence-based assessment practice also requires locally informed and determined choices:

> *Trying to apply them all at the same time…would be complicated and time consuming, particularly in large class contexts…educators are constrained by the amount of time they have to provide individual feedback as well as the need to be timely (Henderson & Phillips, 2015, p. 52).*

These authors and a third collaborator have recently argued that effective feedback practices account for learner, teacher, institutional and broader cultural aspects, highlighting that teachers' views and experiences matter, as a main source of feedback for learners (Henderson et al, 2019; See also Bearman, et. al. 2016; Boud & Molloy 2013). At the pointy end, research on academic "burnout, workload and emotional exhaustion" is sparse and poorly understood, but assessment is a key contributor (Myyry et. al. 2019). The current academic climate only elevates these concerns.

Challenges in applying evidence based practice to assessment for large student cohorts include:

> *Even if instructors are aware that some assessment practices are more beneficial than others, university teachers may face several constraints that affect their choice…established, quality pedagogy – which is often designed, tested and evaluated in much smaller contexts – requires modification to meet the needs of large class teaching…these concessions threaten to undermine the quality of the pedagogy (Broadbent, Panadero & Boud, 2018, p.307-8).*

Our intervention attempted to balance staff workloads with provision of effective feedback to a large and growing cohort. Cycles of evaluation and improvement are intended to ensure that practices work in concrete settings. For us, that included consideration of the specific student outcomes achieved, relative to the sustainability of the staff inputs required to support them.

Method

Action research in a SoTL framework

The Scholarship of Teaching and Learning (SoTL) supports quality in higher education and the dissemination of findings in scholarly ways (Hutchings et al., 2011; Trigwell et al., 2000). It is increasingly used in health promotion disciplines to support the convergence of "teaching, research and practice" in developing "rigorous and creative pedagogy" (Glanz, 2017, p. 6). There is no agreement on what defines quality in SoTL. For Prosser, principles of good practice of

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inquiry require practitioner-researchers to "systematically reflect upon evidence of our own students' learning" (2008, p.3). Felten suggests inquiry that is: focused on student learning; grounded in context; methodologically sound; ideally, conducted in partnership with students; and appropriately public (2013, p. 122). We employ these principles to frame our use of situated action research. Insights from student and staff data are compared to the pedagogical literature, providing evidence for informed critical reflection on decisions about assessment. Rigorous action research privileges student voices by including student feedback, as we do here. Educational research and evaluation often use action research for continuous enhancement of program design and delivery. It is suited to our primary purpose of evaluating assessment design. Action research is a broad church, with critical, interpretive and positivist variants, but which all use data based in fieldwork, to find solutions to local problems within an iterative structure of repeated cycles of enquiry and enhancement (Willis & Edwards, 2014).

Following Prosser, we see Action Research as informed by pedagogical research but "situated within our own disciplines" (2008, p. 2). As such it effectively marries up insights from the pedagogical research with situated evidence about students' learning in concrete settings. The cyclic process of action-research creates iterative co-dependencies between the scholar-practitioners' skill in critique, the evidence and the literature. For a project grounded in local context, this supports a multi-phased study, such as ours. The cycle of action promotes a systematic pathway for inquiry and reflection, where educators work collaboratively to interrogate their practice, and apply the results to make positive changes. Our ontological position is that transformational possibilities result from Action Research, as understanding how particular students learn informs changes in teaching and learning that are evidence-based and contextual. This approach to educational research takes the view from the classroom dance floor, rather than a research view from the informed, but detached balcony. That balcony has still been a valuable lens for framing our concerns more precisely.

Past and present assessment practices

Population Nutrition is a fully online undergraduate unit. It enrolled 298 students from multiple Nutrition and health courses in 2016 and 2017 and 374 students after census in 2019. It is typically taken in year three of a bachelor's degree and so must develop and extend the higher order skills, required for pre-professionals. Over the period of data collection, fifty percent of the final grade was allocated to the written two thousand word assessment task targeted in the intervention analysed here. The task builds on generic and lower order skills developed in two linked assessment tasks, in units taken earlier in the degree. As such, it already scaffolds skills development across multiple units and courses.

In a 2015 University student satisfaction survey, just over half (55%) of respondents agreed that feedback in the unit had helped them to achieve the unit learning outcomes. The teaching team trialled changes to feedback practice in the major assessment task in 2016, aiming to provide more *satisfactory* feedback, rather than more feedback. Additional support was offered to casual markers, including: a video guide to giving feedback on the task; video feedback on examples of markers' early feedback; paid attendance at a meeting on assessing students' use of feedback when grading final assessments; and moderation by the unit chair. The same marker who provided feedback also graded the final paper. In 2017, the unit chair again moderated a random selection of marker feedback and shared a bank of Quickmarks feedback. In both years, markers were instructed to provide brief feedback on improving the section of the task that involving higher order skills. Allocated marking time was fifteen to twenty minutes for drafts and thirty to forty minutes for final submissions. Five minutes additional total time per student was allocated than for comparable tasks.

Students in both years were instructed to focus on drafting the key section. Feedback was provided within a fortnight, with another fortnight to submit final reports. Instructions for students to submit advanced drafts, not dot points, were made more explicit in 2017. Online seminars were run to build their assessment literacy, by discussing what feedback is and how to apply it to the task. To encourage participation, up to five per cent of the grade was awarded for explicitly reflecting on use of draft feedback to improve final submissions. It was hoped that this raft of additional supports would develop student feedback literacy and enable use of targeted feedback to improve the section of the task most related to the unit learning outcomes. However, there was a gain of just six percent overall. In 2016, 59 percent of the eighty-one respondents to the key university survey item agreed that feedback in the unit had helped them to achieve the learning outcomes, as did 61% of eighty-six respondents in 2017. Our intervention had a very small effect on what we had most hoped to improve. Most critically for our argument here, even the relatively small increases in time and effort required to do so are not sustainable without further funding.[1]

Data collection, analysis, and methods

The university survey item was broad, prompting the team to gain ethics approval to collect detailed staff and student feedback (Deakin University ethics committee approval number HEAG-H 162_2016). Online surveys were created in Survey Monkey, with closed and open items. As our intent was exploratory, not to establish relationships among variables or look at effect sizes, all data is categorical. A survey was open for students to complete for one week after submission of the final assignment, before marks were released. Responses were anonymous and voluntary, with consent being implied by completion. It was promoted at the submission point for assignments and on the unit learning site. Students rated closed items using Likert scales and answered open-ended question to explore the reasons for their responses to closed items. Casual markers were invited by email to anonymously complete a survey. Reflection by the teaching team and two academic developers involved in the study provided another lens on staff experiences[2].

Grounded theory was applied to inductively code the raw responses to open-ended questions (Christians & Carey, 1989; Glaser & Strauss, 1967). Content analysis was then used to consider spread of more or less common themes in the data, by counting the student responses categorised at particular codes (Patton, 2015). Frequencies tables for responses to the closed questions were generated using the SPSS program. This analytic strategy triangulates various forms of quantitative and qualitative analyses to explore the data, increasing faith in the credibility of our findings (Denzin, 1989; Patton, 2015). The limitations on interpreting and applying these results more broadly include that the analysis is based on two relatively small student cohorts, within in a single health discipline, at one metropolitan Australian university. The sample of educators involved is equally small and specific, requiring careful consideration of the applicability of these results to other contexts.

Results

Closed student survey item responses

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[1] The School of Exercise and Nutrition Sciences allocated one-off funding to support the intervention.

[2] Markers' survey results are only reported for 2017. Few markers participated in the survey in 2016: three of the five markers offered only very brief responses in 2016, with more fulsome feedback from five of nine markers in 2017.

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In 2016, 107 of 298 enrolled students (36%) completed the survey, as did 108 of 298 students (36%) in 2017, representing response rates of slightly over one third in each year. Most respondents indicated having submitted a draft, but not all (eighteen respondents in 2016 and sixteen in 2017). As seen in Table 1 most stated that they read all of the feedback provided by markers. A majority deemed the draft submission process to be worthwhile overall, with a small drop in 2017 as compared to 2016. These results suggest that most students do engage with the process and find it generally worthwhile[3].

Table 1.

Student participation in and overall evaluation of the feedback process

	2016			**2017**		
	n	Yes	No	*n*	Yes	No
Did you read all of the feedback on the draft	101	99%	1%	108	97.2%	2.8%
Overall, was the draft submission process worthwhile?	107	93.5%	6.5%	108	88.9%	11.1%

Table 2 presents results for selected items from the 2017 survey. These items have direct relevance to feedback assisting students with activities that relate to unit learning outcomes, associated with the assessment task. Summing the tallies across results for the last two 'positive' response categories, it is clear that, overall, most students found feedback from markers to be at least somewhat helpful. However, results are the *least* positive for the three items that are directly tied to learning outcomes for the unit (critical analysis and use of evidence). By contrast, aspects of feedback literacy attracted a strong response, with more than a third indicating that feedback had really helped them to read and use the marking rubric[4].

The 2017 cohort were also largely positive regarding feedback on acceptable standards, what was asked of them to improve their work, the level of detail and degree of personalization of feedback (See Table 3). Interestingly, over a third of students rated the detail provided as 'excessive'. This contrasts with student responses to open questions as reported here, which reaffirmed other student research in suggesting that highly detailed feedback is preferred (Dawson et. al., 2018). Perhaps an unpleasant emotional response to negative feedback, of the kind that surfaced in the qualitative data, helps to explain this apparently contradictory result; some kinds of 'detail' may feel like a bit too much at first. It is true that comments about seeking more 'personalised' feedback may relate more to the affective impact of feedback, interpreting it as a marker not addressing them 'personally' if students don't understand how to implement feedback (Boud & Falchikov, 2007).

Whether these results taken together speak more to under-developed student feedback literacy, perhaps variable quality in markers' feedback, or some other combination of factors is the subject of a future paper. For our current purpose, they suggest that our intervention did not lead to substantial improvements in student satisfaction with feedback that specifically assisted them to achieve the unit learning outcomes. While feedback had other useful and valued impacts, it

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[3] Total respondents reflects usable responses. Cases with two or fewer responses were removed in data cleaning.

[4] A survey comprising six closed and seven open questions was used in both years. Results are not reported for 2017 items irrelevant to feedback supporting the achievement of learning outcomes. The proportions of students' responding positively on selected items in 2016 as compared to 2017 are not reported. Some items attracted more positive responses in 2016 while others were better received in 2017. Comparison of these highly variable results year on year offered little insights into how to improve student satisfaction with feedback that helped them achieve unit learning outcomes.

patently did not help students to improve the targeted section of the report. Critical analysis was a particular challenge in this respect. This finding is reinforced in the analysis of open responses.

Table 2.

Student ratings: extent to which feedback assisted them with learning tasks

	n	**Not at all**	**2**	**3**	**4**	**A lot**
Better final product (than if no feedback)	107	3.7%	5.6%	18.7%	32.7%	39.3%
Read and use assessment rubric	107	2.8%	4.7%	17.8%	39.3%	35.5%
Self-identify areas to work on	105	4.7%	4.7%	24.3%	35.5%	29%
Focus on learning /skill development (more than marks)	107	6.5%	12.1%	28%	37.4%	15.9%
Improve quality: critical analysis in report	106	8.4%	9.3%	26.2%	40.2%	15%
Understand how: critical analysis public health literature	107	7.5%	10.3%	30.8%	38.3%	13.1%
Understand how: prepare evidence-based proposal	106	8.4%	14%	29.9%	36.4%	10.3%

Table 3.

Student selection of a response that best completes each sentence about feedback

	n	**Appropriate**	**Not quite enough**	**Insufficient**	**Excessive**
Explanation of what was done well	106	57%	29.9%	1.0%	11.2%
Amount of detail in feedback	107	50.5%	36.4%	2.8%	10.3%
Explanation of what not done well	105	60.7%	26.2%	2.8%	8.4%
What to do to improve work	107	60.7%	28%	2.8%	8.4%
Personalisation of the feedback	106	65.4%	19.6%	12.1%	1.0%

Open student survey item responses

Thematic analysis of responses to the open-ended survey questions was substantially consistent in both years, signposting further the reasons why our intervention did not dramatically improve student satisfaction with feedback in the unit. Student perceptions of the *value* of feedback emerged in their responses to why they had found the process useful overall. Most commonly, feedback was useful primarily as a guide to the overall quality of a submission, or to addressing specific issues within it:[5]

> *S16: Was worthwhile as it allowed me to improve what I didn't do well in my draft.*

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[5] The last two digits of year of enrolment indicate which cohort student comments are taken from.

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S17: It gave me an opportunity to see whether I was on the right track…where my weaknesses were.

S16: Helped me understand specific areas to focus on.

S17: I realised some very important points I was completely missing.

Smaller proportions in each year had mainly valued the process as a prompt to 'get started', suggesting perhaps a lower level of feedback literacy in this group:

S17: It motivates you to begin the assignment early.

S16: I was forced to begin…early and get past the hardest barrier, which is starting.

Commentary on why students in 2016 *had not* found the process useful overall centred on not having had time to sufficiently develop a draft early in trimester:

S16: It would of been more helpful if I had allocated enough time to complete what was required before draft submission.

S16: I wasn't prepared to hand in a draft, so the feedback was not all that useful…I had a lot more to add and fix and the tutor basically picked up on what I already knew.

S16: Perhaps it was due too soon…I understand marking for tutors would take some time and you wanted us to have the feedback back with enough time to make any changes…in theory it was good, but personally for me I did not find it all that useful.

Across both years, despite acknowledging that drafts may have been underdeveloped, many were nonetheless unhappy with feedback described as 'too general', 'vague', or too 'negative' which could be demotivating:

S17: I felt that the feedback should have been more detailed.

S17: It was insufficient…we didn't receive any feedback on the aspect most students struggled with which was the introduction and justification part.

S16: It was somewhat worthwhile, however needed more detail in feedback.

S16: I did initially interpret the feedback as all negative, which resulted in an initial loss of motivation.

Similarly, although they were informed that only the section on critical analysis would receive feedback, some were still disappointed. The reasons for still requiring a nearly complete draft to be submitted were either not understood, or just not accepted by many students:

S17: Only one aspect was going to get feedback…did not see the point in submitting a nearly completed draft if the direction I was going in…was wrong, and the other components were not…given feedback.

S16: The feedback given was very vague and not helpful. The fact that part A & B was not reviewed also did not make me feel assured if I was on the right track.

S17: The parts that I felt were the most challenging were not marked…It seemed unnecessary to produce a whole draft when a small component was marked. Draft feedback should incorporate the whole assignment, as has been done in previous subjects.

This question attracted more positive responses overall in 2017, but the smaller group who had *not* found it useful made more comparisons to feedback practice in other units than were seen in 2016:

> *S17: I found the draft to be helpful, however…would have been beneficial for the rubric to be marked on where we stood and a brief explanation afterwards. This was done in [other unit]…much more helpful than just reading what we did right/ wrong.*

> *S17: I found this process extremely useful for [other unit] and applied this to [our unit] because the assignments had similarities…required a proposal. The difference in feedback is that you received a rubric…so it was obvious which areas required improvement.*

This is an interesting finding that highlights the extent to which student feedback literacy is indeed supported by time intensive practices, like the use of grading rubrics by all parties to draft and redraft processes.

The majority of responses to a question on what 'good' feedback is also reflected other student research, in framing it as: 'specific', 'personalised', identifying strengths and weaknesses, a 'balance' of praise and redirection and detailed guidance for addressing issues, using examples (See Dawson et al., 2018). These accounts were also highly consistent across both years:

> *S16: A balance of both positive and negative feedback.*

> *S17: Indication on specific improvements, including examples.*

> *S17: Personalised, constructive feedback.*

> *S16: Explaining what you are doing wrong and what could help you to improve…what needs to be added if you have missed parts.*

Interestingly, smaller groups of students insisted here, as elsewhere, that good feedback is holistic and not targeted:

> *S16: Good feedback is when the tutor tells you in each section of the draft what you have done well and what you may need to change.*

> *S17: Pinpoints small details on what to change, includes several sentences (not just 2-3) and it involves receiving feedback on the ENTIRE document, not just one aspect.*

It seems that targeted feedback was unpopular partly due to violating student conceptions of good feedback as being holistic. Unfortunately, that may have rendered our main strategy for reducing marker burden void.

Most student rationales for *non-participation* in the draft submission process reprised two familiar themes: not having enough time to write an adequate draft, or misunderstanding the process, including the deadline. For some, it was both:

> *S16: I didn't realise the assignment was due a month before…I wasn't happy with what I had written, to then get useful feedback.*

> *S17: Starting the entire assignment a month before the due date isn't a realistic timeline.*

> *S16: My draft was not ready at the standard I wanted it to be to receive feedback.*

> *S17: Really struggling with where to begin…didn't think what I had done was worth submitting.*

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Perceptions of insufficient time are perhaps best tackled by building students' feedback literacy earlier in the degree, so that opportunities for using feedback to redraft are valued and prioritised. Questions about why a draft of the whole assignment was required, if feedback was only targeted to one section, also surfaced here:

> S17: It didn't seem like it would be worthwhile. Only one of the many questions would have been provided with feedback...If the draft had been evaluated fully rather than selectively, I would have submitted it.

> S17: It was asked to have 75% of the project completed with 6 weeks still to work on it. I understand that time is needed to mark and give feedback...if it was only one or two sections...that would have been more reasonable.

Very small groups in each year instead cited personal circumstances, such as competing deadlines, illness, work commitments, or technical problems with submission:

> S17: Unable to submit by due date due to medical reasons.

> S16: On the day before the draft was due my partner was admitted into emergency and I was unable to get home before the due time.

> S17: Too many other deadlines at the same time.

> S16: Internet issue. The date of draft submission is the Monday of mid-break. I was abroad and there was Internet issue to view Australian website.

This analysis has further illuminated reasons for a lack of satisfaction with feedback as an aid to student progress on learning outcomes. Many of these are not best solved by adjusting practices and processes in a third-year unit. Creating time and motivation for students to produce a usable draft early in the trimester is partly about convincing them of the value of starting early, in order to improve their work using peer and educator feedback. That is a foundational issue, to be tackled in a first-year unit and so support learning in a program. Addressing a rejection of targeted feedback and perhaps growing expectations about use of rubrics, is not sustainable for this teaching team.

The casual markers: Open and closed responses

The marker survey included four closed questions to elicit views on the impact of the intervention: Had they seen substantial improvements in student proposals? In their final submissions? What about the critical analysis component? Was feedback demonstrably used by students to improve their work? Generally, makers 'somewhat agreed' with all of these statements. One person 'somewhat disagreed' with most of them. The exception was if students had used feedback, with which three 'somewhat agreed' and one 'strongly agreed'. All bar one agreed that the process was worthwhile overall. Interestingly, given that we later explore programmatic assessment as another evidence-based solution, three markers 'somewhat' or 'strongly agreed' that this process should be used in other units. Markers all valued the support offered before and during the exercise and 'strongly agreed' that they had received sufficient information about the process. Most indicated that they would mark the assignment again, but one 'somewhat disagreed'. All either 'agreed' or 'strongly agreed' that performance standards in the rubric used to grade final submissions reflected graduate pre-professional practice standards in the discipline[6].

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[6] 2016 markers responses are not included in the analysis due to too few of them meaningfully participating. In 2017, five markers out of a team of nine completed the survey.

Open-ended questions explored markers experiences in more depth. As to why the process was deemed worthwhile overall, responses tempered valuing the process with recognising that not all students had made the most of it, engaging with feedback too late, or claiming to have incorporated feedback, when they had not:

> *M1: It's a good chance for students to be able to receive feedback that they can then utilize for this assignment. However…time stamping indicates that very few read their feedback until they were about to submit…many reflections I came across stated they had done X or Y to incorporate the suggestions from the feedback, but in reality, they hadn't at all.*

A comment that 'For the students that did submit a higher quality draft…it was helpful to get them on track' reinforced concerns we had that students who would most benefit may self-select out of this aspect of the task. Markers' perceptions of good feedback varied considerably, while still mostly reflecting evidence-based practice, as summarised earlier in this paper:

> *M2: Good feedback avoids vague, judgmental terms…help the student learn. Rather than saying that something was not written correctly…explaining what can be done to move forward and improve the work.*

> *M4: Good feedback includes specific examples and exemplars.*

> *M5: clear feedback that is designed to assist you for future work.*

Reflections on their experiences had positive elements, like contributing to student learning and 'frustrations' stemming from being new to this process, time constraints, or students not using feedback to improve their work. The marker who was consistently the least positive felt they had not had enough time to give 'meaningful feedback', which they defined as being 'individualised':

> *M3: Feedback which is specific - I find Quickmarks too general and would rather write my own comments actually giving an example of what I would have liked to have seen. It needs to help the student learn and know what to do better next time.*

> *M1: I felt like I was able to contribute to the students' learning in a way that was more likely to be taken on board…I'm not sure it was…for a few it clearly was, so that made it worthwhile.*

> *M2: It can be challenging, particularly if the student has not adequately attempted the draft…you want to guide them in the right direction…you don't want to spell out everything for them. Nor do you want to discourage the student either…positive reinforcement is important…it was difficult to shift my mind to the fact that it was a draft assignment…be fair…and guide them through the process to the final assignment.*

Markers' suggested improvements were clearer instructions and narrowed parameters for target content and use of exemplars, all to help students create a more advanced early draft and improve efficiency for markers:

> *M3: More info on what specifically you want them to cover in relation to public health principles…talk generally about the topic or specifically list the principles?*

> *M4: I would mandate that one of the programs must be from the list provided…allocation of more time - even 5 minutes…a post-marking meeting (paid) so that examples and exemplars can be produced for the next year.*

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Key similarities in student and marker experiences to emerge here are the need for more developed drafts and the variable 'readiness' of students to gain from this opportunity.

Discussion

In reflecting on these results holistically, we follow Finlay (2008) who notes that despite diversity, reflective practice is generally understood as:

> *Learning from and through experience towards gaining new insights of self and/or practice...[which] often involves examining assumptions of everyday practice...being self-aware and critically evaluating [practitioners]...own responses to practice situations...to gain new understandings and so improve future practice (ibid p.1).*

That guided our thinking about our aims for assessment in the unit and the implications of the analyses for improving student satisfaction with feedback provision in the unit. New evidence was considered in light of the teaching teams' experience over 2015 to 2018, as a reference point in thinking holistically about unit design and delivery, contextual unit, course and institutional factors and our broader goals for student learning. The literature was a third lens for reflecting on student and staff experiences. The most critical question for us was if the process trialed over 2016 and 2017 had improved student satisfaction with the feedback provided in the unit, in terms of progress on meeting the learning outcomes. On balance, the answer was no. Firstly, student evaluation scores for satisfaction with feedback in the unit did not change. Secondly, student survey findings showed very marginal improvements in that respect and some barriers to students engaging usefully in the process. Thirdly, while not part of the analysis, the team observed no improvement in grades. An impact on unit learning outcomes is unlikely.

Some of the benefits that *were* reported by students, such as avoiding procrastination, are not what we primarily hoped to achieve. Reflecting on this 'disconnect' then between mostly positive survey results, but little improvement in satisfaction, yields many possibilities. Student feedback literacy may have been supported, but perhaps too late to translate to improved performance on the assessment, or for feedback to be understood as satisfactory by students. If feedback literacy is underdeveloped in earlier years, or feedback on earlier tasks has been ineffective, it may be too late to correct these issues in a single task in year three. The University's compressed trimester structure, offering limited time to submit advanced drafts, is clearly a factor particularly given that students are time poor and often underestimate the time required to complete this fully online unit. Jessop et al. (2014) note student ambivalence about ungraded formative assessments generally, as a rationale for a programmatic approach to assessment. We agree that feedback literacy should be developed in year one of undergraduate courses. In our experience, students who may benefit the most are also less likely to complete non-compulsory tasks. Jessop et.al.'s finding that "most students did not value, complete or even notice…formative assessment tasks…in spite of overwhelming evidence in the literature of its value for student learning" (2014, p. 77) may help to explain our results.

We considered, but rejected, several incremental changes. Use of peer feedback and not teacher feedback, to build students feedback literacy (Malecka et al., 2020) was discounted, due to a high risk of plagiarism (students copying peers draft work) and a third-year unit being too late for a first pass at this strategy. Only offering feedback on drafts to those who failed an early assessment task was not considered to be ethical. The team had already provided whole of cohort feedback on 'things to watch' in 2017 without success. Only requiring students to submit the target section of the assessment was discounted. It cannot be completed adequately, without first completing other steps. Whole of task feedback is inefficient for markers and does not target the desired higher

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order skills. Markers' suggestions about exemplars, while well meaning, do not accord with our expectations of third-year students. Similarly, detailed feedback templates to guide markers and students undermines student skill development, as budding pre-professionals. Critically, we found no strategies from the literature to address student submission of drafts without an appropriate level of detail, given that time constraints were identified as the main issue.

Considerable time and effort were invested in this trial. Training and organising markers to give useful, constructive feedback, cross-marking and moderation are already under-resourced, but time on these tasks doubled for the intervention. Unit enrolments are rising by twenty to thirty students a year. The most valuable insight to emerge from reflection was the teaching team's overarching commitment to supporting final year students as emerging professionals. The main implication was that assessment practices need to promote more independent learning than a minor tweak can support. Thinking about appropriate scaffolding in a final year, pre-professionals unit led us to re-examine if this task was the right place for feedback on drafts. Other studies that consider lecturer effort caution that low student assessment literacy is an important consideration in evaluating the effectiveness of a practice, if the aim is enhancing student satisfaction with feedback (Price et. al., 2010). Similarly, sustainable assessment requires feedback to be a "fundamental part of curriculum design" which implies a course level approach (Boud & Molloy, 2013 p. 699).

Our decision to end the intervention also reflects emerging, course-wide 'programmatic' assessment designs in health, to develop student feedback literacy and pre-professional skills over a degree. In medicine, nutrition and dietetics, whole of degree assessment designs are used to develop, assess and assure students' professional competence holistically Nutrition (Bacon et al., 2018; Dijkstra et al., 2010; Jamieson et al., 2019). We intend to advocate for collaboration on constructive alignment of assessments in courses that the unit is embedded in, via the regular unit and course review process. That will support achievement of learning outcomes and competency standards, as well as scaffolding of skills and literacies development in early assessments. Holistic summative assessment can then be focused in the final year (See Jamieson et al., 2018, p. 419). This more strategic level of action to support student learning responds to evidence that excellent courses which facilitate scaffolded development of skills and capacities are built through leadership, teamwork and collaboration at programme level (Gibbs, 2012 p. 21-32; Springer-Sargent, 2015; Zudans-Fraser & Bain, 2016).

Some recent organisational developments will support us in this strategy. The role of Course Director has been targeted for professional learning and support, for example through the development of a manual that advocates for a course level leadership role for this group. Assessment is a mainstream concern at our University, home to the internationally recognised Centre for Research in Assessment and Digital Learning. Our assessment policy is under review and will likely mandate a course-wide approach to assessment design. An enterprise portfolio tool that will support students taking a long view of skills development is being piloted. On the other hand, factors working against these aims include that our student-facing guides to assessment do not always explicitly prompt students to understand and approach assessment in a developmental way. The University's 'compressed' structure of eleven week Trimesters may still be a barrier. Most disappointingly, there no enterprise software for course mapping. The time and effort that goes into ongoing manual calibration of course level alignment and realignment of assessment and feedback practices may thus also prove to be a considerable challenge.

Conclusions

University student and teacher dissatisfaction with feedback is not unique to our setting. Recent scholarship that examines this dissatisfaction has focused on student experiences, grades and

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progression rates, while recognising that understanding the challenges involved for educators is also critical (Boud & Molloy, 2013; Carless & Boud, 2018; Henderson et.al., 2019; Hill & West, 2020; Price et al., 2010). Yet as others stress "Although these layers are connected, most studies focus on one or the other as the central point of concern" (Henderson et.al., 2019, p. 2). To strike a better balance, our analysis took account of four kinds of evidence: university-level student evaluation data; unit-level staff and student survey data; staff data generated through collaborative reflection on practice; and developments in general and disciplinary assessment literature.

We noted earlier the limited applicability of the results we present to other contexts. However, an implication is that further contextualised research, as well as evaluation of units and courses, might fruitfully explore teachers' experiences of assessment practices, in relation to the specific student outcomes that they support. That will help in evaluating the sustainability of highly effective assessment practices in various concrete settings. In our case, contextual constraints on the results achieved by implementing a widely used and effective assessment practice, when marking at scale, emerged from such a study. That prompted a decision to explore more holistic approaches to understanding and evaluating feedback practices. We have also outlined one method for others to use in exploring the sustainability of assessment practices for their own teaching teams; iterative cycles of reflection on the academic inputs that are required to support specific assessment practices, in light of the student outcomes that are supported. Doing so may contribute to a deeper understanding of the sustainability of various assessment practices for teachers, to inform future choices about assessment designs in higher education.

We signalled that we see advocacy for course level collaboration on assessment design as a more strategic move than making iterative changes to assessment practice in a single unit. The literature evidences the potential of this approach for systematic development of student feedback literacy and professional competencies, within assessment designs that support sustainable teacher effort at scale: such designs make visible the points and tasks in a program where teacher feedback can have maximum impact on student learning. This is precisely a solution to our problem. The next phase of the project will document the success or otherwise of our efforts in that respect.

Acknowledgements

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