

**Expectations and Use of Feedback in
First Year University: Improving
Student and Educator Outcomes with
FRAMEwork**

Karen Elgar

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Karen Elgar

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Declaration of Authorship

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program; any editorial work, paid or unpaid, carried out by a third party is acknowledged; and ethics procedures and guidelines have been followed.

Karen Elgar

Date:

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Abstract

A common student perception of feedback in higher education is that it is often lacking in detail, usability, and timeliness; however, many staff members resent the lack of investment students place in engaging with, or even collecting, feedback on work. Despite increasing recognition of the role of feedback in student learning and course satisfaction, few studies have sought to contrast student and academic perspectives of feedback in a discipline to identify reasons why inconsistencies between student and staff perceptions occur. Similarly, few comprehensive feedback interventions have been devised to improve both staff and student engagement in the feedback process. The research reported in this thesis seeks to address these deficits, beginning with a comprehensive exploration of engagement with feedback at a tertiary level. Two exploratory studies were conducted initially to identify key similarities and differences in the conceptualization, use and preference for feedback observed amongst staff and students in the Discipline of Psychology at RMIT University, following a detailed survey of their feedback practices. Within this Discipline, 202 first year undergraduate students (Study 1) and 25 staff members (Study 2) were surveyed regarding their preferences and engagement with feedback in the tertiary setting. Results indicated that there were several key differences in the way students and staff conceptualize and utilize feedback, suggesting that these differences may account for dissatisfaction with the feedback process. In addition, an emphasis on summative feedback and an embedded perception of feedback as a passive linear process were discovered amongst staff and students. Following these studies, a semester-long intervention intended to improve student and staff

engagement and satisfaction with feedback was devised and implemented. The basis for this intervention was the FRAMEwork manual (a comprehensive guide to shaping feedback as an interactive dialogue between staff and students) that was designed based on the observations and recommendations of Study 1 and Study 2. An experimental design was used to evaluate the FRAMEwork manual using 90 first year undergraduates enrolled in Psychology at RMIT University (Study 3). Preliminary analyses of the intervention outcomes were promising, particularly in regard to enhancing feedback utility and student academic performance; however, further modifications and replications are required. In particular, it is recommended that the FRAMEwork program be delivered across the length of a program rather than within a single course.

Preface

My search is driven by the goal of ascertaining the attributes of excellence – because if we can discover the location of these goal posts, if we can understand the height of the bar posts, we then have the basis for developing appropriate professional development, the basis for teacher education programs to highlight that which truly makes the difference, the basis for extolling that our profession truly does have recognisable excellence which can be identified in defensible ways, and the basis for a renewed focus on the success of our teachers to make the difference.

(Hattie, 2003, p. 1)

In 2006, I became a sessional tutor in the Discipline of Psychology at RMIT University to support myself while I completed my postgraduate studies. At the time, my research was not relevant to the learning and teaching arena; I saw the role primarily as a chance to develop my confidence in public speaking, consolidate my understanding of material presented in the undergraduate program and to support students as they undertook the same journey I had recently completed. In addition to the time commitment of facilitating the tutorials, I anticipated that there would be a lot of work ‘behind the scenes’ to prepare adequately for the tutorials and to complete marking. However, I was unprepared for the many complexities faced by university staff in making the student experience valuable and enriching. One of the most significant

challenges I soon identified in my role was understanding how to provide feedback that was considered useful to students. This became a theme that followed me from course to course, semester to semester; the result was that I changed my PhD thesis topic to an exploration of feedback in undergraduate settings in order to address this question: how can academics enable effective feedback in the tertiary environment?

Having recently completed my undergraduate studies and being in the process of undertaking my postgraduate studies, I was painfully aware of many ways in which the feedback process could go wrong. I had encountered feedback that was excessively brief, confusing, illegible, inconsistent or overly generic; I was also familiar with the disappointment of receiving work back and scanning through the paper eagerly to see what was done well, only to find a single grade at the end with no explanation of how that mark was obtained. Other experiences were particularly vivid in my mind: the lecturer who ‘corrected’ the referencing in my paper in complete contradiction of the APA Publication Manual, and the lecturer who awarded a paper 19.9 out of 20, justifying the mark with a brief comment that they ‘never’ awarded students full marks. Now that I was in the role of a marker, I was determined not to repeat these instances of what I felt was poor feedback. I wanted my feedback to be excellent. I wanted to give students usable, comprehensive and fair feedback that allowed them to enhance their content knowledge and academic skills.

However, I quickly found that achieving this was much harder than expected. During my first marking experience, I found that I agonized over

awarding numerical grades to work (e.g. ‘is this really worth a 6 out of 10?’) and spent much time writing comments to justify these decisions, rather than being motivated by what the student would find most helpful in improving their work. I also found it difficult to reconcile my own identity as a student with my role as a marker; questioning my ability to objectively and accurately assess work (e.g. ‘what if I miss something important?’). The expectation that I would know inherently how to assess work contradicted my expectation as a student that tutors and lecturers were trained in the process of grading and providing feedback. In addition, I found myself constantly questioning how the student might interpret my comments and suggestions (‘will they know what I mean by this?’). To say that I found the marking process overwhelming and anxiety-provoking is an understatement.

The experience also highlighted a key constraint in providing effective feedback – time. I was spending up to 3 hours per paper and had 50 papers to mark within the fortnight. The reality that I could not find 150 spare hours during this period was distressing to me, as I could not imagine doing the papers justice if I restricted myself to a shorter allocation per paper. Even reducing the time I spent to a more reasonable 30 minutes per paper meant finding an additional 25 hours within the fortnight that I could free up. I suddenly had a greater appreciation for those lecturers and tutors who had managed to give me any feedback at all during my undergraduate studies.

In addition to being cognisant of the deficits within the feedback provided to me and finding the experience of avoiding these difficult, the

experience of tutoring showed that I had several assumptions regarding how students would use the feedback that I provided. With the benefit of hindsight, I can now see that being a relatively conscientious and independently minded student meant that I was well-placed to take steps to make use of the feedback provided to me. I devised checklists containing errors I had made on previous assessments and applied these to new assignments to prevent errors from recurring. I was also proactive in seeking ways to rectify my lack of understanding; for example, a low mark provided for reporting research methodology would result in me accessing 'How To' guides and perusing examples until I felt I had a better grasp of this material. As I continued in my tutoring role, I realised that many students did not employ these practices. In fact, after my first semester of tutoring, I soon learnt to my disappointment that many students did not take the time to access feedback at all. Upon entering the administration area of the Psychology Discipline at the start of a new semester, I was stunned to see row upon row of uncollected work from the previous semester. Prompts to the students to collect the work were mostly ignored; I watched in disbelief and horror as these assessments (and hundreds of hours of work from staff members) were discarded a year later. As time passed, I also became used to the frequency of comments such as 'it's not like the student will bother to read it anyway' from other tutors during the marking period. Although these comments were mostly said in jest, they highlighted an undercurrent of frustration and resignation with an inefficient process of communicating with students.

This experience provided me with the desire to understand how students perceive feedback. I wanted to know what it would take for students to find feedback useful and therefore be motivated to engage with it. I also wondered whether feedback processes differed amongst students based on characteristics known to influence academic progress (e.g. self-efficacy, personality and wellbeing) – was there a ‘one size fits all’ approach to effective feedback or did individual differences need to be taken into account? I quickly realized that only exploring student perceptions of feedback would not provide comprehensive answers – after all, as a student I could have readily identified a number of things that were ‘essential’ to useful feedback but would not have considered the constraints faced by staff members in achieving this. As such, I wanted to know what staff members thought was important when providing feedback and identify ways to make providing feedback easier. As with student preferences, I was interested to explore whether staff members’ provision of feedback was associated with particular individual characteristics. I felt that illustrating a clear picture of feedback perceptions from both students and staff would provide the basis for devising ways in which they can work together to achieve better outcomes in the feedback process.

I began with a review of the literature, orientating myself to assessment design and exploring the ways in which feedback is conceptualized (Chapter 1). Following this, I reviewed research studies conducted in tertiary settings, exploring how the feedback process is enacted and perceived by students and staff (Chapter 2). However, I found that this review of the literature was not

sufficient to answer my questions; in particular, there was little research available looking at the interaction of staff and student perceptions of feedback within a particular faculty or institution. This was the motivation for the initial research reported in this thesis, in which I looked at student (Study 1; Chapter 3) and staff (Study 2; Chapter 4) perceptions of feedback in the Discipline of Psychology. Both studies utilized a mixed methods approach and involved distributing a comprehensive survey that evaluated feedback perceptions, as well as individual characteristics (such as self-efficacy and wellbeing), of the respondents.

At this point, I expected to identify some preferences for feedback and correlates of effective feedback delivery and use these to design a series of strategies and recommendations to enhance feedback. As I continued to explore the literature and the results obtained in these studies, it became clearer that the way in which students and staff perceived the topic of feedback was at least partially responsible for the problems identified. A focus on summative feedback limited the learning opportunities available to students, as well as placed additional burdens on staff when marking. The lack of clarity in regard to how students and staff should approach feedback opportunities and enact their respective roles led to both parties feeling dissatisfied with each other. Additionally, it became clear that there was an unspoken assumption that staff would automatically know what feedback would be useful to students; conversely, staff assumed that students would inherently know how to enact the feedback they provided. As such, I realized that a much more comprehensive

approach was required to assist staff and students in achieving more satisfactory use of the feedback process. In particular, I felt that significant change would only be possible through embedding an intervention in the curriculum, rather than employing single feedback tools or training sessions.

I spent the better part of the following year integrating these findings from Study 1 and Study 2 with the literature to frame the feedback process as a collaborative and cyclical venture between students and staff (Chapter 5). These efforts to improve feedback in the tertiary environment were collated into a 45-page manual entitled FRAMEwork (Feedback Resources for Assessors, Mentors and Educators). The implementation and evaluation of this intervention formed the basis for Study 3 (Chapter 6); over the course of a semester I used the FRAMEwork manual to work with first year psychology students, using an experimental design to evaluate the effectiveness of the intervention.

While the FRAMEwork program was effective in improving feedback in the Discipline of Psychology and represents a step forward, I am mindful that more needs to be done (as discussed in Chapter 7). Research into feedback at the tertiary level has grown significantly since this investigation was commenced and is being influenced by the shifts to the university landscape that have occurred in recent years. The advancements in technology and a greater focus on student-driven learning environments will allow for the incorporation of more materials into the program in future. I look forward to continuing to expand on the manual as I encounter these new learning initiatives and become familiar with the teaching practices of other study disciplines.

I have begun my thesis with this preface to provide context to the research undertaken. Although the motivation for the initial studies arose from my own experiences as a student and a tutor, a review of the literature, presented in Chapters 1 and 2, reveals that my experiences are not uncommon. I hope that this research is useful in helping to rectify some of the problems identified and ensuring that dissatisfaction with feedback processes becomes a less common experience for both students and staff in the tertiary environment.

Chapter 1

Feedback

Chapter Overview

In this first chapter the topic of feedback is introduced and an overview of contemporary issues within the field of tertiary assessment is provided.

Following this, the concept of feedback is discussed, contrasting views from psychological and educational literature, before providing a working definition for the remainder of the thesis. The effect of feedback is also discussed using the work of Berry (2005), who outlined motivational, evaluative and, most importantly, learning outcomes that result from effective feedback.

Experimental research on feedback is reviewed, highlighting the importance of feedback in the classroom in relation to other teaching output. It is argued that feedback represents one of the main, if not the most important, mechanisms from which student learning can be facilitated. Finally, the characteristics of effective feedback are discussed, reviewing the necessary attributes of feedback for motivation, evaluation and learning to successfully take place.

The Setting: Feedback in a University Landscape

As discussed by Elton (2004) and Price, Carroll, O'Donovan and Rust (2011), the assessment process includes a number of well-documented problems and represents the key source of student dissatisfaction with the tertiary experience. This is particularly worrying given that one aspect of the assessment process, the provision of feedback, has been shown to have the

largest effect on learning outcomes out of a comprehensive range of teacher, student, home, peer and school variables (Hattie, 2003). One problem identified by Price et al. is that, unlike teaching methods which can be strengthened by the development of clear learning objectives, assessment processes can lack clarity and can be informed by systems not central to learning, such as institutional policy and workload planning. Importantly, Price et al. assert that the higher-order and complex learning that is the keystone of tertiary learning is under threat from increasing pressures on staff in managing more diverse workloads and larger class sizes. As such, initiatives to improve the provision of high quality assessment, including the associated feedback processes, are imperative to achieving appropriate learning environments for university students. Rust (2007) furthers this assertion, actively promoting the need for academics to “explicitly articulate and establish a scholarship of assessment, which should be at the very heart of our scholarship of teaching and learning” (p. 229).

One aspect of this is the growing emphasis that has been placed on the use of formative assessment in tertiary settings, in which staff move from the role of assessor of achievement (as typified by summative assessment) to a collaborator in learning (Yorke, 2003). Social-constructivist approaches to assessment have also been developed to emphasise the involvement of the student in *every* stage of the assessment process (Price, O’Donovan, & Rust, 2007). As part of this, attempts to make the marking process more transparent and objective have been proposed, such as the work of O’Donovan, Price and Rust (2001) on criterion-referenced assessment grids. However, as O’Donovan

et al. note, these initiatives in the assessment landscape are not sufficient alone: students require a comprehensive approach to engaging with learning and assessment, including the need for more staff-student interaction, explanation of tasks and use of exemplars to model desired responses.

In the context of the growing use of formative and student-driven assessment in the tertiary classroom, the use of peers as a source of learning partnership has received considerable interest. In addition to being a source of feedback for students beyond staff members, peer feedback can play an important role in a student's process of self-regulated learning (Bilgin & Fraser, 2007; Raban & Litchfield, 2007; Squires, 2003; Willey & Freeman, 2006). For example, Cho and MacArthur (2011) assigned 61 undergraduate students to one of three conditions: reviewing and commenting on a paper written by a peer, passively reading a paper written by a peer, or a control condition (no treatment). Students were then asked to write a paper using a similar structure but on a different topic. Results revealed that the quality of the papers written by students in the reviewing and commenting condition were significantly higher than those written by the students in the other two conditions. Cho and MacArthur (2011) asserted that the provision of comments relating to detecting a problem in the work, as well as suggestions for improving the work, was positively correlated with improvements in post-test writing ability. These findings suggest that the process of critically appraising the work of peers can develop a student's ability to detect problems and independently devise

solutions to these problems, leading to enhanced metacognition and gains for student learning.

Similarly, self-assessment has been increasingly recognized as a tool for aiding metacognitive awareness (Boud, 2000; Devlin, 2002; Sadler, 2010). Self-assessment is also implicated in student performance indicators, even amongst students of low motivation (Ibabe & Jauregizar, 2010). Following a semester-long intervention using the online Hot Potatoes program, Ibabe and Jauregizar (2010) found that the frequency of engaging with self-assessment exercises was positively correlated with academic performance. Self-assessment has also been shown to benefit the student experience by providing immediate feedback, encouraging learner independence and creating greater transparency in the marking process (Taras, 2010). Facilitating self-assessment in students therefore represents an important part of the social-constructivist approach to assessment practice.

The role of grades in assessment and learning has also been called into question in recent years. As Rust (2011) asserts, “a first year statistics student would be failed for doing with numbers what happens in most of our assessment systems” (para 5). Rust proposes numerous reasons for why the use of numerical grades in contemporary assessment is poor practice. In particular, Rust maintains that assigning percentages is not a meaningful assessment of many types of student work, such as essays or lab reports (e.g. what does a percentage of 65% actually mean?), nor is it useful when the assessments are not quantitative (e.g. percentages are not scalable). Similarly, Rust questions the

use of applying normal curves to the distribution of marks in a cohort, the application of penalties (e.g. for being late or exceeding the word count), and the varying ability of students to receive full marks based on the assessment type, program studied and institution enrolled in. His argument builds on the work of Taras (2001; 2003) whose research suggests that withholding numerical grades from students heightens the learning associated with the task, as students are more likely to focus on their work rather than fixate on how the grade will affect their performance in their degree. While the views of Rust, Taras and like-minded researchers are far from widely implemented at this time, they represent clear challenges to entrenched methods of assessment in university settings and have begun to generate considerable interest and research.

However, despite these trends in the provision of assessment and feedback in higher education, opposition to change has been noted. There are many reasons for this, including a perceived lack of pedagogy, a resistance to revisiting the curriculum, institutional policy or current practices of staff, and a failure to suitably implement change so that new practices end up quickly discarded or are considered too difficult to maintain (Cho & MacArthur, 2011; Elton, 2004; Price et al., 2011; Yorke, 2003). ‘Piecemeal’ approaches to assessment innovation have also been blamed, with Kift, Nelson and Clarke (2010) advocating the need to embed change within institutional approaches to learning and teaching. Changing the assessment landscape is also made problematic by individual classroom factors and conflicts, such as the management of large class sizes and not having enough time to appropriately

engage with students (Skelton, 2011). In addition, Sadler (2011) notes an increasing tension between academics and institutions over the balance between freedom and identity in assessment processes versus the need to regulate these practices and outcomes.

As such, there has been a documented backlash following the perception that many innovations in higher educational assessment are disconnected from teaching practice (Coates & Seifert, 2011) and add considerably to the workload of academics with little to no improvement in learning outcomes for students (Bloxham, 2009). Therefore, the need for highlighting the pedagogy underpinning these developments, enhancing staff motivation and ability to implement changes, and assisting universities with utilizing these strategies efficiently and effectively is highlighted. With this in mind, the following content aims to explore the theoretical and empirical basis for feedback processes in tertiary settings to better identify the strengths and challenges facing this research area.

What is Feedback?

Despite the growing literature espousing feedback as a key determinant of effective teaching and learning, there are few studies that have systematically explored what is meant by the term feedback and how it is applied (Hattie & Timperley, 2007). For the most part in the academic literature, feedback can be construed as any response made by a teacher to student behaviour. Early views were orientated towards the corrective function of feedback, in which teachers would highlight student errors and shortcomings; however, this notion has been

expanded more recently to represent feedback as a critical point of interaction between staff and students, with the opportunity for enhancing student outcomes across a range of personal, social and academic fronts (Black & William, 1998; Hawe, Dixon, & Watson, 2008). Despite this shift in conceptualization, there remains healthy academic debate as to a uniform definition of feedback. This is further confused by the introduction of related terminologies such as feed-up and feed-forward, which are marked by a drive to distinguish the differential processes by which students receive information about their learning and performance, as well as a dissatisfaction with what the term *feedback* may imply.

According to Hattie and Timperley (2007), *feed-up* is marked by a focus on setting goals for what is to be learned (e.g. ‘where am I going’), while *feed-forward* concentrates on the work necessary to progress further in this learning (e.g. ‘where to next’). These types of information differ from *feedback*, in which the focus is on the progress made so far (e.g. ‘how am I going’) in the learning task (Hattie & Timperley, 2007). While some authors argue that future research in the area should concentrate more on these distinct processes, particularly feed-forward, others such as Hattie and Timperley (2007) maintain that all three processes should be considered as essential parts of feedback as a concept. It appears that many researchers and authors in the field agree, with the use of the term feedback applied in relation to any one or all of these elements in most instances.

Bondy and McCallum (2009) also claim that academic and student conceptualizations of feedback differ, with students often considering feedback as a postscript to their assessment and academics incorporating a variety of less formal communication exchanges as mechanisms for feedback. These exchanges include providing comments on work and performance during class, working with students in practical settings, providing guidance during individual or small group work, and the delivery of comments and grades on homework and assessment (Squires, 2003). This difference between student and academic perceptions of feedback can perhaps be best illustrated by a focus on alternative perspectives, with students concerned primarily with summative feedback (delivered at the end of a particular learning process) and staff acknowledging both summative and formative (which allow the learner to enhance their work during the learning process) perspectives of feedback (Squires, 2003). A more cynical student view can be summed up by Knight's (2007) observation that typically feedback is seen as an explanation on behalf of the marker, "mainly created to legitimise the assessor's position, as evidence of due diligence in assessment and as a prophylactic against student complaint about the judgment" (p. 446).

Other researchers have chosen to explore the means by which feedback can take place as a way to better understand the term. Hounsell, McCune, Hounsell, and Litjens (2008), for example, have proposed a six-step feedback and guidance loop outlining this process for tertiary assessment. They suggest that previous experiences of similar assessment form the basis for perceiving

and interpreting information of such a task (Step 1) before preliminary information about the assessment, such as handouts and staff advice, is processed and incorporated (Step 2). According to this model, students then have the opportunity to continually clarify expectations of the work throughout the assessment (Step 3). This can take on two forms: self-assessment of knowledge on the topic (such as through practice tests) and via directly contacting staff for advice. Following submission of the work, students can receive a more formal delivery of feedback on their achievements (Step 4), which can then be acted upon using supplementary support mechanisms (Step 5). Hounsell et al. note that, as with Step 3, the opportunities to seek support and advice during this step are primarily student-driven. The final stage of this process is the feeding forward of these enhanced skills and knowledge sets into new learning and assessment tasks (Step 6). Step 6 can often be missed due to lack of opportunity, such as in cases where feedback is provided too late or there is no chance to use it. Utilizing a number of concepts within the feedback literature (e.g. Nicol & Macfarlane-Dick, 2006; Sadler, 1998), Hounsell et al.'s representation of the feedback process represents a sound basis for developing a traditional model of feedback in the tertiary system. However, as this is a recently proposed model, more examination and rigorous evaluation is warranted.

The study of feedback processes also incorporates less traditional modalities. While it is most commonly delivered in verbal or written modes, feedback can be provided via body language or gestures that indicate approval,

encouragement or criticism of a student's performance (Dinham, 2008; Squires, 2003). Furthermore, while the study of feedback has traditionally explored the role of the teacher in guiding a student, it should be recognized that peer feedback can play an important role in a student's process of self-regulated learning (Bilgin & Fraser, 2007; Raban & Litchfield, 2007; Squires, 2003; Willey & Freeman, 2006). Similarly, self-assessment enables important critical thinking and reflective abilities relevant to academic performance (Boud, 2000; Devlin, 2002; Sadler, 2010). It has also been recognised that feedback processes can be altered or enhanced by students providing feedback to teaching staff on their own performance or the feedback they supply (Dinham, 2008; Pan et al., 2009).

For the purpose of further discussion, feedback will be used to describe any information delivered to the student, based on some output relating to the student, which will allow them to gauge, understand or improve their learning and performance in their academic studies. Despite the advantages outlined earlier in regard to the use of more specific definitions of feedback, a broad approach will be applied here so as not to discount important research findings in the field. This is supported by Black and William (1998) who advocate that the term be used in its most unrestricted state for the sake of simplicity and progress. Furthermore, as will be later discussed, it is contended that the shortfalls noted in the provision of educational feedback are not due to issues of semantics, but rather a difficulty for both staff and students to fully enact their roles in the feedback process.

The Effect of Feedback

A review by Berry (2005) of the functions of feedback revealed three key themes. The first, *motivational*, suggests that feedback provides incentive for repeating good work and striving to improve in the future. The second purpose reported by Berry is that feedback serves an *evaluative* function in which students can compare their progress against either a set target or the performance of other students. Berry suggests that both these functions within themselves are inadequate, as they do not assist the student in learning how to improve their work and thus may not result in change. It is within the final function, *learning*, that students are provided with guidance in improving their performance and even encouraged to more actively engage in their own education. Bondy and McCallum (2009) support this notion, arguing that the higher the levels of involvement in learning students have, the more favourably they will respond. All three functions of feedback are examined below.

Motivational effect of feedback. One of the ways truly effective feedback can motivate students is by engaging them in more challenging work or by developing an appreciation for higher quality learning experiences, rather than by just compelling them to do more (Hattie & Timperley, 2007). Feedback can therefore be seen as distinct from mere praise or encouragement in that it provides a basis from which students can enrich their learning opportunities through higher-order thinking. Similarly, while praise and encouragement may be useful in commending past efforts, feedback provides a template that allows students to progress in their learning. Recent research by Budge and Gopal

(2009) supports this notion, with three-quarters of the students surveyed in their study indicating that good quality feedback motivates them in their study.

According to Berry (2005), feedback that is encouraging about performance and utilizes rewards serves as an incentive for students to repeat the actions that led to the positive outcome. Where praise or encouragement may be limited to comments such as ‘good effort’, feedback is detailed so that the student can understand what efforts are worthy of repetition in future learning endeavours. Further to this, Burnett (2002) asserts that promotion of this particular type of motivating environment is associated with more beneficial student-teacher relationships and satisfaction with the learning environment. The motivational effect of feedback therefore assists students in gaining additional regulators of their interaction with study, increasing the likelihood of succeeding with their learning goals.

Evaluative effect of feedback. Beyond the evaluation from teachers, parents and peers, effective feedback can also engender self-evaluation in the learner. Students who develop error detection skills via previous feedback examples can learn to provide their own feedback on work and then strategize to improve their performance as a result (Hattie & Timperley, 2007). Similarly, the ability to appraise high quality work should lead to the regulation of the student’s own work in order to better approximate these standards (Hounsell et al., 2008). In a study evaluating the benefits of providing and receiving feedback, Lundstrom and Baker (2009) found that the ability to critically

provide feedback led to greater gains in writing ability compared to the general use of feedback provided by others.

Similarly, research has shown that feedback can overcome metacognitive errors, particularly in instances where a student may identify correct responses but doubt their grasp of the material. A study by Butler, Karpicke and Roediger (2008) demonstrated that feedback following a multiple-choice test resulted in double the retention of low confidence correct responses, relative to no feedback being provided at all. According to the authors, confirming the accuracy of low confidence responses allows students to become better evaluators of their own work, facilitating further learning.

There are, however, drawbacks when the evaluative effect of feedback is overemphasized or applied without clear parameters for interpretation. One common instance is when a normative view of assessment is encouraged rather than a criterion view, wherein the student gauges their success against their peers rather than themselves. In cases where the student may be performing poorly when measured against their peers, there is the potential for the student to become discouraged in their studies or lack the esteem to perform well in future tasks as a result of this poor self-evaluation following feedback (Black & William, 1998). Assistance provided to students in developing evaluative skills as a result of feedback may minimize the impact of such attributions.

Similarly, student propensity for feedback must be considered when enacting the evaluative effect of feedback. According to Hays and Williams (2011), two processes for engaging with feedback are typically used by learners:

monitoring and direct inquiry. Monitoring refers to the inferences drawn from observations of the learning environment and the performance of others within this context (Ashford & Cummings, 1983). For monitoring to be effective, students must possess the metacognitive abilities to identify feedback opportunities and draw the correct inferences from these occasions. As such, there can be clear differences in the extent to which feedback serves an evaluative effect dependent on the individual differences of the learner. Similarly, direct inquiry can be subject to problems in engendering an evaluative effect. Direct inquiry refers to the active solicitation of information from relevant others (Ashford & Cummings, 1983); in the tertiary environment, this typically involves students approaching teaching staff of their own accord. Direct inquiry is therefore subject to students' goal orientation, or their preferences in regard to enhancing or displaying their ability in the learning environment (Pieterse, van Knippenberg, & van Ginkel, 2011). Students who do not actively seek opportunities for feedback limit the extent to which evaluative feedback can be provided. Therefore, individual differences in student propensity for feedback must be considered by staff to maximise the extent to which the feedback provided engenders evaluation.

Learning effect of feedback. While the importance of feedback in motivating students and assisting them in the process of evaluation should not be underestimated, feedback should always engender learning as a key outcome. Feedback should work to reduce discrepancies between a student's current performance or understanding and their desired learning goal (Hattie &

Timperley, 2007), such as by providing the student with an opportunity to have their progress assessed and explained by an expert in the field. This guidance can overcome the gaps in knowledge and lengthy periods of attempting to master the skill or knowledge that is associated with trial-and-error learning (Dinham, 2008). It should also be recognized that in most learning tasks, particularly at a beginner level, people lack the skills and ability to properly assess their progress and provide constructive feedback to themselves (Westberg & Jason, 2001). According to Dinham (2008), there is a high likelihood that learners who do not receive adequate instruction, correction or encouragement will quit due to a failure to progress. Feedback in these cases can therefore maintain the learning process.

These observations are supported by a meta-analysis that reviewed 58 effect sizes from 40 papers and examined the usefulness of providing correct responses as a mode of feedback provision. The results of this analysis revealed that feedback that indicated the accuracy of a response (right/wrong) resulted in a lower effect than feedback that elaborated on this by providing a correct response (Bangert-Drowns, Kulik, Kulik, & Morgan, 1991). Therefore, feedback that facilitates learning is much more likely to result in performance gains than feedback that is primarily evaluative. It is for reasons such as this that educators seek in particular to facilitate the learning outcome of feedback (Sadler, 1989).

The Importance of Feedback

When evaluating factors that lead to effective learning and course satisfaction, personal teaching characteristics and methodology have both been examined. While a number of key themes have been established in both regards, research by Pan and colleagues (2009) suggests that teaching quality is more highly valued than any personal attributes of the teacher themselves. Of those markers of teaching quality, feedback has been shown to be one of the most important determinants of effective learning and satisfaction with learning processes. This finding is supported by research reported by Dinham (2008). According to Dinham, meta-analyses reveal large effect sizes for teacher-provided feedback on student performance, suggesting that feedback is one of the most influential factors on student achievement when compared to other teaching and learning variables.

Furthermore, feedback also serves a vital role in assessment. While the intended role of feedback in summative assessment is typically straightforward, little recognition is given to the extent successful feedback shapes the curriculum as a whole. According to Westberg and Jason (2001), the absence of effective or sufficient feedback can actually inflate the importance placed on formal testing. These authors suggest that formal testing is only able to provide a static and fragmented insight into the learning experience, whereas feedback can more fully document “the complex, changing landscape of ... intellectual and performance skills” (p. 19-20). As such, feedback can provide a more detailed qualitative analysis of student ability and potential than numeric grades

are able to capture, allowing staff members to more accurately capture a profile of student learning.

Characteristics of Successful Feedback

As noted by Sadler (1989), information regarding a student's performance in relation to a desired outcome should only be considered feedback when it can be used to alter the gap between the performance and the intended outcome. Therefore, successful feedback has traditionally been described in terms of the usability of the feedback provided. Common usability themes relating to the content of feedback have focused on the need for legibility (Bondy & McCallum, 2009), detail (Rowe & Wood, 2007) and skills development (Walker, 2009). For example, Walker (2009) found that students perceive skills development feedback to be the most useful feedback on written assignments, particularly comments that utilize explanation as part of the feedback provided as a means of enhancing its usability. Students may find comments usable in two different ways: retrospectively in regard to the work at hand or in planning ahead for future work to avoid displaying the same gaps in knowledge or ability.

The amount of feedback provided to a student also determines the successful use of the information at the time and in the future. Inadequate feedback that is marked by lack of explanation or failure to be specific can hinder a student's ability to improve their own work, as they are left with little direction or understanding of their errors. However, the provision of too much feedback can also have detrimental effects on the student's learning, as this can

result in an over-dependence on external evaluation. According to Squires (2003), “if we want learners to develop and internalize the capacity to evaluate their own work – important in many jobs and the rest of life – we should encourage them to try judging it for themselves” (p. 40). Therefore, striking the balance between sufficiently detailed feedback and feedback with no room for independent learning is crucial.

Another leading trend in the provision of successful feedback is an emphasis on personalized comments, particularly those in the form of a one-on-one consultation between marker and student (Dinham, 2008). Students have been shown to object to overly generic feedback, wanting reassurance that markers have given consideration to their own particular performance (Poulos & Mahony, 2008). In addition, research suggests that personalized instruction is more effective in tertiary settings than whole-group approaches to teaching (Austin, 2000, as cited in Martin, Pear, & Martin, 2002), suggesting that responsiveness to individual needs is preferable to a one-size-fits-all view of interacting with students.

Closely linked to a personalized approach to feedback is the inclusion of students as active members in the process. Working closely with students in the feedback process can allow them to develop an ‘insider’ perspective; this can then engage them more in their learning and allow them to exert agency over their own improved understanding or performance (Black & William, 1998; Hawe et al., 2008). Close collaboration with students can also assist in avoiding situations where students fail to understand or make use of the feedback

provided. As noted by Nicol and Macfarlane-Dick (2004), teachers regularly make the assumption that the information they transmit to students via feedback is easily decoded and acted upon. This assumption is unfortunately in stark contrast to much research exploring student perceptions of feedback which outlines the difficulties students have in understanding and using what is provided (Bondy & McCallum, 2009; Rowe & Wood, 2007). As such, Nicol and Macfarlane advise that a key part of the feedback process involves students actively constructing their own understanding of feedback messages from markers. Consistent dialogue between staff and students, in addition to the promotion of students as exerting power in the process of feedback, therefore appears to engender more successful use of feedback.

Timing of feedback has also been established as an important marker of its use by students. Prompt feedback is necessary to ensure quick rectification of errors and to avoid instances where students have moved on from the learning topic or process (Glover & Brown, 2006; Murdan, 2002; Squires, 2003). It can also overcome instances where students feel that there is no meaningful connection between the work they produce and the commentary provided by markers, leading to disenchantment with the topic or the course as a whole. Timely feedback in these cases can allow students and markers to rectify these issues while the topic is still fresh and before frustration sets in (McGregor, Merchant, & Butler, 2008). This is supported by meta-analytic findings demonstrating that, with the exception of particular experimental situations (see Butler, Karpicke & Roediger, 2007, for example), more immediate feedback

translates to greater learning gains (Kulik & Kulik, 1988). Butler et al. (2007) suggest that the perceived superiority of immediate feedback in genuine settings is likely due to the fact that, unlike experimental situations, students are often not made to process feedback after a delay in typical classroom settings (i.e. subsequent work does not always build upon, or require students to demonstrate use of, feedback from previous work).

Chapter Summary

A growing emphasis on student-focused formative assessment has shaped the academic landscape in which the study of feedback exists; as part of this, several challenges to understanding and challenging feedback processes in tertiary settings have been presented. Research exploring feedback has encompassed many attempts to operationalise a standard definition of feedback; however, consistent with Black and William's (1998) advice, this thesis adopts a broader approach for the sake of simplicity and progress. Despite these difficulties in conceptualisation, feedback has been implicated as a determinant for a number of motivational, evaluative and learning outcomes, signifying the importance of successful feedback practices between staff and students in tertiary settings. The useability, depth, personalization and timing of feedback have all been noted to be characteristic of successful feedback. However, more explicit understandings of how staff and students perceive and use feedback are warranted. Given the high levels of dissatisfaction noted with the provision of feedback in university settings (Krause, Hartley, James, & McInnes, 2005; Nicol, 2008), it appears that a more sophisticated analysis of staff and student

interaction is required to better determine the breakdown in feedback processes in these instances.

Chapter 2

Research on Feedback in University Settings

Chapter Overview

This chapter summarises recent research trends regarding the provision and receipt of feedback in tertiary settings. It begins by exploring student perceptions of feedback. In this section, student attitudes, expectations, use and preferences for feedback will be outlined. Following this, perceptions of feedback from the perspective of educators will be explored, evaluating perceptions of feedback in terms of attitudes, provision and preferences. The similarities and differences between staff and student perceptions of feedback, including issues requiring further exploration, will then be reviewed. It appears that in many instances student and staff perceptions are not aligned, leading to dissatisfaction with the feedback process and a failure to facilitate successful feedback. This chapter concludes with several recommendations for overcoming these negative outcomes.

Students' Perceptions of Feedback

According to Rowe and Wood (2007) and Poulos and Mahony (2008), the examination of feedback from the point of view of students has largely been overlooked in the literature to date. The following section summarises the available research findings in this area. In particular, student attitudes, expectations, use and preferences for feedback will be discussed. It appears that while the research literature on the topic is not abundant and that there are noticeable differences between courses, campuses and cohorts, there remain

several key themes within the perceptions of feedback amongst students. The identification of these themes is integral in understanding and challenging the dissatisfaction towards feedback processes utilized in tertiary settings.

Attitudes towards feedback. Research in tertiary settings by Bondy and McCallum (2009) has revealed that students' understanding of feedback is often narrow and focused on assessment outcomes. This finding supports research by Rowe and Wood (2007) who suggest that while some students recognize the role of feedback in learning, most students in their study considered feedback to be most important in preparing for the final exam. Similarly, Holmes and Papageorgiou (2009) found that students consider feedback to be limited to written responses on assessment, disregarding other teaching evaluations such as comments on performance during class. As discussed further in this chapter, this focus on summative, rather than formative, outcomes may explain key differences between staff and student perceptions of feedback.

Student perceptions of what actually constitutes feedback within summative assessment have also been shown to be at odds with the perceptions of educators (Devlin, 2009; Rowe, Wood, & Petocz, 2008). In a study exploring marking rubrics (used in an attempt to demystify the marking process), Calvert (2004) found that while some students valued this method of clarifying how marks are awarded, students did not perceive this information as being 'feedback'. Despite the staff effort in using rubrics in conjunction with traditional comments as a means for elaborating on the feedback provided,

students disregarded this portion of information as being irrelevant to their individual progress.

Other research by Penny and Grover (1996) has found that students often lack a detailed understanding of marking considerations; this lack of understanding may contribute to the lack of cohesion between staff and student perceptions on the nature of feedback. Fourth year students enrolled in an education degree completed a self-assessment of an assignment, including documenting what grade they felt the project was worth and the criteria they used to justify this judgment. When asked to identify what tutors would consider important when marking and annotating this written assignment, Penny and Grover found that students largely failed to consider many higher-order learning issues such as evidence of theoretical understanding, synthesis of opposing viewpoints and critical dissection of the research. Instead, students were focused on considerations such as style, readability and layout; students also considered the amount of work invested into the assessment as important to markers. As such, this difference in attitudes towards what constitutes feedback, both in regard to formative and summative outcomes, may account for the dissatisfaction with feedback processes noted by many tertiary students.

This dissatisfaction has been well documented over the past decade in Australia; for example, nationwide research suggests that less than one-third of first year students feel that their teachers take an interest in their progress and in providing feedback (Krause et al., 2005). These figures are complemented by recent Australasian Survey of Student Engagement data which suggests that

only 38.6% of Australasian first year students report receiving prompt written or oral feedback on their academic performance from university staff (ACER, 2009); results from the most recent Course Experience Questionnaire also show that only a small percentage of graduates (12.9%) in Australia strongly agreed that staff put a lot of time into commenting on their work (Carroll, 2011).

Expectations of feedback. In comparison to other areas of feedback research in tertiary settings, student expectations of feedback have received considerable interest. Focus groups involving approximately 105 social science, engineering and humanities students at RMIT University, Melbourne, were administered by Bondy and McCallum (2009) to discern the expectations undergraduate students have for feedback outcomes. Several key themes were revealed. The most strongly expressed concern was for marking consistency, particularly in regard to cross-marker reliability and transparency in allocation of marks. The accessibility of staff was also flagged as a potential problem, with several students indicating difficulty in obtaining consultations regarding already graded work. This was coupled with a difficulty deciphering the handwritten comments of staff on work, failure to return assessments within a reasonable timeframe, and a desire for verbal as well as written feedback. However, despite these strong themes in student expectations of feedback, Bondy and McCallum noted that students were largely uninterested in the topic of feedback, feeling that their own suggestions for improving assessment feedback were rarely used and therefore meaningless. Students wanted to see that their own suggestions to staff had been properly heard and implemented,

something that many feedback processes conducted over the semester did not allow. It would appear that this breakdown in student and staff communication transferred to students perceiving staff feedback as irrelevant or useless; similarly, poor attitudes by staff towards actioning student suggestions may be modelled by those students in response to staff feedback.

In addition, a series of focus group interviews conducted by Rowe and Wood (2007) with 29 business, finance and statistics students at Macquarie University, revealed that students perceived detailed additional comments on work as the greatest marker of 'good' feedback. Feedback that was minimal or non-existent was considered the worst feedback of all. In contrast to Bondy and McCallum (2009), Rowe and Wood found that students did consider feedback to be important to them and considered feedback in further learning for the course. While this difference may be explained by differences in courses or campuses, it may also be accounted for by Rowe and Wood's observation that in instances where the received grade was high or the feedback was perceived as irrelevant to further assessment, feedback was deemed less important. This observation may help to shed light on instances in which students do not engage in the feedback process.

The issue of engagement with feedback is further elaborated by Sendziuk (2009) in his study of Australian History students at the University of Adelaide. Of the 73 students (85.9% of the cohort) who responded to the anonymous questionnaire, 60% reported failing to collect assessment feedback on one or more occasions. Further to this, 21.9% of students reported failing to

actually read the provided feedback on one or more occasions. While this may suggest that many students are uninterested in the topic of feedback, other findings within the study support the notion that dissatisfaction with feedback arises from a self-perpetuating cycle. Over 75% of the students surveyed by Sendziuk reported receiving no written feedback for one or more assessment tasks, and for those assessment tasks that did receive written feedback, the quantity of the feedback provided was described as modest rather than plentiful. The results of Sendziuk's work therefore suggest that students may be discouraged from entering into the feedback process by a perceived lack of effort from markers; similarly, markers may become frustrated and less invested in the feedback process when they perceive a failure to make use of the feedback provided. Shaping feedback as more of a collaborative, ongoing process may assist in re-engaging both students and staff in their respective roles.

Furthermore, an Australian study at Griffith University exploring student perceptions of what constitutes helpful feedback found that students place importance on the role of supportive feedback (Lizzio & Wilson, 2008). In this study, 57 undergraduate students enrolled in psychology, law and arts degrees were asked to provide anonymous written descriptions of what they considered to be useful or helpful feedback. Three aspects of supportive feedback were highlighted: acknowledgement of achievements, recognition of effort, and use of a considerate tone when providing comments. Of particular note was the link between students who performed less well than expected and the use of

supportive comments, with students reporting that such encouragement assisted with maintaining motivation and ability to persist. It appears that while students as a whole value supportive feedback, the impact on particular groups of students may be more profound.

Further focus group research by Poulos and Mahony (2008) also highlights several expectations of students towards feedback. Four groups of student volunteers from the Health Sciences faculty at University of Sydney, Australia, participated in the focus groups. As in previously mentioned research, specific rather than generalised feedback was preferred, as was more timely feedback. In addition, the researchers found that perceived usability of feedback reflected students' progress in their degree. Final year students deemed feedback relating to their professional practice following graduation as more valuable than course-specific feedback, whereas first year students required feedback to provide emotional support and integration into university life. Despite these trends, the authors also noted that the wide range of student perspectives on the matter of feedback indicated that students as a whole "do not hold a homogenous view of what effective feedback is and how it could be used" (p. 145). As such, Poulos and Mahony advocate the need to educate students in the recognition of, and engagement with, feedback.

This assertion is consistent with survey research conducted by Budge and Gopal (2009) that found that students valued feedback less when it was delivered by non-traditional means (e.g. online feedback) compared with more formalized methods. Of the 83 students enrolled in the School of Fashion and

Textiles at RMIT University, Melbourne, who participated in the research, 81% agreed that written or oral feedback is preferable to feedback delivered online.

While this preference may reflect the less personal approach of such communication, it may also be attributed to the general lack of investment placed in tertiary settings in educating students about non-traditional and innovative means of feedback, both in terms of signalling opportunities for feedback and also strategies for engaging successfully with this feedback.

Budge and Gopal therefore recommend that the value of these forms of feedback be highlighted to students as part of a multi-faceted approach to securing better feedback outcomes.

Use of feedback. Explorations of feedback in tertiary systems have also focused on the ways in which students interact and make use of feedback. One such study was conducted by Lee, Wong, Cheung and Lee (2009) that explored the use of an automated feedback system in developing essay writing skills amongst 28 English as Second Language (ESL) computer science students at Hong Kong Baptist University. Although there were no significant differences in the essay scores obtained by the experimental and control groups involved, an analysis of the way in which students utilized the feedback system revealed that there were key differences in students' ability to use the system successfully. In particular, the role of the teacher and a need for appropriate pedagogy were flagged as crucial in achieving gains from the feedback system, rather than assuming that the system alone would be sufficient. Findings such as this support the need for more comprehensive responses to feedback opportunities,

rather than utilizing singular resources or tools without the proper support, education and discussion with teaching staff.

Reasons for the differences apparent in students' ability to use feedback may be in part explained by the skills they bring to the university classroom. In particular, research suggests that students entering the tertiary system often lack insight into the successful utilization of feedback, having received limited or no assistance in developing these skills. Burke (2009) found that fewer than 40% of the new tertiary students surveyed in her sample of 358 Humanities students in the United Kingdom reported receiving guidance in using feedback prior to university. More alarmingly, further analysis of the responses made by students in this instance (p. 49) revealed that many of the students confused actual feedback (e.g. 'to plan before I write an essay') with guidance on how to use feedback (e.g. 'collate feedback to see weaknesses/strengths'). As such, Burke asserts that first year students do not possess the necessary skills to engage with feedback and should not be expected to be able to make use of feedback automatically; specific guidance is called for in the facilitation of appropriate feedback strategies, knowledge and skills.

In addition to assisting students with their engagement in the feedback process, research suggests that attention needs to be given to the quality of feedback to ensure students are able to make use of it. Following an investigation of what constitutes usable feedback, Walker (2009) found that a "relatively high proportion" of feedback provided to students is unusable, in that it was not applicable to rectifying the gap between performance and desired

outcome (p. 76). As such, Walker advocates the need for staff to question the theories of learning and teaching that guide the assessment and marking process. Walker further encourages markers to focus on skills development and the provision of explanatory comments, rather than corrections or brief annotations, when delivering feedback. These observations reiterate academic demand for assessment practices to be underpinned by appropriate pedagogy, as discussed in Chapter 1.

Comparisons of the differing outcomes resulting from feedback have also been made. One such study was conducted by Nesbit and Burton (2006), who found that student performance expectations result in differing outcomes on the receipt of feedback. In particular, it was shown that students who achieve grades lower than a credit and believe that their effort warranted a better mark are more likely to develop low self-efficacy and dissatisfaction with feedback than other students. Nesbit and Burton therefore recommend that the development of realistic performance expectations, via marking discussion and use of exemplars, is needed for students to remain engaged during and after the summative feedback process.

The findings of Nesbit and Burton (2006) have been supported by additional research conducted by Senko and Harackiewicz (2005). In their study of introductory psychology students, they found that competence feedback impacted students' pursuit of their achievement goals. In particular, poor exam performance predicted a significant reduction in the pursuit of mastery goals and performance-approach goals. This finding, in conjunction with Nesbit and

Burton's (2006) work, suggests that feedback experiences that relate to negative outcomes are particularly relevant to student satisfaction, efficacy, and engagement with learning, especially in future academic opportunities. Findings such as this therefore highlight the need to establish better mechanisms to assist students in coping more positively with feedback relating to negative outcomes.

Feedback interventions have been shown to impact on student use of feedback. Case (2007) implemented the use of an electronic feedback template and access to one-on-one staff-student consultation across all three years of undergraduate criminology study at Swansea University, United Kingdom, to replace the typical annotation of essays and completion of handwritten feedback forms. Questionnaires distributed to students following this process indicated that students developed a greater understanding of the role of self-evaluation in learning. In particular, Case demonstrated that an emphasis on explicit engagement with assessment criteria and facilitation of feedback consolidation resulted in greater engagement with higher-order learning. Furthermore, results from this intervention demonstrated greater student performance following this realignment between course design and student need (as measured by improved assessment grades). As such, it is clear that improving student use of feedback can have both mastery and performance gains.

Preferences for feedback. A comparison of different feedback conditions was conducted by Lipnevich and Smith (2009) to explore outcomes that resulted from no feedback, feedback from a course coordinator and computer-generated feedback in 464 students completing an essay under

examination conditions. The researchers also differentiated these conditions by trialling use of praise and provision of grades. Lipnevich and Smith found that detailed written feedback that is personalized and specific to the student's work is most strongly related to improvement in work output. They also found that providing a marked grade as part of the feedback resulted in decreased improvement compared to feedback without grade allocation; however, this effect was removed when then the grade was combined with statements of praise within the feedback given. The largest improvement was noted for detailed feedback without the use of praise and grades, suggesting that descriptive feedback that focuses on how the task is conducted and methods of improvement is more useful to student learning than evaluative feedback that informs the student of how well they performed. Although research in this area is limited, it is plausible that these findings may be applicable to other forms of assessment or contributions to the learning environment.

Students have also shown a preference for more proactive feedback approaches by staff (Rowe & Wood, 2007). In a study exploring student perceptions of feedback, Rowe and Wood (2007) found that while many students agreed that academic staff were available for further consultation to provide feedback, this was available only by student request. Rather than additional feedback being available only via email and consultation, students demonstrated a desire for staff to be more proactive in providing feedback to students in the first instance. It would seem that staff-initiated feedback opportunities, such as class discussions or assessment reviews, would be

considered highly by the student body. This need for staff to be more proactive in providing quality feedback has been replicated in research by Holmes and Papageorgiou (2009), who suggest that workshops or online discussions designed to engage both staff and students in dialogues about feedback would provide a useful vehicle for students to ask more questions and for staff to make more effective use of their time.

Therefore, the research on student perceptions of feedback indicates that there are a number of consistent trends. The first is that students often have difficulty in conceptualizing and engaging with feedback, focusing largely on assessment outcomes and ignoring formative feedback opportunities. In addition, many students fail to engage in higher-order learning with the feedback provided by staff. This could be rectified by the well-documented and consistent trends in student suggestions for improving feedback, namely to improve the timeliness, legibility, consistency, applicability and transparency of the feedback provided and to increase the availability of staff in working with students to understand and apply this feedback.

Educators' Perceptions of Feedback

In the following section, the perception of feedback amongst educators in tertiary settings is explored. In particular, staff attitudes, provision and preferences for feedback will be examined. As previously mentioned, the research exploring student perceptions of feedback is not abundant (Poulos & Mahony, 2008; Rowe & Wood, 2007); research exploring staff perceptions of feedback is even more minimal. As noted by Rowe et al. (2008), consideration

of staff perceptions of feedback is necessary when establishing a complete picture of learning contexts. This section therefore details the few key research trends established thus far in exploring academic engagement with feedback processes.

Attitudes towards feedback. As noted earlier, while student perceptions of feedback tend to be focused on summative outcomes, educators tend to adopt a more comprehensive approach, including less formalized output in their perspective (Holmes & Papageorgiou, 2009; Rowe & Wood, 2007). Staff in tertiary settings have also demonstrated an awareness of the mismatch between staff and student perceptions of feedback, with claims of students being mark-focused rather than learning-focused in their approach to feedback (Bondy & McCallum, 2009; Squires, 2003; Storch & Tapper, 2002). While such observations may indicate feedback awareness on behalf of educators, they may also signify a perceived lack of engagement on behalf of students. These perceptions are likely to be damaging in some cases, as this assumed lack of student investment may translate into a resulting lack of effort from staff in engaging with feedback.

Provision of feedback. According to Tang (2000), staff often inhabit particular marking roles during the feedback process. These roles are commonly influenced by the power relationship in place between staff and students, that is, whether teachers are considered the absolute authority, benevolent authority, equal authority or whether students themselves are considered the authority. The marking roles described by Tang, ranked from highest to lowest use of teachers

as authority figures, include *the gatekeeper* (judging with the aim of determining whether the work meets the criteria; a failure to meet this criteria results in disqualification from a group), *the judge* (evaluating with the aim of passing judgment), *editor* (correcting), *discourse community expert* (serving as informant for the relevant discourse information), *coach* (guiding the student with information to help the student improve), *sounding board* (providing a friendly environment to discuss ideas), *collaborator* (works with student to enable their best work to be produced), *conversation partner* (marking is a means for having a democratic discussion with student), and *common reader* (putting aside usual marking agenda to allow students to determine their own agenda).

Tang (2000) suggests that mindfulness of the roles inhabited when marking is useful in ensuring students gain the most from feedback opportunities. For example, markers who routinely rely on utilizing the gatekeeper or judge roles may discourage students from fully engaging with the material and exploring learning possibilities, instead teaching them to focus on summative achievement outcomes. As such, feedback provided by staff can be shaped by the many roles teachers consciously and unconsciously assume when interacting with their students. These roles can in turn affect student learning outcomes when mindfulness is not present.

Preferences for feedback. Moodie, Brammer, and Hessami (2007) report that educators often respond more favourably when assessment guidelines and marking criteria are detailed and comprehensive. In their

comparison of two engineering cohorts, the authors found that the inclusion of more detailed writing guidelines, criteria and marking schemes for laboratory report assessments resulted in gains for not only the students but for the staff members as well. In addition to students demonstrating greater gains in marks over the course of the semester, staff reported that achieving marking consistency and providing clear feedback was much easier when supported by these tools. In addition, staff found that they could better identify problem areas and reflect this in their teaching approach.

This research is supported by findings reported by Kuisma (1999) who compared the use of detailed criteria marking sheets for written assignments to marking without such a form. Kuisma found that staff responded very positively to the use of the detailed forms, noting that discriminating between students' performance was made considerably easier. Furthermore, the teachers involved in the study reported becoming more objective and more consistent in their marking and feedback as a result of this tool. As such, the quality of assessment and marking materials may play a part in determining staff satisfaction and engagement with feedback.

Managing the Competing Needs for Feedback in Higher Education

As documented throughout this chapter, there appear to be several discrepancies between staff and students concerning their perceptions and interactions with feedback. This is exemplified in research by Gibbs, Simpson and Macdonald (2003) who documented the divide between students who lamented their feedback opportunities and wanted more, compared with staff

who were frustrated by the failure of students to adequately engage with the feedback already available. It appears that targeting this mismatch between staff and student perceptions of feedback is the starting point for achieving better satisfaction with the feedback process and ultimately greater learning outcomes for students.

In aligning staff and student perceptions of feedback, it is suggested that education regarding engagement with feedback is key, rather than focusing on the semantics of the term 'feedback' or the development of single feedback instruments as suggested in much of the recent literature. Hawe and colleagues (2008) found in their exploration of using feedback that teachers often struggled to successfully facilitate feedback in the classroom, particularly in regard to enabling students to become active participants in this process. They argue that for effective feedback mechanisms to occur, staff require more professional learning opportunities to develop their understandings and use of feedback. Findings such as these highlight the need for discussions about feedback to not only provide a conceptual dissection of the term or tools for achieving feedback, but also an applied focus towards successfully engaging both learners and educators in the process.

Differing feedback needs across tertiary education levels. While much of the research above discusses the perceptions of staff and students regarding feedback as a whole, several research studies have indicated that there may be more need for feedback education amongst students during the earlier stages of tertiary education. Two key arguments have been forwarded in support

of this: evidence to suggest that feedback practices are not equal amongst differing levels of study (Rowe & Wood, 2007) and the well-documented need to support first year students during the transition to university life (Dietrich, 1999; Field & Kift, 2010; Gall, Evans, & Bellerose, 2000; Hill, 2006; Kift & Moody, 2009; Kift, Nelson, & Clarke, 2010; Li, 1997; Nicol, 2007, 2008; Tinto, 2009).

In their study of student perceptions of feedback at an Australian university, Rowe and Wood (2007) asked 29 economic and finance students across both undergraduate and postgraduate programs to discuss in focus groups whether or not they received enough feedback. Thematic analysis suggested that later year students identified differing levels of feedback across their degrees. In particular, Rowe and Wood found that feedback was perceived to be much more comprehensive in later years of study, with little feedback available in the first two years of tertiary study. This finding is supported by nationwide research suggesting that less than one-third of first year Australian students feel that their teachers take an interest in their progress and provide helpful feedback (Krause et al., 2005). In their review of the first year student experience in Australia, James, Krause and Jennings (2010) noted that “the student-teaching interaction appears impersonal and distant for many students” (p. 5) and suggested that more emphasis on communication between staff and students in this critical year is required. Recent AUSSE data suggests that this trend may be more pronounced in Australian first year students than those internationally, with statistics suggesting that they are less than half as likely as their American

counterparts to discuss their grades with university staff (ACER, 2010). This is particularly troubling given that 34% of Australian first year students report that their average mark for the semester was lower than expected (Krause et al., 2005), suggesting that student progress is not always effectively conveyed to many of these first year students until it is too late to rectify.

This perceived lack of feedback available to students is particularly concerning in light of evidence suggesting that feedback is especially crucial in the first year of study. Research suggests that many students who enter university are unprepared for the rigors of tertiary study (McInnis, James & Hartley, 2000; Schrader & Brown, 2008); Burke (2009) supports this conclusion with evidence to suggest that first year students in particular are ill-equipped to make successful use of feedback. New tertiary students have also demonstrated unrealistic expectations for feedback, such as feedback on drafts and ready access to teachers, which are not consistent with common university practice (Brinkworth, McCann, Matthews, & Nordstrom, 2009). In this, first year students may be out of their depth when encountering University approaches to feedback.

Moreover, according to Poulos and Mahony (2008), in addition to valuing corrective feedback, first year students require feedback that facilitates integration into university life and provides emotional support, such as through encouraging interaction with staff and promoting future opportunities and networking. This observation is consistent with Little's (1975) typology of learning climates in tertiary settings, in which he identified two key dimensions

that shape the learning experience: *challenge* (the degree to which students are stimulated academically) and *support* (the degree to which students are included in and assisted with negotiating the learning environment). Little maintained that cultivating environments, which emphasized both challenge and support, were the most conducive to learning in university settings. This proposal is supported by Kift and Moody (2009) who assert that, in light of the challenges presented to new tertiary students, “a fundamental first year curriculum objective should be to assist students to make the successful transition to assessment in higher education” (para 1). It would appear that the transition phase of adjusting to university life places additional demands on the provision of quality feedback during this first year and that institutions would do well to incorporate these needs into curriculum design. For example, Kift et al. (2010) suggests that this may be achieved by using peer mentoring as an ongoing semester activity to facilitate greater learning support (including feedback dialogues) for curriculum content.

Furthermore, research indicates that students with little experience of feedback have less satisfaction and lower engagement with feedback processes (Fyfe et al., 2006). As such, first year university students are particularly vulnerable to negative feedback outcomes in light of their limited experience dealing with feedback in tertiary settings. Fyfe and colleagues (2006) argue that more emphasis is needed on students recognizing, experiencing and reflecting on feedback in the earlier stages of study, in order to maximize their learning

outcomes. It thus appears that particular energy needs to be directed at promoting good feedback processes during the first year of tertiary study.

Differing feedback needs within student cohorts. In the research discussed in this chapter, several themes for student perceptions of feedback have been discussed, including how first year students have specific feedback needs when compared with other tertiary levels. However, even within the same tertiary level of study there appear to be significant differences among the different samples of students and more importantly within each of these cohorts (Burke, 2009; Lee et al., 2009; Lizzio & Wilson, 2008; Nesbit & Burton, 2006; Rowe & Wood, 2009). While differences amongst campuses and courses must be noted in comparing different samples, the evidence from these studies suggests that individual differences also play a key role in determining student perceptions and engagement with feedback. However, despite this, very few studies have systematically analysed the participant characteristics associated with feedback satisfaction, feedback engagement or preferences for particular feedback methods. The research discussed previously (Burke, 2009; Lee et al., 2009; Lizzio & Wilson, 2008; Nesbit & Burton, 2006; Rowe & Wood, 2009) suggests that cognitive appraisal and academic skills may be related to student interaction with feedback, yet the evidence in support of this is sparse and fails to consider the contribution of other individual characteristics to this relationship.

Of particular interest in the link between student experiences with feedback and individual student characteristics is the resulting impact on

feedback satisfaction, efficacy, and performance (Nesbit & Burton, 2006; Senko & Harackiewicz, 2005). As discussed previously, it would appear from the research conducted by Nesbit and Burton (2006) and Senko and Harackiewicz (2005) that students respond differently to particular feedback challenges, with some students faring more poorly than others due to these individual factors. Identifying those individual characteristics that help support students in negotiating feedback or help to buffer them from the effects of negative feedback experiences may allow facilitation of such characteristics as part of interventions to enhance feedback. Similarly, identification of stable individual characteristics that are associated with negative outcomes arising from feedback would allow additional support to be provided to these students at risk. Lastly, establishing links between individual student characteristics and feedback preferences would help to secure more effective provision and interaction with feedback in the long term (Vasilyeva, Pechenizkiy, & Puuronen, 2006).

Research exploring individual student characteristics and feedback has been minimal. Lizzio and Wilson (2008) conducted one of the few studies that evaluated the relationship between student personal variables and feedback factors. Based on their initial research, Lizzio and Wilson found four key feedback domains used by students to evaluate the quality of feedback provided by staff on assessments: effectiveness, development, encouragement and fairness. In a sample of 277 psychology, criminology, science and engineering students across various levels of study, Lizzio and Wilson conducted correlation analyses between these factors and a range of personal variables (age, gender,

year of study, satisfaction with degree, GPA and work hours). With the exception of year of study, which was shown to have a weak negative correlation with effectiveness, development and fairness, no significant relationships were uncovered. However, given the exploratory nature of this research, Lizzio and Wilson recommended that future research continue to investigate “the relative contribution of student characteristics or traits to students’ likely use of feedback” (p. 274). It may be that other individual characteristics are more important in determining student interaction with feedback.

In light of the identified link between feedback experiences and cognitive appraisal/academic skills (Burke, 2009; Lee et al., 2009; Lizzio & Wilson, 2008; Nesbit & Burton, 2006; Rowe & Wood, 2007; Senko & Harackiewicz, 2005), it would appear prudent to examine the relationship between similar variables noted in the literature for their impact on learning and academic success. One such variable is self-efficacy, which has been posited by Narciss (2004) to be a key student characteristic that impacts on feedback, motivation and engagement. Self-efficacy refers to a person’s perceived ability to enact a given task (Bandura, 1982). A particular form of self-efficacy that is especially relevant to learning environments is the variable of academic confidence. Academic confidence refers to students’ belief in their ability to respond to the demands of study (Sander & Sanders, 2003). As noted by Miles (2004), “educational success can be largely drawn from positive self-efficacy in academic settings, including college environments” (p. 3).

As such, self-efficacy and academic confidence beliefs have been implicated in a number of academic outcomes, including performance, adjustment, overall satisfaction and commitment to remain in study (Chemers, Hu, & Garcia, 2001). In their sample of 256 first year students, Chemers et al. (2001) found that students with high academic confidence outperformed their less confident counterparts. One potential explanation offered for this is that students with high self-efficacy are likely to make better use of metacognitive strategies and skills for managing the tertiary environment, therefore leading to superior learning when compared to students with low academic self-efficacy. These skills may extend to engagement with feedback and feedback utility as they represent an important aspect of managing the tertiary environment. While research explicitly exploring self-efficacy and feedback in tertiary settings is minimal, emerging research suggests that a relationship exists. Chan and Lam (2010) found that different forms of feedback have particular effects on student self-efficacy, with formative feedback and self-referenced feedback being more valuable to promoting self-efficacy than summative feedback and norm-referenced feedback respectively. This research suggests that feedback processes may contribute to the development of academic confidence in different ways. This, coupled with the established link between academic confidence and academic success, suggests that the exploration of such cognitive variables in the study of feedback is warranted. Bray (2007) in particular asserts that not only are these beliefs important but that they are

variables worthy of intervention in order to assist students transitioning to university life.

In addition to these cognitive variables, more global student characteristics have been shown to be related to student tertiary success, including successful use of feedback. In particular, student wellbeing has been explored as an important mediator of student success. While research on the notion of student wellbeing has varied in terms of focus, a popular strategy has been the exploration of mental health variables as an indicator of wellbeing, including those relating to psychological distress. Research indicates that wellbeing, as measured by variables such as quality of life and self-esteem, has demonstrated a strong link with academic success and satisfaction (Disch, Harlow, Campbell & Dougan, 2000; Friedlander, Reid, Shupak, & Cribbie, 2007). Additionally, poor wellbeing has been associated with negative student outcomes; for example, emotional distress and depression have been shown to be related to greater use of disengagement coping in first year university (Arthur, 1998). Another study conducted by Solomon and Rothblum (1984) exploring reasons for student procrastination, and indirectly poor academic performance, found that depression and anxiety were significantly related to fear of failure in avoiding work. As such, Solomon and Rothblum maintain that student performance is affected by a complex interaction of cognitive, behavioural and affective variables.

This link between wellbeing and academic outcomes also extends specifically into the field of feedback. In their study of task feedback effects,

Holmes and Pizzagalli (2007) found that subclinical depression is associated with impaired ability to behaviourally adjust following feedback about poor task performance. Therefore, as wellbeing appears to be related to effective student approaches to academic study and engagement with feedback, it is crucial to consider the implications of student wellbeing when seeking to improve feedback. Furthermore, wellbeing measures relating to psychological distress appear to be particularly relevant when considering student engagement with feedback. If interventions focus solely on the provision of feedback and neglect important student variables mediating their ability to engage with such feedback, it is likely that benefits resulting from these programs will be limited if not nonexistent.

Similarly, personality considerations have been implicated in learning and teaching practice throughout a number of different studies (Arogundade & Akpa, 2009; Barr, 1997; Burke, 2004; Burton, Taylor, Downing, & Lawrence, 2009; Colquitt & Simmering, 1998; Furnham, Swami, Arteché, & Chamorro-Premuzic, 2008; Lounsbury, Saudargas, & Gibson, 2004; Major, Turner, & Fletcher, 2006; Miller, Kohn, & Schooler, 1986; Nofle & Robins, 2007; Swanberg & Martinsen, 2010; Tams, 2006; Zhang, 2002) and may need to be considered when tailoring approaches to feedback for individual students. For example, Booth and Winzar (2003) found that while individual diversity within University disciplines cannot be discounted, significant trends in personality characteristics have emerged in Accounting students across three different Australian universities. The authors suggest that this ‘personality profile’

distinct to Accounting students has implications for their learning preferences, both in regard to utilizing student strengths and challenging their potential weaknesses. Similar studies have revealed distinct personality profiles for medical (Lievens, Coetsier, De Fruyt, & De Maeseneer, 2002) and psychology students (Busato, Prins, Elshout, & Hamaker, 2000). Additional research by Miles (2004) supports the notion for university majors differing significantly from one another in terms of learning preferences. These findings have also been extended by Parvez and Blank (2008) who found that tailoring feedback to these particular learning preferences results in higher learning gains.

One consistency in the area of personality profiles for learning and academic success has been the employment of the Big Five approach to personality in understanding these student differences. The Big Five, also known as the Five Factor Model (FFM), focuses on five overarching factors of personality: *neuroticism* (tendencies toward negative affect), *extraversion* (preferences for social interaction and companionship), *openness* (needs relating to diversity, change and novelty), *agreeableness* (tendencies toward amiability and compliance), and *conscientiousness* (needs relating to achievement, aspiration and purpose) (McCrae & Costa, 1999). However, little research has focused on the FFM and feedback, with studies largely exploring the five factors and their relationship to broader academic strategies and outcomes. One noteworthy study was conducted by Swanberg and Martinsen (2010) using 867 tertiary students enrolled in business studies. Their findings suggest that three factors in particular are associated with learning approaches in university

settings: conscientiousness, openness and neuroticism. Their correlational analyses revealed strong positive relationships between conscientiousness and strategic learning, openness and deep learning, and neuroticism and surface learning. Given that learning approaches outline a range of likely behaviours students engage in when completing their academic studies, it is feasible that such tendencies will be applicable to feedback related behaviours. However, research in this area is relatively new and subject to varying focus. Other researchers have found differing relationships between various factors of the FFM and student-related variables in university settings, including learning orientation (Barr, 2007), academic outcomes (Nofle & Robins, 2007), thinking styles (Zhang, 2002) and motivation to learn (Colquitt & Simmering, 1998). Similar research has also been conducted in non-academic settings in relation to learning. For example, Major et al. (2006) found that extraversion, conscientiousness and openness predicted willingness to learn in financial services employees. These studies suggest that the FFM is useful in understanding the varying ways in which people may approach academic and learning tasks. However, further research is warranted to establish the extent this is applicable to feedback-related arenas in tertiary settings and the individual contribution of each factor in the understanding of academic and learning processes.

As noted earlier, students do not have a homogenous view of what feedback entails and how it can be applied (Poulos & Mahony, 2008). While this may in part be rectified by education and skill-building, it may also reflect

the differing ways in which students inherently interact with feedback. Given that research suggests individual differences impact on student engagement with other facets of learning and education (Fyfe et al., 2006), further research exploring the link between these characteristics and feedback would be useful to more clearly understand feedback processes in tertiary education and promote successful engagement in future learners. In particular, more exploration of cognitive appraisal and academic skills, such as self-efficacy and academic confidence, is warranted in light of the research mentioned earlier (Bray, 2007; Chan & Lam, 2010; Chemers et al., 2001; Narciss, 2004). Furthermore, given the link between learning and personal characteristics such as personality and wellbeing variables (Arthur, 1998; Booth & Winzar, 2003; Disch et al., 2000; Friedlander et al., 2007; Holmes & Pizzagalli, 2007; Miles, 2004; Parvez & Blank, 2008), exploratory studies are needed to ascertain whether these trends extend into the realm of feedback interaction.

Chapter Summary

Research suggests that students and staff encounter a range of potential difficulties when enacting their roles in the feedback process. Nicol (2008) advocates the need to address these issues to avoid significant consequences for both the student and the institution, such as dissatisfaction with the tertiary experience, alienation and poor retention. It is clear from this chapter that while research exploring student perceptions of feedback is minimal, staff perceptions are even less frequently explored. In particular, few studies have thoroughly investigated the contribution of both staff and students towards the feedback

process in the same university discipline. Additionally, more research is warranted in exploring feedback in first year university, including the impact of individual characteristics in this process, given deficits identified in the feedback processes within the first year of higher education (Rowe & Wood, 2007) and the well-documented need to support first year students during the transition to university life (Dietrich, 1999; Field & Kift, 2010; Gall et al., 2000; Hill, 2006; Kift & Moody, 2009; Kift et al., 2010; Li, 1997; Nicol, 2007, 2008; Tinto, 2009). A more comprehensive outlook on feedback in tertiary settings would allow for a greater understanding of the interaction between staff and students; moreover, such an analysis would assist when designing strategies to enhance the feedback process in such an environment.

Chapter 3

Study 1: Student Perceptions of Feedback in First Year University

Chapter Summary

Following a review of the literature in the first two chapters, this chapter documents the rationale for an exploration of student perceptions of feedback during the first year of study at university. In conjunction with understanding student approaches to feedback, this first study aimed to establish preferences for feedback and identify the skills used by students to engage successfully with feedback. The methodology of the survey research conducted in the Discipline of Psychology at RMIT University is discussed, before the findings of the mixed-method approach are presented. The preferences for useful and personalized feedback are explored, as is the emphasis on summative feedback processes that was revealed through analysis of qualitative data. Lastly, the implications of these findings are discussed, signalling the need to better understand how staff perceptions of feedback interact with the themes identified in this study.

Background and Rationale

As discussed in Chapters 1 and 2, assessment processes in tertiary education are linked to a number of well-documented problems and represent a key source of student dissatisfaction (Elton, 2004; Price et al., 2011). An integral component of the assessment process and learning experience at University is feedback, which has been shown to have the largest effect on learning when compared with a range of teacher, student, home, peer and school

variables (Hattie, 2003). Student perceptions of the provision of feedback indicates room for improvement, with Australian research suggesting that less than one-third of first year students feel that their teachers take an interest in their progress and in providing feedback (Krause et al., 2005).

Berry (2005) proposes three main functions of feedback, indicating that good quality feedback should result in motivational, evaluative and learning outcomes for students. This is supported by observations from survey research exploring student engagement with feedback in University settings; for example, research by Budge and Gopal (2009) found that three-quarters of the students surveyed in their study indicated that good quality feedback motivates them in their study. Similarly, a majority of students (91%) surveyed by Budge and Gopal reported that effective feedback allowed them to evaluate their strengths and weaknesses. The researchers also proposed that feedback can facilitate learning through the use of scaffolding, creating an ideal environment from which students can build upon their existing knowledge and increase their depth of understanding.

However, in order for these three functions of feedback to be achieved, a greater understanding of student interaction with feedback is warranted. As noted by Nicol and Macfarlane-Dick (2004), teachers regularly make the assumption that the information they transmit to students via feedback is easily decoded and acted upon. This assumption is unfortunately in stark contrast to much research exploring student perceptions of feedback which outlines the difficulties students have in understanding and using what is provided (Bondy &

McCallum, 2009; Rowe & Wood, 2007). In particular, Bondy and McCallum (2009) have suggested that academic and student conceptualizations of feedback differ, with students often considering feedback as a postscript to their assessment and academics incorporating a variety of less formal communication exchanges as mechanisms for feedback. O'Donovan et al. (2001) support this observation, proposing that students require a comprehensive approach to engaging with learning and assessment, including the need for more staff-student interaction, explanation of tasks and use of exemplars to model desired responses.

The starting point for involving students more actively in the feedback process is developing an understanding of how students interact with feedback to begin with. In particular, determining students' initial perceptions of feedback and typical use of feedback in university settings will assist in identifying strategies to maximize successful engagement with feedback processes. Several small-scale qualitative and survey research studies have been carried out with university students to determine what students perceive as high quality feedback. Common usability themes relating to the content of feedback have identified the need for legibility and fairness (Bondy & McCallum, 2009), detail (Rowe & Wood, 2007) and skills development (Walker, 2009). Another leading trend in the provision of successful feedback is an emphasis on personalized comments, particularly those in the form of a one-on-one consultation between marker and student (Dinham, 2008). Finally, a desire for feedback that is timely has been noted, with suggestions that feedback often arrives too late to be

considered useful or relevant by students (Krause et al., 2005; McGregor et al., 2008; Squires, 2003).

Despite these themes, clear differences between cohorts, courses and campuses have been noted (e.g. when comparing Burke, 2009; Lee et al., 2009; Lizzio & Wilson, 2008; Nesbit & Burton, 2006; Rowe & Wood, 2009). A potential explanation for these differences is that particular degrees attract or facilitate distinct learning profiles. For example, Booth and Winzar (2003) found significant trends in personality characteristics within Accounting students across three different Australian universities. The authors suggest that this ‘personality profile’ distinct to Accounting students has implications for their learning preferences, both in regard to utilizing student strengths and challenging their potential weaknesses. Similar studies have revealed distinct personality profiles for medical (Lievens et al., 2002) and psychology students (Busato et al., 2000). Further exploration of this hypothesis is warranted to determine whether engagement with feedback differs across study programs, therefore signalling the need for course-specific feedback interventions.

Emerging research in the area of personality profiles for learning and academic success has typically utilised the Big Five approach to personality. The Big Five, also known as the Five Factor Model (FFM), focuses on five overarching factors of personality: *neuroticism* (tendencies toward negative affect), *extraversion* (preferences for social interaction and companionship), *openness* (needs relating to diversity, change and novelty), *agreeableness* (tendencies toward amiability and compliance), and *conscientiousness* (needs

relating to achievement, aspiration and purpose) (McCrae & Costa, 1999).

While little research has focused on the FFM and feedback, research has linked particular factors in the model with broader academic strategies and outcomes. For example, Swanberg and Martinsen (2010) suggest that three factors in particular are associated with learning approaches in university settings, finding strong positive relationships between conscientiousness and strategic learning, openness and deep learning, and neuroticism and surface learning. Other researchers have found differing relationships between various factors of the FFM and learning orientation (Barr, 2007), academic outcomes (Noftle & Robins, 2007), thinking styles (Zhang, 2002) and motivation to learn (Colquitt & Simmering, 1998) in university. In addition, findings have emerged from non-academic settings; Major et al. (2006), for example, found that extraversion, conscientiousness and openness predicted willingness to learn in financial services employees. These studies suggest that the FFM is useful in understanding the varying ways in which people may approach academic and learning tasks. However, caution must be applied in extrapolating these findings to the understanding of feedback in university settings. It is tempting to hypothesise, for example, from Major et al.'s work that the personality factors of extraversion, conscientiousness and openness will be linked with more proactive engagement with feedback or a willingness to utilize more intensive feedback strategies and methods. However, due to the minimal findings in this area and lack of application to the context of feedback engagement, an exploratory approach is warranted to establish the relationship between the FFM

and feedback utility. Establishment of these relationships will allow for more definitive construction of personality profiles, if warranted, in regard to feedback engagement in tertiary settings.

In addition to personality considerations, student perceptions and preferences for feedback may vary due to a number of personal characteristics. Cognitive appraisal and academic skills, such as self-efficacy and academic confidence, have been implicated in student engagement with academic processes, including use of feedback (Bray, 2007; Chan & Lam, 2010; Chemers et al., 2001; Narciss, 2004). Similarly, wellbeing has demonstrated a strong link with academic success and satisfaction (Disch et al., 2000; Friedlander et al., 2007). Although exploration of these variables in the context of feedback alone is limited, some support for this notion has been shown; for example, Holmes and Pizzagalli (2007) found that subclinical depression is associated with impaired ability to behaviourally adjust following feedback about poor task performance. Recognition of personal characteristics in students' approaches to feedback is also consistent with Poulos and Mahony's (2008) observation that students as a whole lack a universal view of what feedback is and how it can be applied. It is therefore clear that exploratory research is needed to ascertain the extent to which these trends extend into the realm of feedback engagement.

Research has also identified differing feedback needs across program levels, with first year students typically identified as needing greater direction in negotiating feedback. For example, Burke (2009) found that first year students do not possess the necessary skills to engage with feedback and are unable to

make use of feedback automatically, noting that specific guidance is called for in the facilitation of appropriate feedback strategies, knowledge and skills. Rowe and Wood (2007) supported this finding with their survey research indicating that feedback was perceived by students to be much more comprehensive in later years of study, with little feedback available during the first two years of tertiary study. First year tertiary students have also demonstrated unrealistic expectations for feedback, such as feedback on drafts and ready access to teachers, which are not consistent with common university practice (Brinkworth et al., 2009). As such, it is clear that greater examination of feedback perceptions during the first year of university study is warranted, in order to devise appropriate intervention strategies for this group of students most at risk for poor feedback outcomes.

This exploratory study therefore aimed to establish first year tertiary student preferences for the provision and use of feedback, as well as provide an overview of how these students deal with the feedback processes currently used at university. Establishing student perceptions of feedback in this sample will assist in overcoming the current lack of research in the field (Poulos & Mahony, 2008; Rowe & Wood, 2007), as well as provide course-specific information that will allow appropriate feedback intervention strategies to be devised. It was hypothesized that first year psychology students enrolled at RMIT University would demonstrate a preference for feedback that is personalized, highly legible, detailed, fair and focused on skill facilitation. It was similarly expected that these students would express a desire for timely feedback. However, a

range of perceptions regarding feedback will be explored in order to create a feedback profile that is specific to this cohort of students. This will allow for future comparison to other university disciplines in order to determine whether feedback needs differ across study programs.

In addition, the relationship between feedback perceptions and student demographic, self-efficacy, academic confidence, life satisfaction and personality variables will be explored. The reason for this is twofold. The first reason is to establish whether variations in feedback preference and use are linked to these variables, in order to determine whether an intervention in this field must use varying approaches in order to account for these differences. The second reason is to explore whether these variables are associated with feedback satisfaction and skilled use of feedback, allowing researchers to incorporate these factors as part of an intervention design to enhance student interaction with feedback. Based on the limited research available, it was hypothesized that higher self-efficacy, academic confidence and life satisfaction would be associated with greater feedback satisfaction. Similarly, it was predicted that a positive relationship would be observed between feedback utility and self-efficacy, academic confidence and life satisfaction. Following previous theoretical attempts to link demographic and personality variables to feedback engagement, these variables will also be explored to empirically examine their role in feedback processes.

Method

Participants

A total of 252 students enrolled in first year psychology at RMIT University, Melbourne, were invited to participate in the study, with 80% responding. The ages of the 202 participants (152 females, 48 males, 2 unidentified) ranged from 17-45 years ($M = 21.39$, $SD = 4.41$). Students were primarily Australian-born (80.7%) and identified their proficiency as 'good' for written (90.6%) and spoken (95%) English. Participants were also asked to anticipate their average mark in psychology for the semester and their satisfaction with this. While the trend of self-reported marks tended to be relatively negatively skewed (with 56% of respondents stating that their average mark for the semester would be 70% or higher), only 35.6% of students were 'happy' or 'very happy' with their marks for the semester.

Materials

A questionnaire was developed for the purpose of this study, containing a demographics section and a perception of feedback section devised by the researchers, as well as four published scales to measure self-efficacy, academic confidence, personality, and life satisfaction (Appendix A).

Demographic information. A total of 12 self-report items were devised by the researchers to collect information on the sex, date of birth, degree undertaken, country of birth, date of arrival in Australia (where applicable), proficiency in written and spoken English, hours spent in paid employment or

volunteer work, engagement with additional study assistance and enrolment status of the participant. Two final questions asked the participant to estimate their mark range in psychology for the year and rate their satisfaction with this mark.

Perceptions of feedback. Following identification of key themes from the literature, a total of 14 items were devised to ascertain student beliefs, preferences and engagement with feedback. In particular, participants were asked to comment on the most useful and least useful traits of feedback encountered during the semester, their satisfaction level with feedback received during the semester, their ability to relate the feedback received to their learning, and their effectiveness in using feedback. Further to this, participants were asked to indicate their feedback preferences via questions relating to timeframes for return of feedback, their likeliness to engage with particular feedback strategies, their preferences for feedback methods, and the usefulness of particular types of feedback. Questions were also directed at students' willingness to engage with further feedback training and the importance of their markers engaging in further training. A final open-ended question was included for students to extend upon any of their provided responses or comment on feedback in general.

At the time of commencing the investigation, no published measures of feedback perceptions were available for use or adaptation. The 14 items used to assess student engagement with feedback were therefore derived from themes commonly identified in the literature; in particular, similar survey research of

students was reviewed to ascertain key areas of investigation (e.g. Rowe & Wood, 2007). The items were then shown to 4 students and 3 staff members to ensure clarity of wording and ease of completion. Following this feedback, minor adjustments were made and the revised items were included in the survey package.

One item, which explored the use of 5 feedback skills on a 5-point Likert scale, was summed to provide a total feedback utility score. These skills included approaching the marker for clarification prior to submitting work, clarifying feedback with the marker, disputing/challenging feedback, not focusing solely on marks, and using feedback for future assessments. A principal components analysis (PCA) was conducted to explore this scale. Prior to conducting PCA, the suitability of the data for factor analysis was assessed. Inspection of the correlation matrix revealed several coefficients of .3 and above. The Kaiser-Meyer-Olkin value was .63, exceeding the recommended value of .6 (Pallant, 2007). Furthermore, a significant value was obtained for Bartlett's Test of Sphericity ($p < .001$), thus supporting the use of factor analysis. Two components with eigenvalues exceeding 1 were revealed by PCA, explaining 41.12% and 24.87% of the variance respectively. An inspection of the scree plot confirmed the presence of two factors, with a clear break following the second component.

Oblim rotation was then performed to aid in the interpretation of these two components. The rotated solution revealed the presence of a simple structure, with both components showing a number of strong loadings and all

variables loading substantially on only one component (Table 1). A very weak positive correlation was observed between the two factors ($r = .17$).

Communalities ranged from .52 to .76, exceeding the recommended value of .3 (Pallant, 2007). The results of the analysis support the use of two subscales: assessment-specific feedback utility (items 1, 2 and 3) and forward-planning feedback utility (items 4 and 5).

Table 1

Factor Loadings for Principal Components Analysis with Oblim Rotation of Feedback Utility Scales (N = 196)

Item	Rotated Factor Loading	
	1	2
3. Clarify feedback for an assessment	.85	-.21
2. Dispute feedback for an assessment	.76	-.32
1. Clarify marking expectations for an assessment	.70	-.17
4. Concentrate only on the mark, rather than the feedback*	.33	.75
5. Use feedback for future assessment	.39	.71

Note. Factor loadings $> .40$ are in boldface.

* Item 4 was reverse scored, indicating likelihood to not focus solely on the mark.

Reliability analysis was also conducted on each subscale. The assessment-specific feedback utility subscale demonstrated adequate internal consistency ($\alpha = .73$). All items appeared worthy of retention, with inter-item correlations exceeding the recommended value of .3 (Field, 2009). Item analysis revealed that the only item to increase the Cronbach α coefficient on removal

was Item 1; however, the increase was deemed too small (an increase of .01) to warrant removal from the subscale.

The forward-planning feedback utility subscale had relatively low internal consistency ($\alpha = .51$). An inter-item correlation of .34 was observed; however, changes to Cronbach α following item removal was not calculated given the subscale consisted of 2 items.

Academic Confidence Scale (ACS; Sander & Sanders, 2003). The ACS is a 24-item scale used to determine a student's confidence in succeeding with academic demands in six key areas: studying, attendance, understanding, grade achievement, clarification and verbalizing. The ACS was included in the survey package as a measure of context-specific self-efficacy. Responses are made using a 5-point Likert scale, with total scores averaged across the items and ranging between 1-5. Higher scores indicate greater academic confidence. Research by Sander and Sanders (2003) reveals adequate validity, while the Cronbach α coefficient in this study was .91.

General Self-Efficacy Scale (GSES; Schwarzer & Jerusalem, 1995). The GSES is a 10-item self-report scale used to establish a person's belief to succeed with the demands in their life. This measure was included in the survey package as a supplement to the ACS, in order to give a more comprehensive investigation of self-efficacy by including a general measure and a context-specific measure. Responses on the GSES are given using a 4-point Likert scale, with total scores ranging between 10-40 and higher scores indicating greater self-efficacy. In previous research the Cronbach α coefficient for the GSES has

ranged from .75 to .82 (Lightsey, Burke, Ervin, Henderson & Yee, 2006). In the current study, the Cronbach α was .89.

Australian Personality Inventory (API; Murray et al., 2009). The API is a new measure based on the ‘big five’ theory of personality and is designed to ascertain individual differences in a 50-item inventory. Responses are provided on a 5-point Likert scale to generate subscale scores for neuroticism, extraversion, openness, agreeableness and conscientiousness. Higher scores on these subscales indicate higher levels of these traits in the individual. The API was considered a desirable measure of personality for this sample as norms were available based on an Australian university sample. The API is also one of the few big five measures that exists in the public domain, making it viable for further replication purposes. Internal consistency estimates range from .78 to .87 in a similar university sample (Murray et al., 2009). In the current study, Cronbach α coefficients for the five sub-scales ranged from .77 to .83 (Neuroticism subscale = .80; Extraversion subscale = .83; Openness subscale = .77; Agreeableness subscale = .77; Conscientiousness subscale = .80).

Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffen, 1985). The SWLS is a brief 5-item measure of subjective wellbeing. Responses are given using a 7-point Likert scale ranging from ‘Strongly disagree’ (1) to ‘Strongly agree’ (7). Total scores range from 5 to 35, with higher scores indicating greater life satisfaction. Given the exploratory nature of the investigation into the association between feedback and wellbeing, the SWLS was deemed an appropriate measure given its extreme brevity and sound

psychometric properties. According to Pavot, Diener, Colvin, and Sandvik (1991), the SWLS has good internal consistency, with a Cronbach α coefficient reported of .85. In the current study, the Cronbach α coefficient was .88.

Procedure

Ethics approval for the study design was granted from the Human Research Ethics Committee at RMIT University. Particular care was given to the issues of voluntary consent and participant confidentiality, given that students were advised of the research opportunity during tutorial classes. The questionnaires, together with a plain language statement, were distributed during the final tutorial for the semester in a first year psychology class at RMIT University. Prior to administration, tutors were instructed to read the following instructions to students:

Today we are seeking your opinions on feedback provided at RMIT University. We are asking you to reflect on all of the feedback you have received this semester from staff and how it has affected your learning and progress at university. In addition to assessing attitudes towards feedback at RMIT, we are also hoping to explore whether feedback preferences and satisfaction are linked to personality, academic or wellbeing variables. As well as the benefits you may gain from reflecting on your use of feedback, the information you provide today will be used in conjunction with existing literature to support the structure and content of a feedback program that will be devised to improve the educational and personal outcomes of students at RMIT.

Students who chose to participate were able to complete the questionnaire within class or could elect to complete an identical online version via the university website. Administration took approximately 15 minutes, with tutors leaving the room and completed paper questionnaires returned into a closed drop box to ensure anonymity of responses. Although tutors were not privy to student responses, confidentiality was also protected via the collection of non-identifying data and publication of group results only.

Results

Data Analysis

Quantitative data were entered and scored using the Statistical Package for Social Sciences (SPSS, standard version 17, 2008). Given the small number of missing data fields for each of the scale totals, a cautious approach was maintained in which these participant totals were omitted from the relevant analyses. Assumption testing was also conducted prior to inferential testing to ensure that the assumptions of each analysis were met.

Qualitative data were initially scanned for emergent themes, before a list of key words and descriptors were developed for each theme. Individual participant responses were then grouped under each theme, with several student responses loading onto more than one theme. The total number of participant responses was then calculated for each theme to ascertain the frequency of these trends amongst the sample.

Student Perceptions of Feedback

Descriptive statistics for the quantitative data in the feedback perceptions section were computed and a thematic analysis of responses to open-ended questions was conducted.

Preferences for feedback. Students were asked to rate the importance of 10 feedback attributes on a scale from 1 (not at all important) to 5 (very important). Results indicated that while all feedback attributes were seen to be at least moderately important, students perceived being provided with examples of how to improve their work to be the most important attribute, while receiving comments on spelling and grammar was considered the least important aspect of feedback (Table 2).

Table 2

Student Preferences for Key Feedback Attributes

Feedback Attribute	<i>M</i>	<i>SD</i>
Receiving examples of how to improve your work	4.54	0.67
Feeling that the assessment process was fair	4.50	0.72
Feeling that the marker really thought about your work	4.40	0.77
Seeing how it relates to the final mark	4.39	0.68
Being shown what you have done well	4.35	0.74
Being able to use it for other assessments	4.28	0.84
Receiving comments on content-related matters	4.28	0.72
Being able to relate it to your learning for the subject	4.12	0.78
Receiving comments on presentation-related matters	3.91	0.89
Receiving comments on spelling and grammar	3.63	1.05

Provision of feedback. Students were also asked to rate their satisfaction with the feedback provided during the semester on a scale of 1 (very unsatisfied) to 4 (very satisfied). While students were generally 'satisfied' with the feedback they had received over the semester (73.9%), only 7% of students nominated themselves as 'very satisfied'. Nearly one-fifth of students were 'unsatisfied' or 'very unsatisfied' with the feedback provided (19.1%). Similarly, one-fifth of students found it 'difficult' or 'somewhat difficult' to relate the feedback they received to their learning in the course. Only 3.1% stated that it was 'very easy' to link these two together.

Provision of feedback was also evaluated in terms of time taken to provide feedback on a traditional assessment in the course (i.e. how long should a marker spend per paper) and time taken to return feedback (i.e. the amount of days between submitting an assessment and it being returned to the student). Student opinions varied considerably, with time taken to mark each assessment ranging between 4-120 minutes, and averaging longer than the standard 15 minutes granted for a traditional 1500 word report in the course ($M = 21.67$, $SD = 23.38$). Students also felt that work should be handed back much more quickly than the standard 3-week timeframe used for this course, with suggestions ranging between 1-21 days but tending more towards a 7-14 day turnaround ($M = 10.70$, $SD = 5.10$).

Students were asked to rank five formats for feedback delivery in terms of preference, from 1 (most favoured) to 5 (least favoured). These scores were then reversed to indicate desirability (i.e. higher scores equated to being more

favourable formats of feedback delivery). Analysis of these feedback formats strongly supported the use of more personalized methods, as opposed to generic, class-orientated or standardized feedback. Written feedback was also perceived as more useful than oral delivery (Table 3).

Table 3

Student Preferences for Feedback Formats

Feedback Format	<i>M</i>	<i>SD</i>
Personalized written comments on student work	4.10	1.19
Typed personalized comments on a marking sheet	3.30	1.07
Speaking one-on-one with marker about strengths and weaknesses	3.24	1.31
Standard typed summary, with examples of correct or 'best' responses	2.22	1.30
Oral summary of group strengths and weaknesses, with examples of correct responses	2.12	1.16

In terms of accessing feedback, less time-intensive methods appear to be preferred by students. Students favoured feedback being available during class time ($M = 3.05$, $SD = 1.04$) and delivered to their inbox ($M = 2.57$, $SD = 1.17$) over methods such as during a consultation with their marker ($M = 2.32$, $SD = 1.06$) or picked up at an alternative time ($M = 2.06$, $SD = 0.95$).

Use of feedback. While nearly three-quarters (74.6%) of students stated that they were likely or very likely to use feedback in completing future

assessments, they were not so proactive in engaging in useful feedback practices overall. Only 39% of students were likely to clarify marking expectations prior to submitting a piece of work, and only 39.6% were likely to follow-up with a marker to make use of the given feedback. Furthermore, despite only 7% of students being 'very satisfied' with the feedback they received this semester, a mere 21.4% of students indicated that they would follow-up with a marker to query the feedback given. Indeed, over a quarter (26.6%) stated that they were likely or very likely to focus solely on the mark provided for an assignment and not the feedback supplied.

Despite these findings, students generally perceived themselves as quite successful in using feedback. Nearly one-fifth of students nominated themselves as 'extremely' effective in applying feedback, and a further 62.3% stated that they were 'moderately' effective. Only 18.1% stated that they were 'somewhat' effective and 0.5% (1 respondent) felt 'not at all' effective in using it.

Improving feedback. Participants were asked whether they would be interested in University-run training to get the most out of their feedback, with over two-thirds (68.7%) of students indicating that they would like to be involved. Of these, 55.2% would prefer to incorporate this training into their traditional coursework, 9.7% preferred to engage in it as an additional learning experience, and 35.1% were open to both methods of delivery. Interestingly, 70.9% of students felt that it was 'important' or 'very important' for their markers to attend additional training in providing feedback, with only 2.6% stating that it was 'not at all important' to them.

Further to this, students were asked to gauge the success of a new assessment task trialled during the semester, in which the first section (a 500-word Introduction task) of a larger piece of assessment (a 1650-word laboratory report) was drafted. The primary aim of this new task was to provide early, formative feedback on the students' progress and personalized guidance for the final submission of the laboratory report. The students strongly supported the use of this type of assessment, with 93% indicating they would like more opportunities of this type in the future. Over three-quarters of the students (76.8%) felt that the feedback they received on the task was 'useful' or 'very useful' when later completing the major assessment. Further analysis of qualitative data concerning this assessment suggest that many students who did not want further opportunities for such assessment or did not feel that it was particularly useful had encountered difficulties with the manner in which the marking was carried out (such as individual issues with the marker), rather than the task itself.

Suggestions for feedback. Open-ended questions were provided to students to gauge their opinion of feedback received this semester. These were divided into two categories: examples of useful feedback (as perceived by the student), and suggestions for improving feedback in the future, based on perceived deficits in feedback provided to the student. Themes extracted from student perceptions of useful feedback are listed in Table 4, ranked in order of most frequently to least frequently suggested.

Table 4

Student Perceptions of Useful Feedback Qualities

Theme	n (%)	Student Comments
Facilitates improvement	98 (74)	It helped me to receive a better mark on a later oral task. When improvements to work have been specifically outlined rather than just being told it's wrong.
Corrective	37 (28)	Detailed description of what I was doing wrong. It helped me fix up a lot of my mistakes.
Specific/detailed	31 (23)	A lot of written comments regarding specific aspects/questions. Specific improvement suggestions meant I could actually focus on what to improve.
Encouraging/positive	24 (18)	Feedback that highlights positives and says why it's good. Positive feedback ... helped me know I had learnt something.
Personal	10 (8)	Individual help and specific attention made it easier to raise crucial questions and get a better understanding of weaknesses.
Provides examples	9 (7)	A tutor wrote an example introduction essay I needed help on, which gave me very useful ideas.
Organizes student	8 (6)	It helped with my time management at the end of the semester – instead of cramming. It got me starting my lab report earlier.
Charts student's progress	6 (5)	[It] ... allowed me to see how hard I had to work the next half of the semester. [It] ... indicated I knew the material.
Fair	2 (2)	The person offering feedback was able to accurately and fairly give their opinion.

Similarly, student suggestions for improving feedback are presented in Table 5, ranked from most to least frequent. Feedback that facilitates improvement in student work was perceived as the most useful type of feedback, while increasing the usability of feedback represented the main suggestion for improvement. Closely linked to this was the request for more

detailed and specific feedback, suggesting that this is an important aspect of making feedback more useable.

Table 5

Student Suggestions for Improving Feedback

Theme	<i>n</i> (%)	Student Comments
Increasing usability	104 (83)	Rather than just underlining/circling an error, clarifying how it needs to be changed. Show how the student can improve.
More detail/specifcics	98 (78)	Write it in a more detailed way, stating what should be done to correct it. Provide more explicit comments, regarding specific areas of the marked work.
Increasing fairness	38 (30)	Spend time! Each student matters. Make it look like they have put thought into the process.
Providing examples	27 (21)	Give examples (detailed ones) on how I can improve. Provide good examples and bad examples of work.
Improving legibility	23 (18)	Have typed feedback rather than written. Sometimes it's really hard to read it. Type comments if you have bad handwriting.
Personalizing comments	20 (16)	More personalised, less generic. Make it relevant to the individual's work.
Highlighting positives	14 (11)	Not only suggest ways in which the assessment can be improved but also sections that were done well. Give more emphasis on what was done well.
Increasing timeliness	12 (10)	Get feedback to students within a reasonable time frame, especially if there are future assignments on the same topic. Ought to be timely to enable me to correct and improve.

Relationships Among Student Characteristics and Feedback

Satisfaction with feedback. Rank correlation coefficients using Kendall's τ were calculated to explore the relationship between feedback satisfaction and the life satisfaction, self-efficacy, and personality variables. The decision to utilize Kendall's τ for the non-parametric correlation analysis is consistent with Field's (2009) recommendation that it allows for more accurate generalizations than Spearman's ρ . A positive significant relationship between life satisfaction and feedback satisfaction was observed, while a significant negative relationship between neuroticism and feedback satisfaction was also obtained (Table 6). No significant relationships were observed for academic confidence or the remaining personality variables.

Table 6

Relationships between Feedback Satisfaction, Life Satisfaction, Self-Efficacy and Personality Variables

Measure	1	2	3	4	5	6	7	8	9
1. FS	-	.23**	.09	.06	-.14*	.10	.09	.07	.05
2. LS		-	.29**	.21**	-.42**	.13*	.10	.18**	.31**
3. SE			-	.43**	-.32**	.21**	.20**	.32*	.24**
4. AC				-	-.22**	.19**	.19**	.19**	.43**
5. Neuroticism					-	-.13*	-.06	-.23*	-.27**
6. Extraversion						-	.25**	.20**	.18**
7. Openness							-	.18**	.05
8. Agreeableness								-	.28**
9. Conscientious									-

Note. FS = Feedback Satisfaction; LS = Life Satisfaction (SWLS); SE = Self Efficacy (GSES); AC = Academic Confidence (ABC); Neuroticism = Neuroticism subscale (API); Extraversion = Extraversion subscale (API); Openness = Openness subscale (API); Agreeableness = Agreeableness subscale (API); Conscientious = Conscientiousness subscale (API)

** $p < .01$

* $p < .05$

Feedback utility. Scores from five items assessing proactive feedback skills (approaching marker for clarification prior to submitting work, clarifying feedback with marker, disputing/challenging feedback, not focusing solely on mark, and using feedback for future assessments) were totalled to provide a feedback utility score. Pearson’s product-moment correlations revealed significant but weak positive relationships between feedback utility and the

following variables: life satisfaction, self-efficacy, extraversion, openness, agreeableness and conscientiousness (Table 7); a significant weak negative correlation was observed between feedback utility and neuroticism. Table 7 also displays a moderate positive relationship between academic confidence and feedback utility.

Table 7

Relationships between Feedback Utility, Life Satisfaction, Self-Efficacy and Personality Variables

Measure	1	2	3	4	5	6	7	8	9
1. FU	-	.25**	.31**	.48**	-.29**	.26**	.23**	.16*	.39**
2. LS		-	.38**	.32**	-.57**	.21**	.14	.27**	.37**
3. SE			-	.60**	-.43**	.25**	.30**	.27**	.45**
4. AC				-	-.33**	.30**	.26**	.27**	.60**
5. Neuroticism					-	-.18*	-.08	-.32**	-.37**
6. Extraversion						-	.34**	.24**	.21**
7. Openness							-	.23**	.06
8. Agreeableness								-	.40**
9. Conscientious									-

Note. FS = Feedback Utility; LS = Life Satisfaction (SWLS); SE = Self Efficacy (GSES); AC = Academic Confidence (ABC); Neuroticism = Neuroticism subscale (API); Extraversion = Extraversion subscale (API); Openness = Openness subscale (API); Agreeableness = Agreeableness subscale (API); Conscientious = Conscientiousness subscale (API)

** $p < .01$

* $p < .05$

A multiple regression analysis was conducted to explore life satisfaction, self-efficacy, and academic confidence variables as predictors of feedback utility. The predictors were entered using the forced entry method. Preliminary analyses were conducted to ensure that the assumptions of multicollinearity, linearity, normality, homoscedasticity and independence of residuals were not violated. This model explained a significant proportion of variance in feedback utility scores, adjusted $R^2 = .23$, $F(3, 183) = 19.48$, $p < .001$. The only predictor, however, to reach statistical significance was academic confidence ($\beta = .45$, $p < .001$), indicating a unique contribution of 13 percent to the explanation of variance in feedback utility. Life satisfaction ($\beta = .11$, $p = .13$) and general self-efficacy ($\beta = -.01$, $p = .94$) were not shown to make significant contributions to the prediction of feedback utility scores.

Feedback method preferences. Exploration of student preferences for feedback methods revealed few significant findings. Age was positively correlated with a preference for typed standard summaries, $r(168) = .19$, $p = .02$, oral summaries of group strengths and weaknesses, $r(168) = .17$, $p = .03$, and speaking one-on-one with the marker, $r(174) = .18$, $p = .02$; however, a negative relationship was revealed for age and preference for personalized written comments, $r(168) = -.24$, $p = .002$. An independent samples t -test revealed that females ($M = 3.41$, $SD = 1.02$) were more likely to prefer personalized typed comments than males ($M = 2.95$, $SD = 1.17$), $t(172) = -2.4$, $p = .02$, $\eta^2 = .03$ (two-tailed, equal variances assumed).

Similarly, analyses of student preferences for feedback return strategies revealed no significant relationships, with the exception of a negative relationship between conscientiousness and preference for returning feedback online to student inboxes, $r(166) = -.17, p = .03$.

Discussion

The exploration of student themes in the perception of feedback for the most part supported existing research. In particular, the hypothesis that students would demonstrate a preference for feedback that is personalized, highly legible, detailed, fair, and focused on skill development was supported. In considering the importance of different feedback attributes, students rated ‘receiving examples of how to improve work’, ‘feeling that the assessment process was fair’ and ‘feeling that the marker really thought about your work’ as the three most important attributes of feedback. Thematic analysis of qualitative data revealed a particularly strong emphasis on feedback that facilitates improvement when students were asked to describe useful feedback. Similarly, it was found that increasing usability, detail, fairness, provision of examples and legibility were the most frequent suggestions made by students in improving feedback. This is consistent with the work of Bondy and McCallum (2009), Rowe and Wood (2007), and Poulos and Mahony (2008), who found similar themes when exploring student preferences for feedback.

Similarly, the hypothesis that students would desire more timely provision of feedback was supported. When asked to provide a reasonable timeframe for return of their assessments, students nominated a much quicker

turnaround than is currently employed in the discipline. Furthermore, a request for more timely provision of feedback was noted in the open-ended question relating to student suggestions for improving feedback. This emphasis on quicker turnaround of assessment feedback supports the recommendations made by Krause et al. (2005), McGregor et al. (2008), and Squires (2003), who have suggested that the usability and relevance of feedback is affected by the timeliness of its return.

Taken together, the importance placed on these feedback characteristics by students is consistent with the work of Berry (2005) who proposed that effective feedback should result in motivational, evaluative and learning outcomes. Feedback that is personalized, legible, detailed, fair, focused on skill development and provided in a timely manner is likely to result in great gains for students; it is probable that these gains are likely to engender an increased desire and ability in students to critically assess work and enhance their understanding of content. In addition to support of Berry's work, the consistency of the results obtained in this study with other research into student feedback preferences (e.g. Bondy & McCallum 2009; Krause et al., 2005; McGregor et al., 2008; Poulos & Mahony, 2008; Rowe & Wood, 2007; Squires, 2003) suggests that the perceived importance of several characteristics in the provision of feedback may not be limited to specific courses or campuses. As such, it appears that there may be universal student demands in the provision of feedback at the tertiary level.

Consistent with the observation of Booth and Winzar (2003), Lievens et al. (2002) and Busato et al. (2000) that tertiary study disciplines may attract particular learning or personality profiles, further exploration of feedback preferences in first year psychology students at RMIT University was also undertaken to construct a 'feedback profile' for this cohort. In addition to the preferences noted above, the first year psychology students demonstrated a desire for feedback to be provided in a written and personalized format, strongly preferring this to oral delivery or generic feedback statements. Less time-intensive methods of returning feedback were also preferred, with students desiring feedback to be delivered during class or directly to their inbox, as opposed to consultation with the marker (which typically takes place outside of class time in this discipline) or pick-up at an alternative time. While these preferences may be applicable in varying cohorts, little work has been conducted comparing such preferences for feedback across differing courses or campuses. This research therefore represents an initial step towards compiling a feedback profile for first year psychology students at RMIT. Future research may use these themes to compare and contrast with other cohorts, courses and campuses. Identification of these preferences also represents part of the groundwork necessary in designing a feedback intervention for first year psychology at RMIT. Utilizing feedback formats that are written, personalized and delivered during class time may help to increase student connection with this content.

A number of course-specific themes also emerged that support the need for this proposed feedback intervention. In particular, while satisfaction with feedback was observed in a majority of students, a large subset (one-fifth) of students indicated dissatisfaction with feedback processes over the semester. The same number of students also reported struggling to relate the feedback provided to their learning in the course. Furthermore, a large discrepancy between engagement with feedback (as per feedback skills utilized) and perceived success in using feedback was observed, with students generally perceiving themselves as successful at using feedback but only reporting low levels of engagement with several feedback skills. This failure to translate perceived success in using feedback into real skills or practices indicates that students require more education, support and practice when interacting with feedback. These results are consistent with Burke's (2009) observation that first year students require additional assistance in negotiating the assessment landscape at a tertiary level, finding that they do not possess the necessary skills to engage with feedback and are unable to make use of feedback automatically. Similar support was found for the conclusions of Brinkworth et al. (2009), who found that first year university students demonstrated unrealistic expectations for feedback and were not cognizant of typical university feedback practices. This finding may be partially explained by the focus on summative feedback assessment observed in the qualitative data. A failure to recognize and utilize multiple opportunities and resources for feedback may account for a lack of success in engaging with tertiary assessment.

Encouragingly, a majority of students indicated that they would like the opportunity to receive feedback training as part of their University experience, with a preference for incorporating this into their traditional coursework. Furthermore, the pairing of a low-stakes introductory assessment (a 500-word Introduction) with the usual major assessment for the course (a 1500-word research report) was perceived favourably. More than three-quarters of the students found that the feedback generated from the first task was useful in completing the larger and more heavily-weighted final assessment; similarly, nearly all the students indicated that they would like to encounter similar assessment designs in future. Therefore, it appears that not only do students perceive themselves as open to opportunities for developing their feedback skills, but they are also receptive to innovations implemented by staff for this purpose. As such, the results of this study support the development of a feedback intervention during first year psychology study at RMIT University.

In terms of the relationship between feedback and self-efficacy, academic confidence and life satisfaction, several interesting trends emerged. The hypothesized relationship between high feedback satisfaction and these variables was only partially supported, with a weak but significant positive correlation observed between feedback satisfaction and life satisfaction. No relationships were noted between feedback satisfaction and the academic confidence and self-efficacy variables. However, all three variables were shown to be related to feedback utility, with the combination predicting a significant proportion of the variance in the feedback utility scores. This supports the final

hypothesis positing a relationship between feedback utility and self-efficacy, academic confidence and life satisfaction. While strong assertions cannot be made from this exploratory survey research, there is enough evidence to suggest that the relationships found amongst these variables should be of interest to further feedback interventions. Providing that such feedback interventions are successful, it may be that students will also experience gains in academic confidence, self-efficacy and life satisfaction through the process of participating in the academic program or as a result of increasing student engagement with feedback. Conversely, a holistic approach to improving the student experience that targets self-efficacy, academic confidence and life satisfaction may result in increases to student engagement and satisfaction with feedback. Further research in this area would therefore benefit by including these variables in any intervention design.

The results of this study also indicate that while there was no relationship between feedback satisfaction and personality, weak relationships are evident between all personality variables and feedback engagement. Positive relationships were observed for the Big Five personality variables and feedback utility, with the exception of neuroticism where a weak negative relationship was identified. These findings are particularly interesting given that, despite a wealth of theoretical information available in which to posit a relationship between these variables (Booth & Winzar, 2003; Busato et al., 2000; Lievens et al., 2002), little research has been conducted to explore the extent to which they are linked. These relationships may provide greater insight into the development

of personality profiles for student engagement with feedback in academic settings, particularly in light of suggestions that personality profiles are evident for particular courses. However, in the absence of supporting research and the failure to uncover anything more than weak relationships amongst these variables, a decision was made to omit these variables from the intervention described in Study 3. In time, with replications and greater knowledge about the relationship between these variables, the decision to utilize personality considerations in devising feedback interventions may be possible.

Similarly, weak relationships were observed between some feedback method preferences and the demographic variables of age and gender. As with the personality variables explored in the study, a decision was made to not influence future intervention content based on these observations. It would appear that individual characteristics may play a part in shaping student interaction with feedback; however, those variables explored in the study did not influence feedback to a large extent. As such, modifying feedback intervention content based on these weak relationships, particularly when considering the costs and difficulty in delivering various modes of feedback intervention to account for such differences, would not appear warranted. However, collection of data pertaining to these demographic and personality variables in future would be useful to further track and explore their relationship with feedback satisfaction and utility.

Despite the number of student perceptions and preferences for feedback identified in this study, it is yet to be seen whether implementing these

recommendations will result in improved academic performance. As discussed by Hattie and Timperley (2007), for feedback to serve value, it must result in gains for learning. Therefore, further experimental research would be useful to examine whether implementing feedback that is perceived as effective actually translates to learning gains. This suggestion is consistent with the work of Lizzio and Wilson (2008) who failed to reveal a relationship between student perceptions of feedback effectiveness and self-reported academic achievement in a sample of 277 students. One explanation offered by Lizzio and Wilson to explain this unanticipated finding was that establishing preferences for feedback may not be a valid means of understanding the impact of such feedback on student learning. As such, it would appear that further work is required to explore the notion that enhancing the perceived usefulness of feedback will consequently impact student learning.

It should also be noted that the study design is limited by the availability of psychometrically validated instruments in the assessment of feedback perceptions and use. The relatively low internal consistency observed with the Forward-Planning Feedback Utility subscale (forming part of the larger Feedback Utility scale devised for this study) suggests that more research is needed in designing a measure for this purpose. Much research to date in the field of feedback is based on qualitative designs or is limited to single-item analysis. A more comprehensive measure of feedback utility would provide a standard against which to explore student interaction with feedback processes across a range of settings.

Despite this limitation, this study represents an important step in rectifying the highly documented dissatisfaction noted with assessment and feedback processes in tertiary education (Elton, 2004; Hattie, 2003; Krause et al., 2005; Price et al., 2011). The support for several universal trends in student preferences for feedback, as well as identification of a number of course-specific themes, has led to recommendations for improving the provision of feedback at university. The next step for implementing these recommendations is to explore the perceptions of feedback that tertiary staff members bring to this environment, to evaluate how they can best be supported in providing the most effective feedback for students. Taken with the findings from the current study, it may be possible to develop a more comprehensive understanding of feedback processes in the tertiary setting that can inform a feedback intervention for both staff and students.

The purpose of this study was to explore student perceptions of feedback in first year university and to evaluate those factors that were associated with successful use, satisfaction with and preferences for feedback. The results of this study are largely consistent with the small body of literature currently available evaluating student opinions and preferences for feedback. Support was also found amongst students for implementing a feedback intervention in the first year of the psychology program at RMIT University, indicating that students are interested in working to secure better feedback outcomes for their learning. While further research is needed to explore the relationships between feedback and individual student characteristics, this study represents an addition

to this underexplored aspect of the feedback literature. In time, these considerations may play a larger part in the understanding of student interaction with feedback in tertiary settings.

Chapter Summary

Previous literature exploring feedback in the context of tertiary learning has suggested much can be done in facilitating student use and satisfaction with feedback. This chapter documented the first of three studies outlined in this thesis that were conducted to rectify this problem. A mixed methods approach was undertaken among 252 psychology undergraduate students at RMIT University to better understand how students perceive feedback in the tertiary environment. A comprehensive survey was administered at the conclusion of the first semester, revealing both universal and cohort specific preferences for feedback. In particular, the findings supported previous literature by revealing a preference for personalized, highly legible, detailed, fair, timely and skill-orientated feedback; written feedback delivered in class or to student inboxes was also perceived favourably in the cohort.

In addition, difficulty in engaging with feedback skills, a preoccupation with summative feedback processes and demonstrated student interest in receiving feedback training were revealed, supporting the need for feedback intervention in first year psychology at RMIT University. Furthermore, self-efficacy, academic confidence and life satisfaction were shown to predict a significant proportion of variance in feedback utility, suggesting that these personal variables may be important when engaging students with the feedback

process. Weaker observations were made between feedback and demographic and personality variables, supporting their omission from the intervention described in Study 3.

The limitations of this research were also reviewed in this chapter. In particular, the need to establish whether feedback that is perceived as useful also results in learning gains was identified. Furthermore, the lack of psychometrically validated instruments to evaluate feedback perceptions was noted; with the Forward-Planning Feedback Utility subscale devised for this study demonstrating poor internal consistency, further revision of this scale or identification of another measure is necessary. This chapter concluded with the recommendation that perceptions of feedback among staff in the Discipline of Psychology at RMIT University be established to evaluate the ways in which staff and student perceptions may interact and lead to dissatisfaction with the feedback process. Identification of these factors will allow for intervention strategies to be devised. The exploration of staff perceptions and preferences for feedback are presented in Chapter 4.

Chapter 4

Study 2: Staff Perceptions of Feedback in University

Chapter Overview

This chapter begins with an overview of the rationale for why exploration of staff perceptions of feedback is necessary to improve feedback processes in tertiary settings. The methodology of Study 2, in which 25 sessional and permanent staff members involved in teaching undergraduate psychology at RMIT University were administered a comprehensive survey of their personal characteristics and interaction with feedback, is then reviewed. The results from this mixed methods approach are detailed, evaluating staff perceptions and preferences for feedback. These findings are compared to the results from Study 1, evaluating the similarities and differences between staff and students in regard to how they conceptualize and engage with feedback. In the final section, the implications of the results are discussed in relation to designing an intervention to improve feedback processes for both staff and students at the tertiary level.

Background and Rationale

Student dissatisfaction with tertiary assessment and feedback processes has been well-documented; however, research studies exploring contributing factors to this dissatisfaction are not widespread (Poulos & Mahony, 2008; Rowe & Wood, 2007). The research conducted in Study 1 aimed to rectify this by evaluating student perceptions and preferences for feedback, revealing several universal and cohort specific characteristics of what students perceive to

be effective feedback. In addition to the risk of these characteristics not being upheld by staff when delivering feedback, findings from Study 1 revealed that student perceptions of feedback are primarily limited to summative assessment feedback; furthermore, despite perceptions of being successful at using feedback, students failed to employ a number of skills relating to effective feedback use. These findings offer likely explanations for the student dissatisfaction and lack of engagement reported in tertiary learning environments. The extent to which academics are aware of, or even contribute to, these potential reasons for why students are dissatisfied with feedback processes is not clearly understood.

The noted lack of research into student preferences for feedback is also applicable to tertiary staff. However, even less research is available to establish how staff perceptions and preferences for feedback provision influence the university assessment landscape. While students are administered a plethora of evaluation surveys to establish their engagement and satisfaction with university processes, less emphasis is placed on ascertaining staff perceptions. As such, an incomplete picture of the processes that regulate feedback in tertiary environments has been used to determine how to 'fix' the problem of student dissatisfaction with feedback. As noted by Gibbs et al. (2003), student and staff perceptions of feedback are often perceived to be at odds with each other, with students wanting more feedback and staff desiring that students engage more effectively with the feedback available. Further exploration of the factors behind

the differing perceptions of feedback would therefore be useful in aligning staff and students' ability to engage with each other in the feedback process.

The emphasis on summative feedback processes identified in Study 1 is consistent with Bondy and McCallum's (2009) assertion that students often consider feedback to be postscript to their assessment. Conversely, Bondy and McCallum claim that academic staff hold a much broader view of feedback; Squires (2003) supports this, stating that academic conceptualizations of feedback include a range of informal exchanges such as comments on performance during class, assistance with completing individual or group tasks, and the delivery of grades and comments on homework. A detailed understanding of how undergraduate psychology staff members perceive the topic of feedback is therefore useful to ascertain. If academics see an abundance of feedback opportunities available to students by acknowledging these informal processes, they may be able to readily assist students in also recognizing these instances and applying their skills accordingly. Similarly, if recognition of these opportunities is apparent but staff members also fail to see students respond proactively to these in order to improve learning, it is possible that a lack of investment in providing feedback may ensue; this may account in some ways for the dissatisfaction noted by students in regard to the feedback provided to them. However, if staff members are also primarily concerned with summative feedback processes, more work would appear necessary in highlighting the feedback opportunities available to both staff members and students.

Timeliness of feedback return was identified as a key area for improvement when exploring student perceptions of feedback in Study 1. Students nominated a much quicker turnaround of assessment than is currently facilitated in the discipline when asked to provide a reasonable length of time for return of work. Similar themes were noted when students were asked to comment on ways in which feedback could be improved. Krause et al. (2005), McGregor et al. (2008), and Squires (2003) have all noted the importance of this, suggesting that the usability and relevance of feedback is affected by the timeliness of its return. Glover and Brown (2006) provide some insight into the difficulties faced by staff in providing feedback, asserting that increases in teaching workloads and the associated provision of feedback have led to slower timeframes for this delivery. Brinkworth et al. (2009) further illustrate why first year students may be dissatisfied with the timeliness of feedback provision, finding that these students have unrealistic expectations of teacher support during the assessment process. Despite these findings, little exploration of what staff members perceive to be reasonable timeframes for return of work has taken place in the literature. Additionally, staff may not perceive time to be an important factor in the provision of feedback, choosing instead to focus on the quality of their comments. Therefore, an exploration of timeframes considered reasonable to staff for returning feedback is warranted, as is an opportunity to identify the constraints staff feel hinder them from providing effective feedback.

This exploratory study intended to extend the findings of Study 1 which sought to explore first year tertiary student preferences for the provision and use

of feedback. As noted by Rowe et al. (2008), consideration of staff perceptions of feedback is necessary when establishing a complete picture of the learning contexts involved. As such, the aim of this study was to gauge staff perceptions and preferences for feedback in undergraduate tertiary settings. Establishing staff perceptions of feedback in this sample will not only assist in overcoming the current lack of research in the field but also provide course-specific information that will allow appropriate feedback intervention strategies to be devised in conjunction with findings from Study 1. In addition, the relationship between feedback perceptions and staff characteristics will be explored. In particular, this research aimed to discover whether self-efficacy and wellbeing variables are associated with feedback preferences and delivery, in order to replicate the research design implemented in Study 1. Although research exploring these variables in relation to staff perceptions of feedback is limited, it may be consistent with the wealth of research findings linking these variables to engagement in academia and feedback use in students (e.g. Arthur, 1998; Bray, 2007; Chan & Lam, 2010; Chemers et al., 2001; Disch et al., 2000; Friedlander et al., 2007; Holmes & Pizzagalli, 2007; Narciss, 2004). This is particularly likely in light of previous research that suggests staff nominate institutional support, time availability and personal agency as key influences in their ability to manage their workload, including the provision of effective feedback (Case, 2007; Sadler, 2011; Skelton, 2011). Perceptions of wellbeing and self-efficacy may therefore impact on staff perceptions of feedback provision in their work, such as that higher wellbeing and self-efficacy are associated with greater

engagement and satisfaction with feedback processes. Further understanding of these relationships will help to establish the content necessary within a feedback intervention to enable staff engagement with the program.

Despite the lack of research available, several predictions were established. In comparison to the focus on summative feedback observed in Study 1, it was expected that staff members would recognize a broader range of feedback opportunities in their discussion of feedback. It was also anticipated that time would represent the major constraint for staff members in providing effective feedback. Confirmation of these predictions would provide a rationale for the proposed feedback intervention to use staff members in assisting students to recognize feedback opportunities, as well as incorporate a number of time saving resources in enhancing the provision of feedback by academics.

Method

Participants

Of the 35 staff members engaged in undergraduate teaching within the Discipline of Psychology at RMIT University who were approached, 25 participated in the study, indicating a 71% response rate. A diverse spread of teaching experience was noted in the 15 females and 10 males who participated, ranging from 6 months to 35 years ($M = 5.56$, $SD = 8.43$). Of the participants who nominated their position, 83% were sessional staff members with responsibility for feedback. Participants were largely Australian-born (80%).

Materials

A questionnaire developed for the purpose of this study was administered, containing a demographics section and perceptions of feedback section devised by the researchers and two published scales to measure self-efficacy and life satisfaction (Appendix B).

Demographic information. The demographics section consisted of 5 items used to ascertain the country of birth, date of arrival in Australia (where applicable), current position, current workload, and years spent in a teaching role.

Perceptions of feedback. A total of 20 items were designed to ascertain staff attitudes towards and interaction with feedback. Participants were asked to evaluate their own feedback skills and preferences through both rating scales and open-ended questions, before commenting on their own observations of students' interaction with feedback. Rating scales were used to establish perceived staff effectiveness in providing feedback, student application of feedback and staff satisfaction with student use of provided feedback. Staff were asked to rank methods of providing feedback in regard to both their 'real world' and 'ideal world' preference; preferences for methods of returning feedback to students were also ranked. A 5-point Likert scale was employed to establish the importance of particular attributes in providing useful feedback. Questions relating to reasonable timeframes for marking and returning work were also provided. Dichotomous yes/no items were provided to establish the use of measures to rate the usefulness of feedback provided, use of tools in providing

feedback and engagement with feedback training and resources; these items were accompanied by space for staff to expand on their responses. Open-ended questions were used to identify key constraints in providing feedback, suggestions for students in engaging with feedback and thoughts on feedback training programs/resources. It should be noted that several items were identical to those used in Study 1 to allow direct comparison of staff and student responses. These items were derived from themes commonly identified in the literature; in particular, similar survey research of feedback in tertiary settings was reviewed to ascertain key areas of investigation (e.g. Rowe & Wood, 2007).

General Self-Efficacy Scale (GSES; Schwarzer & Jerusalem, 1995).

The GSES is a 10-item self-report scale used to establish a person's belief to succeed with the demands in their life. The scale was chosen for this study to provide a measure of global self-efficacy. Responses on the GSES are given using a 4-point Likert scale, with total scores ranging between 10-40 and higher scores indicating greater self-efficacy. In previous research the Cronbach α coefficient for the GSES has ranged from .75 to .82 (Lightsey et al., 2006). In the current study, the Cronbach α was .92.

Satisfaction with Life Scale (SWLS; Diener et al., 1985). The SWLS is a brief 5-item measure of subjective wellbeing. Responses are given using a 7-point Likert scale ranging from 'Strongly disagree' (1) to 'Strongly agree' (7). Total scores range from 5 to 35, with higher scores indicating greater life satisfaction. According to Pavot and colleagues (1991), the SWLS has good

internal consistency, with a Cronbach α coefficient reported of .85. In the current study, reliability was lower with a Cronbach α coefficient of .67.

Procedure

Ethics approval for the study design was granted from the Human Research Ethics Committee at RMIT University. Staff in the Discipline of Psychology at RMIT University were contacted directly to participate in the study. Those who volunteered were directed to the recruitment website at a secure web address from which they could access the plain language statement, consent form, and online questionnaire. The confidentiality of the data collected was maintained through the collection of non-identifying data and publication of group, rather than individual, data.

Results

Data Analysis

Quantitative data was entered and scored using the Statistical Package for Social Sciences (SPSS, standard version 17, 2008). A cautious approach to data analysis was employed due to the small number of missing data fields for each of the scale totals; therefore, the relevant totals were omitted from final analyses. Assumption testing was also conducted prior to inferential testing to ensure that the assumptions of each analysis were met.

Qualitative data were initially reviewed for emergent themes. Following this, a summary of key words and descriptors for each theme were outlined and individual participant responses were then grouped under each theme. Several

responses from staff members loaded onto more than one theme. The total number of participant responses was then calculated for each theme to ascertain the frequency of these trends amongst the sample.

Staff Perceptions of Feedback

Descriptive statistics for the quantitative data in the feedback perceptions section were computed, while a thematic analysis of qualitative data was conducted. Of the six open-ended questions posed, a review of the responses revealed that no reference was made to informal feedback opportunities. All responses either made explicit reference to assessment feedback or failed to identify differing feedback contexts.

Preferences for feedback. Staff were asked to rate 11 feedback attributes in regard to what they expected students to perceive as important in the feedback process, with 1 indicating ‘not at all important’ and 5 indicating ‘very important’. Results indicated that staff perceived being able to use the feedback for other assessments as the most important aspect of feedback for students, whereas they perceived receiving comments on spelling and grammar to be seen as the least important attribute by students (Table 8). However, the high means observed across all items and lack of variability suggests strong endorsement from staff across all items.

Table 8

Staff Preferences for Key Feedback Attributes

Feedback Attribute	<i>M</i>	<i>SD</i>
Being able to use it for other assessments	4.84	0.47
Feeling that the assessment process was fair	4.67	0.76
Feeling that the marker really thought about your work	4.56	0.82
Being shown what you have done well	4.52	0.65
Being able to relate it to your learning for the subject	4.48	0.51
Seeing where marks were lost	4.48	0.87
Receiving comments on content-related matters	4.44	0.87
Receiving examples of how to improve your work	4.36	0.64
Seeing how it relates to the final mark	4.36	0.64
Receiving comments on presentation-related matters	4.08	0.86
Receiving comments on spelling and grammar	3.88	0.78

Provision of feedback. The perceived efficacy of staff providing feedback was evaluated, with staff members nominating themselves as ‘moderately’ effective in providing feedback ($M = 3.08$, $SD = 0.57$). They saw students as being less skilled at using the feedback provided, ranking them as ‘somewhat’ to ‘moderately’ effective in applying it ($M = 2.46$, $SD = 0.51$). As such, staff ranged from ‘unsatisfied’ to ‘satisfied’ with how students used the feedback provided over the last semester ($M = 2.67$, $SD = 0.48$). Further investigation revealed a moderate significant positive correlation between staff perceptions of their efficacy in providing feedback and student efficacy in applying this, $r(N = 24) = .45$, $p = .03$.

Provision of feedback was also evaluated in terms of time taken to provide feedback (i.e. how long should a marker spend per paper) and time taken to return feedback (i.e. the amount of days between submitting an assessment and it being returned to the student) for a 1000 word assessment. Staff opinions varied, with the time taken to mark each assessment ranging between 14 -25 minutes ($M = 19.85$, $SD = 2.85$). Several staff members also indicated that more time should be given for returning work than the standard 3-week timeframe typically used in undergraduate teaching in the discipline, with suggestions ranging between 10 – 40 days ($M = 23.89$, $SD = 8.61$).

Analysis of feedback formats preferred by staff members was divided into two categories: preferences for current practice (i.e. taking into account workloads, timeframes etc.) and ‘ideal world’ preferences (i.e. based on what they would utilize given no restraints). A review of the descriptive statistics exploring the preferences for current practice strongly supported the use of personalized written comments instead of oral delivery, while ideal practices placed a greater emphasis on individual consultations with students (Table 9).

Table 9

Current Practice and 'Ideal World' Feedback Format Preferences of Staff

Feedback Format	Staff Preference			
	Current		Ideal	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Personalized written comments on student work	3.96	1.27	4.08	1.08
Standardized typed summary with examples	3.28	1.43	2.28	1.06
Typed personalized comments on marking sheet	3.16	1.28	3.24	1.13
Oral summary of group strengths/weaknesses with examples	2.84	1.14	1.96	1.10
Individual consultation with students	1.76	1.05	3.44	1.58

Comparisons of real and ideal preferences for feedback methods were undertaken using paired samples *t*-tests, revealing a trend in preference for more personalised approaches being used in ideal feedback settings. A statistically significant decrease in the use of standardized typed summaries, $t(24) = 4.33$, $p < .01$ (two-tailed), and oral summaries of group strengths and weaknesses, $t(24) = 4.53$, $p < .01$ (two-tailed), was observed in the ideal world preferences. A significance increase in the use of individual consultations was also noted, $t(24) = -5.17$, $p < .01$ (two-tailed). No significant differences between real world and ideal world preferences were observed for personalized written comments or personalized typed comments.

In terms of accessing feedback, methods with high accessibility appear to be preferred by staff members. Staff favoured feedback being delivered to

student inboxes ($M = 3.80$, $SD = 1$) and accessible online ($M = 3.68$, $SD = 1.25$), over methods such as during a consultation with students ($M = 3.33$, $SD = 1.4$), during class time ($M = 2.28$, $SD = 1.49$) or picked up at an alternative time ($M = 1.96$, $SD = 0.89$).

Improving Feedback. Staff were asked whether they had any measures in place to evaluate the usefulness of the feedback they provided, with 60% responding in the affirmative. Of these 15 staff members, 14 indicated that this largely occurred through the use of mid-semester or end-of-semester teaching evaluations in which feedback quality is rated via one item. Two staff members also made mention of ongoing conversations regarding student use of feedback, in which they proactively sought student evaluations of the feedback provided.

Staff were also asked whether they used any measures to enhance the provision of feedback in the classes they taught; 20 of the 25 staff members reported doing so. Of these participants, the majority (13 staff) reported using marking criteria guides or rubrics, while 2 staff reported using self-assessment sheets prior to submission of work. Singular responses were made for using questionnaires, generic feedback templates and providing additional comments beyond the marking sheet.

In regard to feedback training, 9 participants indicated that they had undertaken training or accessed resources to assist them in the provision of feedback in the past. When asked whether they would like to access further training or resources via the University in the future, all 25 participants indicated interest. The majority of staff members (17 participants) stated that

they would participate in a University-run program if offered, while a further 4 participants indicated interest if incentives were offered. The final 4 members of staff stated that they would like to receive additional resources in the provision of feedback but were not interested in training. One of these staff members followed this up with the comment: ‘The problem with University based training is that it is offered by staff who do not have the expertise to improve skills and demonstrate how to provide effective feedback, hence no, I do not think they have anything to offer’.

In addition, staff were prompted to identify constraints encountered when providing feedback, in the hope that this information could be used in a feedback training program. Of the 23 respondents, 15 identified time as a key constraint in providing quality feedback. Additional information provided by staff suggested three key reasons for this: the brevity of University semesters and the challenges associated with facilitating assessment during this time, heavy workloads, and lack of external incentive (as one staff member commented in light of their time constraints, ‘there is no financial reimbursement for providing good feedback’). Lack of resources was also noted as a constraint (4 respondents), as was course design (4 respondents). Lack of student engagement was also considered (3 respondents), with reasons varying from difficulty in ensuring students received the feedback to questioning whether students read the feedback that they received. One staff member cited efficacy-based concerns, stating ‘I feel like I'm chasing my tail making changes to feedback strategies that don't always pay off’.

Following this, staff were asked to identify the skills or information they would perceive as useful inclusions in a University-led training program. Analysis of these themes revealed that staff were mainly motivated to know how to provide high-quality, effective feedback under time and workload constraints (7 out of 16 respondents), followed by exploring marking criteria concerns (4 respondents). These concerns were broken down into two smaller issues: the development of effective marking criteria and the achievement of a more uniform way of enacting criteria across markers. Student-outcome focused feedback was also highlighted as a topic staff would like further education on (4 respondents), particularly ascertaining what students want from feedback and pinpointing highly-effective, empirically-supported feedback strategies. Learning how to provide constructive feedback was also mentioned by 2 respondents. One staff member requested strategies for dealing with students who were defensive or mark-focused in their approach to feedback.

Staff were also asked to provide information relating to students maximizing gains from feedback. When questioned about the importance of students attending training to enhance their use of feedback, 75% of staff felt that it was important or very important for students to attend. Only one staff member felt that it was not important at all for students. An open-ended item was included to ascertain what advice staff would like to give to students to get the most of the feedback provided to them. Responses were strongly orientated towards using feedback to improve learning and performance (from 16 of the 20 respondents), urging students to avoid being mark-focused on receipt of

feedback. Linked to this was the suggestion of reading the feedback carefully (7 respondents) and following up feedback with the marker (6 respondents). One staff member also suggested feeding back information to the marker regarding what worked well and what could be improved.

Further comments. A final section of the questionnaire provided space for staff to make any additional comments regarding feedback. Six participants chose to do so. Interestingly, all comments focused on perceived deficits in the feedback process, with two comments highlighting means for improving feedback for students and four comments regarding the difficulty in enacting feedback and a perceived disengagement between students and feedback. Of the two comments regarding improvement of feedback, one focused on ensuring high-achieving students were provided with the same quantity of feedback as other students, and the other highlighted the need to find better ways of achieving successful feedback despite the many constraints faced by staff. This staff member justified this response, adding ‘it is understandable that students resent the university/teaching staff if they are not provided with adequate, good, clear, and practical feedback – hence, it is crucial to improve this area of teaching’. Of the comments regarding student engagement with feedback, one staff member made reference to the proposed training for students, commenting ‘I cannot imagine that students would necessarily attend workshops or training to get the most out of their assessment feedback. This is because I believe many (but not all) students are apathetic about taking responsibility when it comes to feedback’. Another staff member noted the abundance of feedback provided to

students currently, in contrast to his/her own studies, while another reflected on the difficulty in providing feedback with the given time constraints and lack of reimbursement. Lastly, one staff member explained their frustration with the feedback process:

‘My feeling is that over the past five years T&L academics are trying to use assessment as part of the positive teaching experience (that is, you can learn from your work). While academics may be convinced that this is possible, students have not been able to grasp this concept. They see assessments as arbitrary and final, the mark is digested and reflected in terms of possible final grade (can I still get a distinction) and feedback is skimmed for positive comments. Negatives and suggestions for positive change are generally ignored. An example, my first semester class was given Rubrics for each of 8 small pieces of work, most students lost one (out of 5) mark for incorrect referencing, in most, the skill of appropriate referencing did not improve over the eight tasks’.

Relationships Between Staff Characteristics and Feedback

Feedback efficacy. Rank correlation coefficients using Kendall’s τ were calculated to explore the relationship between perceived efficacy in delivering feedback and the demographic, life satisfaction and self-efficacy variables. The selection of Kendall’s τ as opposed to Spearman’s ρ is consistent with recommendations made by Field (2009). A significant negative correlation between feedback efficacy and current position (ranging in experience from sessional to Level E) was observed, $\tau(23) = -.46, p = .02$, whereas a positive

relationship was revealed between feedback efficacy and general self-efficacy, $\tau(25) = .47, p = .005$. No other significant relationships were identified.

Provision of feedback. Rank correlation coefficients were also conducted using Kendall's τ to explore the relationship between preference for particular feedback formats and the demographic, life satisfaction and self-efficacy variables. These formats included personalised written comments on student work, personalized typed comments, generic typed summaries, oral summaries of group strengths and weaknesses, and individual student consultation. No significant correlations were observed. Similarly, no significant relationships were observed between preferences for return of feedback (during class, face-to-face consultation, online system, email, or alternative pick-up) and staff characteristics.

Discussion

Staff Perceptions of Feedback

The results from this study shed light on the preferences and perceptions of feedback amongst academic staff in university settings. In considering the most important attributes of feedback, the usability and fairness of feedback provided to students was rated highly. However, staff perceived themselves as more effective in providing feedback than they perceived students were at using it. Staff also ranged from unsatisfied to satisfied, rather than very satisfied, with the way in which students applied their feedback. This sense that students do not fully engage in the feedback process was also apparent in several responses to open-ended items in the questionnaire, implying the frustration of those staff

members. These feelings of disappointment and perceptions of student apathy towards feedback may in part explain why only just over a third of staff members had previously accessed resources or training to improve the feedback they provided, with some staff members indicating perhaps that they perceived breakdowns in the feedback process to be largely caused by student failure in taking responsibility, rather than their own ability to provide effective feedback. Encouragingly, all staff members indicated that they were receptive to receiving further training or resources from the University in future to help improve the feedback they provided.

These findings have three implications for improving feedback processes in tertiary settings. The first is that students must be involved more actively as equal members in the feedback process, including clarifying the responsibilities attached to their roles and enabling students with the skills to enact such responsibilities. This is especially important given student perceptions discussed in Study 1, in which students perceived themselves to be successful users of feedback despite failing to utilize important feedback skills. Second, staff need to be empowered with the resources and motivation necessary to assist students to become effective participants in the feedback process in order to overcome their frustration with the apathy they currently perceive. Lastly, consideration should be given to how the feedback provided by staff can be readjusted to make it more relevant to students. Draper (2009) asserts that often staff perceptions of students misusing or ignoring feedback arise from situations where the type of action called for by the feedback provided is ambiguous or

when staff assume that students will self-regulate all feedback loops. However, Draper also demonstrates how simple adjustments to feedback, such as making explicit what interpretations a student should make from the feedback provided, can result in large gains for learning.

Interestingly, staff perceptions of their own efficacy in providing feedback were shown to be positively related to their perception of how effective students were in applying it. The implications of such a finding are twofold. First, staff members who perceive themselves as highly effective in providing feedback may be less likely to detect deficits in students' ability to engage effectively with feedback. The majority of participants in this study rated themselves as being effective or very effective in providing feedback. As such, it is possible that the large number of students dissatisfied with feedback or unable to engage fully with feedback observed in Study 1 have gone undetected due to this bias. Conversely, while staff members who do not perceive themselves as particularly effective at providing feedback are better able to identify students who struggle to implement feedback, they are also less likely to perceive themselves as able to enhance feedback utility in these students due to their own poor performance in providing feedback. As such, care needs to be taken in providing staff with opportunities to recognize deficits in student engagement with feedback, as well as equipping them with the necessary resources to implement change.

Few significant relationships were identified between individual characteristics and feedback. No significant relationships were observed

between demographic, self efficacy or life satisfaction variables and preferences for feedback formats or return of feedback. There are two likely explanations for this finding. The most straightforward conclusion is that these distal factors play little role in the provision of feedback by staff members. Given the lack of research in this area, there is little evidence to suggest otherwise. However, an alternative explanation is that the largely homogenous practices for enacting feedback within the Discipline of Psychology at RMIT have led to minimal room for expression of personal characteristics in considering preferences for feedback. It may be that staff are likely to prefer what is known to them, so the results obtained are more reflective of teaching norms in the Discipline than personal characteristics. Therefore while it appears that in this study that demographic, self-efficacy and life satisfaction variables do not play a large role in how academics interact with feedback, further research would be useful to shed light on the possible explanations for the obtained outcomes.

Despite the lack of observed relationships between individual characteristics and feedback provision, a significant positive relationship was observed between self-efficacy and perceived effectiveness in delivering feedback. As such, the earlier recommendation of equipping staff with the necessary resources to implement change should be extended to improving self-belief in enacting this change. Future interventions should therefore facilitate staff confidence in their provision of feedback to enable them to perceive themselves as capable of delivering effective feedback.

Results from this study also indicated that the provision of feedback is negatively impacted upon by time and workload considerations, supporting the prediction that staff perceive time constraints as representing a key obstacle to the provision of effective feedback. Analysis of qualitative data revealed that time was identified as the largest constraint in providing effective feedback, and strategies for maintaining quality feedback while managing workload and time limitations was the most requested aspect for further workplace training. Furthermore, several preferences for currently used feedback methods were shown to be at odds with the 'ideal' practices staff would engage in given fewer constraints. In particular, one-on-one consultation with students was ranked as the least preferred method of engaging with feedback in current practice, yet it was the second most desired method under ideal circumstances. These observations suggest that staff have difficulty in matching their current work practices with those they perceive to be most beneficial. Further work rectifying this gap may assist staff in achieving better satisfaction with the feedback process and ensure students receive high-quality feedback on a consistent basis.

Furthermore, the findings suggest that staff members may not be particularly mindful of the feedback processes they enact throughout the course of the semester. For example, only 60% of participants reported having procedures in place to evaluate the usefulness of the feedback provided, despite the fact that mandatory evaluations take place throughout the semester in this Discipline (e.g. mid-semester evaluations, end-of-semester evaluations, course experience surveys etc.). Similarly, only two staff members reported engaging

in dialogue with students regarding feedback as a means for assessing student interaction with this process; while more staff members may also engage with this strategy, these findings suggest that staff are not actively mindful of this interaction or may perceive feedback as a linear process, rather than an ongoing loop. This conclusion is further supported by analysis of the qualitative data, which revealed that staff members exclusively focused on feedback as a response to assessment or failed to acknowledge other feedback opportunities. As such, the prediction that staff members would recognize formative or informal feedback activities was not supported. In this, it appears that both students and academic staff perceive feedback in terms of a linear, summative assessment process. Highlighting the importance of more regularly evaluating feedback and encouraging dialogue with students in regard to feedback may assist staff in recognizing strategies for improving the provision of feedback, as well as engage them more fully in this latter part of the process.

Comparisons of Student and Staff Perceptions of Feedback

Given the underlying rationale of identifying ways to make feedback more effective in tertiary settings, it is important to revisit the findings from Study 1 exploring student perceptions of feedback. A comparison of staff and student responses to identical items allows for identification of similarities and differences in the ways in which both parties interact with feedback at a tertiary level. Identification of these trends is important for establishing strategies to help each party become more effective in working together to achieve successful feedback outcomes.

While staff preferences for personalized written comments and typed personalized comments were relatively comparable with students, results showed that staff had a greater preference for summary or generalized feedback formats than students. In addition, staff members were less likely to prefer one-on-one consultation in day-to-day practice. Staff identification of key characteristics of effective feedback was similar to students, emphasising the usability of feedback and the importance of fair assessment of work. However, time was a key source of difference between students and staff when exploring the return of work to students. When asked what would be an acceptable timeframe for the return of a 1000 word assessment piece, the average response provided by students was less than half the length nominated by staff.

A review of qualitative data relating to feedback perceptions also revealed similarities between students and staff. In particular, a similar conceptualization of feedback was evident, with many staff and students focusing on a linear process of feedback (Figure 1). This feedback was generally limited to summative assessment tasks, with students demonstrating their understanding via assessment and receiving feedback following staff input. Most staff did not appear to acknowledge opportunities for formative or informal feedback as part of this process. It should be noted that although staff largely saw feedback as a linear process in the same way that students did, they also expressed a desire for students to actively engage with feedback upon receiving it. This final step is not depicted in Figure 1, as many academic staff members noted that this did not take place regularly.

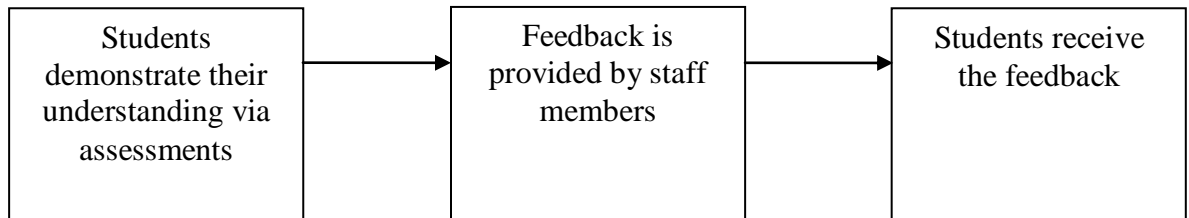


Figure 1. Student and staff conceptualizations of feedback in tertiary environments

Therefore, when compared to the student perceptions of feedback documented in Study 1, several differences were observed in staff perceptions identified in Study 2. In particular, staff members were more likely than students to prefer generic or summary feedback; this preference may be at least partially explained by the noted time constraints staff raised when considering barriers to providing feedback. The issue of time was also a key difference between staff and students when considering acceptable timeframes for return of assessments, with staff nominating an average return date that was more than twice as long as students. There are two possible reasons for this. The first is that students may lack insight into the complexities of the marking process, therefore underestimating the time needed to provide feedback to a cohort of students. The second is that staff may not understand the necessity for timely return of assessment. As noted by Krause et al. (2005), McGregor et al. (2008) and Squires (2003), feedback must be returned promptly for students to perceive it as usable and relevant to their academic progress. Therefore, strategies are required to enhance staff members' ability to return feedback within a

timeframe deemed reasonable by students, as well as provide students insight into the marking process. Furthermore, encouragement of informal feedback, formative feedback and recognition of feedback resources beyond staff members may assist in lessening the reliance on staff-directed summative feedback processes.

Thematic analysis of qualitative data also suggested resentment from both staff and students in regard to perceived deficiencies on behalf of the other party in engaging with feedback. Students commented on the lack of usability, detail and equity of feedback provided to them, while staff were concerned with a perceived lack of student effort in reading feedback and a preoccupation with grades rather than using feedback to enhance learning. Although the results of Study 1 and Study 2 suggest differences in the perceived deficits of each group, they are consistent in that few participants identified means in which to help the other party overcome these issues. As such, it is clear that feedback processes are currently not perceived as collaborative or reciprocal. This supports the work of Rowe and Wood (2007) who identified staff-student communication breakdown as a likely determinant of feedback dissatisfaction. A move to make the feedback process more collaborative would support recent conceptualizations of formative assessment as an opportunity for staff and student partnership (Hawe et al., 2008). This student-focused approach to teaching has been linked to enhanced learning outcomes and satisfaction when compared to teacher-focused approaches (Taras, 2001; Trigwell & Prosser, 2004).

Despite these themes and their consistency with existing literature, the small sample size of the study must be acknowledged. In particular, the utilization of staff belonging to a particular discipline at a single tertiary institution may lead to a reliance on observations specific to psychology staff at RMIT University. As Booth and Winzar (2003), Lievens et al. (2002) and Busato et al. (2000) revealed, distinct trends in personality characteristics have emerged in particular discipline areas. It may be that these personality profiles extend to staff teaching within these discipline areas. As such, further replication is needed to discern the extent to which these observations extend across various discipline areas and institutions. However, for the purposes of evaluating the interaction of staff and student perceptions of feedback in a tertiary setting, the selection of this sample is ideal for comparison to the student cohort investigated in Study 1. It is recommended that similar approaches are adopted in feedback research to construct a more comprehensive understanding of their interplay between these two parties in the feedback process.

Investigating feedback in disciplines with larger faculty sizes could also allow for comparison between permanent and sessional staff members; again, the high predominance of sessional staff members in this discipline may limit the generalisability of these findings to disciplines that are typically composed of permanent staff members. Consideration also needs to be given to the limited control sessional staff members may have in determining mechanisms for feedback within the courses they teach. Sessional staff typically do not have access to data, such as course evaluation survey scores, on which to develop an

awareness of how feedback is received by their students. Therefore their willingness to explore feedback strategies may be limited to the decisions made by permanent staff members within the discipline. Conversely, sessional staff members within the Psychology discipline are primarily postgraduate students or recently graduated students; their recent experiences with receiving feedback in a student capacity may bring about greater awareness of how to enact effective feedback. This interpretation is supported by the finding that perceived efficacy in providing feedback was negatively related to academic position (i.e. the higher the position, the less effective staff members felt at delivering feedback). More research exploring differences between permanent and sessional staff members is warranted in future to determine what impact this may have on staff perceptions of feedback and their engagement with feedback strategies.

Further research exploring the mindfulness of individual characteristics staff bring to the feedback process is also warranted. Consistent with Tang's (2000) observation that staff are likely to adopt certain roles when marking and providing feedback, it may be that staff also utilize particular marking methods according to their own individual characteristics. Further research exploring this notion would assist in gaining a better understanding of the impact of individual differences amongst educators when engaging in feedback.

As noted by Boud (2000), "providing feedback to students to assist in their learning is bread and butter to teaching and learning, but it can become so commonplace that it gets ignored and becomes under-conceptualised" (p. 4).

This research study sought to investigate those conceptions of feedback held by staff in an undergraduate University setting. Consistent with Boud's observation, there appear to be deficits in the current feedback processes enacted by staff; however, there is also evidence of willingness to engage with feedback and further training to overcome these issues. Importantly, this study provides vital knowledge for devising such feedback training and intervention in tertiary study, as well as adding to this underexplored aspect of the feedback literature. In particular, five aspects have been highlighted as warranting application in improving feedback: students must be involved more actively as equal members in the feedback process; staff need to be empowered with the resources and motivation necessary in assisting students to become effective members in the feedback process; consideration should be given to how the feedback provided by staff can be readjusted to make it more relevant to students; assistance needs to be provided to staff in using time effective methods of feedback delivery, including recognizing opportunities for informal or formative feedback; and students and staff perceptions of feedback would benefit from expanding beyond a linear summative assessment approach. Combining this information with student preferences for feedback identified in Study 1 assisted in the development of a comprehensive staff and student program for enhanced feedback processes in university. This program is described in Chapter 5.

Chapter Summary

This chapter documented the second study in this thesis, which aimed to further develop an understanding of feedback processes at the tertiary level. While Study 1 focused on student perceptions and preferences for feedback in a first year psychology sample, Study 2 explored similar themes among staff members responsible for teaching in this discipline at the same university. This paired approach to exploring feedback provides a unique perspective in regard to students and staff perceptions of the feedback process, including how these may account for the widely noted dissatisfaction with feedback in tertiary settings. Analysis of the survey responses provided by the 25 staff members involved in undergraduate psychology teaching at RMIT University revealed a focus on summative feedback; this complements the linear assessment process of feedback identified by students in Study 1. Similarly, staff identified time as a key constraint in the provision of feedback, providing context to student responses in Study 1 which nominated the timeliness of feedback as a key aspect of effective feedback.

Based on a comparison of outcomes between Study 1 and Study 2, five key recommendations were proposed for a feedback intervention. They included revising staff and student perceptions of feedback to incorporate opportunities beyond assessment feedback and to acknowledge the active role students can take in the process; similarly, a need to support staff with resources to provide timely and relevant feedback was identified. While the small sample size and limited generalisability to other tertiary disciplines must be acknowledged, this

study provided essential information for a course-specific feedback intervention.

This program is explored in the following chapter.

Chapter 5

Devising a Feedback Intervention for First Year University

Chapter overview

This chapter describes the development of a feedback intervention manual by the researcher. This manual seeks to overcome the well-documented deficits and dissatisfactions with feedback processes in tertiary settings (Bondy & McCallum, 2009; Hawe et al., 2008; Rowe & Wood, 2007), from the perspective of both staff and students. In particular, the provision and use of feedback will be targeted by incorporating findings from Study 1 and Study 2. In the first part of this chapter, the rationale for the design and implementation of a feedback intervention will be outlined, using evidence from Studies 1 and 2. Following this, seven key defining elements of the intervention will be explored. This intervention was designed as a manual, entitled FRAMEwork (Feedback Resources for Assessors, Mentors and Educators). Each element of FRAMEwork will be overviewed in regard to the research literature that supports its use, as well as findings taken from Studies 1 and 2 exploring student and staff perceptions of feedback. In the final section, the more detailed particulars of the intervention manual will be presented, including how each of the intervention elements are enacted in the intervention program. A brief description of each activity, including the rationale and expected outcomes of the task, will be covered when exploring each of the eight modules in the intervention manual.

Rationale and Background

Research undertaken in Study 1 and Study 2 complements and adds to the existing literature in the identification of student and staff perceptions of feedback. Several key themes were extrapolated from this research that were deemed particularly relevant to the design of an intervention to improve feedback in tertiary settings. The first of these was the passive role of students in the feedback process; this theme was observed in both the student and staff samples. Students were primarily concerned with deficits in feedback provided by staff, while staff felt resentful at the lack of investment students appeared to place on enacting the feedback provided to them. It would appear that failure to encourage and equip students as active agents in the feedback process places a high dependency on the feedback provided by staff; as such, when the feedback is perceived to be insufficient, unusable or limited to summative assessment, there is little opportunity for the situation to be rectified by the student shaping the feedback process or using their own feedback resources. Therefore, a need to encourage students to develop independent feedback skills and to actively engage with a range of feedback sources was also recognized.

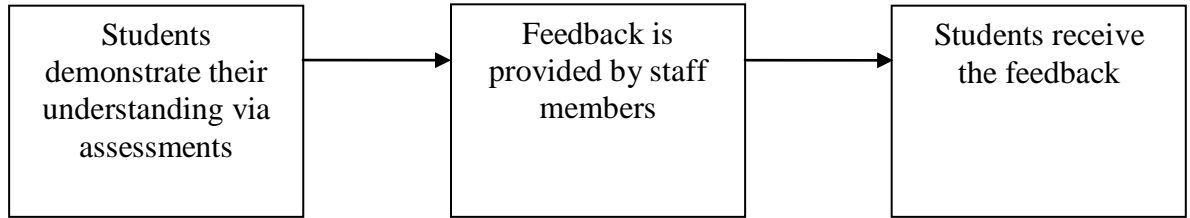
Closely linked to this was the underlying perception of feedback as a linear process. Both staff and students fixated on feedback relevant to summative assessment, where feedback appeared to be a postscript attached to the assessment or a justification of the grades allocated, when discussing the topic of feedback. No recognition of formative feedback opportunities or informal feedback mechanisms was demonstrated by either party. Revising this

perception of feedback to acknowledge a continual and reciprocal dialogue that takes place between staff and students may better highlight feedback opportunities within the classroom.

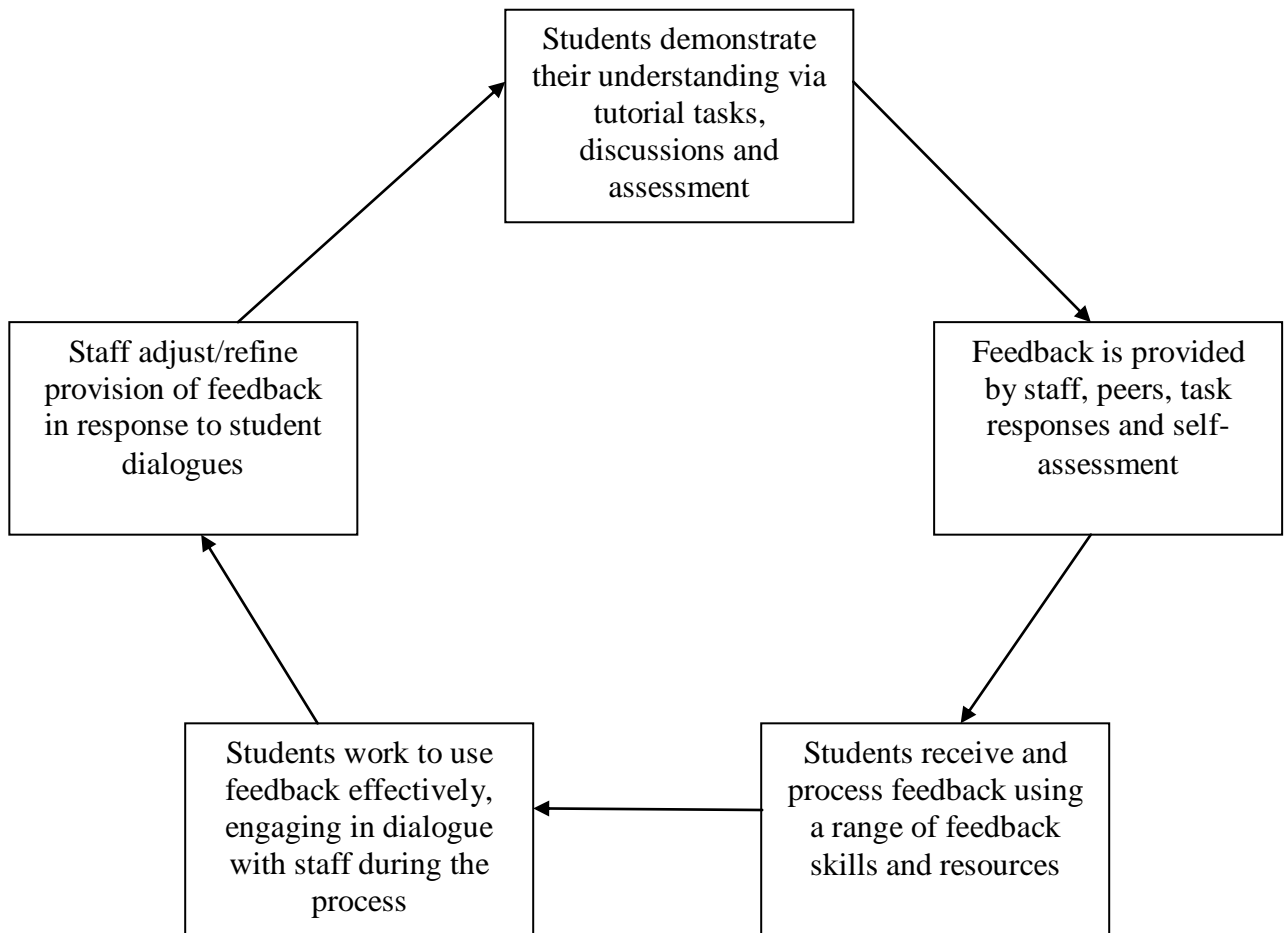
Students also demonstrated a gap between their perceptions of feedback efficacy and their actual use of feedback skills in Study 1. This finding was complemented by staff perceptions of students' effectiveness in using feedback in Study 2, where they were rated as 'somewhat' to 'moderately' competent in using feedback. Given that students in this first year cohort therefore appear to lack the necessary skills to engage with feedback successfully, it is clear that they must be given the time, support and resources to gradually develop these abilities.

Lastly, the number of suggestions provided by students to improve the provision of feedback at a tertiary level in Study 1 highlights a gap between current feedback practices in staff and demands within the student cohort. Further care on behalf of staff members in tailoring the provision of feedback to these student needs is required to overcome the dissatisfaction noted by students in regard to feedback and the perceived lack of usability of feedback currently provided. Of particular importance for the first year psychology intake was receiving feedback that utilized examples, was perceived as fair and that clearly related to the final mark obtained. Increasing the timeliness of the feedback received was also deemed important. These recommendations were recognized as essential in aligning staff provision of feedback to student expectations.

This attempt to shift student and staff perceptions of feedback therefore required a new model of the feedback process from which both parties could work from. In particular, feedback envisioned as a dialogue process with students as active agents and a range of feedback resources made available were considered essential components. This revised approach to feedback, in contrast to the passive linear process identified by students and staff in Study 1 and Study 2, is illustrated in Figure 2.



a) Linear process of feedback



b) FRAMEwork process of feedback as an ongoing dialogue

Figure 2. Typical linear perception of feedback in tertiary environments contrasted with the dialogue process of the FRAMEwork manual.

Defining Features of the Intervention

The following section summarises the key elements of a feedback intervention devised to improve the provision and use of feedback in a tertiary setting (see Table 10 for an overview of these elements). These features reflect best-practice recommendations in the current literature, as well as attempt to overcome the shortfalls nominated by both students and staff in engaging with the feedback process (as outlined in Study 1 and Study 2). Researchers Rowe and Wood (2007) state that the development of academic feedback guidelines may work to enhance satisfaction with feedback in university settings. The following suggestions therefore represent an effort to provide concrete guidelines for how feedback should be conceptualized and enacted within the classroom. The strategies devised for achieving these elements are discussed later in the chapter

Table 10

Key Elements of the FRAMEwork Manual

Number	Element
1	Students as active agents in the feedback process
2	Promotion of continual staff and student dialogue
3	Use of scaffolding in encouraging feedback skills
4	Encouragement of independent learning
5	Responsiveness to student need
6	Time-shifting of feedback and use of exemplars
7	Allows recognition of a greater range of feedback sources

Element 1: Students as active agents in the feedback process.

According to Hawe and colleagues (2008), recent conceptualisations of formative assessment have moved beyond a teacher-focused orientation and have been expanded to recognize the student-teacher partnership in securing learning outcomes. With this in mind, the authors argue that “if students are to take responsibility for their learning, they need to be full partners in the feedback process” (p. 44). Other research is consistent with this reasoning, suggesting that student-focused teaching is linked to greater student learning outcomes and satisfaction than teacher-orientated approaches (Taras, 2001; Trigwell & Prosser, 2004).

This point of view is further supported by Fisher and Miller (2008) who suggest that reframing the learning process as a collaboration, even at the

curriculum design stage, is crucial to encouraging ongoing feedback throughout the semester. In particular, Fisher and Miller encourage the promotion and use of feedback processes from the first class of the semester in order to avoid the limitations of only seeking and recognising end-of-semester feedback. It therefore appears that working closely with students in the feedback process can allow them to develop an 'insider' perspective; this can then engage students more in their learning and allow them to exert agency over their own improved understanding or performance (Black & William, 1998; Hawe et al., 2008).

Recognizing the role students can play in the feedback process may discourage the passive approach documented in Study 1 and Study 2. Both students and staff were shown to be primarily focused on the provision of feedback by staff at the end of the assessment process; however, the opportunities for students to solicit formative feedback or to shape the feedback process in any way were not recognized. While staff typically begrudged the lack of investment they perceived students placed in interacting with feedback, little mention was made of ways they sought to enable students with the necessary skills or opportunities to do so. From this, it appears that staff may lack the time or knowledge to best enable students to take ownership of the feedback provided to them.

In addition to facilitating ownership of feedback, encouraging students as equal partners in the feedback cycle may also assist in discouraging the perceived apathy towards feedback amongst students noted by staff members in Study 2. By facilitating ongoing dialogue, rather than viewing feedback as a

linear process, an explicit expectation for students in engaging with feedback is promoted, rather than implied. Furthermore, by students exerting agency in this process, it is likely that their satisfaction with feedback will improve as they will have regular opportunity to shape the feedback delivered to them (Varlander, 2008).

Therefore, a key element in the design of the content of the FRAMEwork manual was an emphasis on collaborative learning between students and staff, as well as developing students' ability to become active agents in the feedback process. A large aspect of this centred on assisting staff to create scaffolded learning opportunities for students so that they could develop tools and skills for using feedback. This focus was also intended to address the deficits outlined by Burke (2009) in regard to first year student engagement with assessment, who found that many students lack the required knowledge and skills to engage fully with feedback.

Element 2: Promotion of continual staff and student dialogue. In addition to encouraging students to take a more active role in the feedback process, the need for staff members to explore how students understand and interact with feedback was identified as crucial. According to Dinham (2008), a vital step in improving feedback processes is to ascertain what students understand in regard to the term feedback. Results from Study 1 indicate that students have a limited view of what constitutes feedback; similarly, a disconnect was identified between students' perceptions of their use of feedback and their actual engagement with feedback skills. This observation supports the

results of Study 2, which captured the dissatisfaction of staff members in regard to how students approached feedback in their learning.

In their analysis of student perceptions of feedback, Rowe and Wood (2007) also found that a breakdown in communication between academic staff and students may be a key determinant of dissatisfaction with the feedback process. It therefore appears necessary to improve dialogues about feedback with students if they are to better engage with the process. This point of view is supported by Bonnel (2008) who noted that “opportunities for learning are limited if faculty consider themselves as lone feedback providers” (p. 293).

In their review of successful feedback principles, Nicol and Macfarlane-Dick (2004) advocated the use of dialogue between teachers and students in order to secure superior feedback outcomes. Among other benefits, continual dialogue contributes to student understanding of the conventions and terminology surrounding learning and assessment within tertiary settings (Kift & Moody, 2009). Furthermore, dialogue between staff and students allows for more accurate judgments about student understanding and performance to be made (Gilliatt & Hayward, 1996).

However, while few would debate the potential benefits of quality staff and student interaction in achieving these outcomes, the emphasis in this manual is on the promotion of opportunities for this dialogue to take place. As noted by Rowe and Wood (2007), while many students agree that academic staff are available for further consultation to receive or discuss feedback, they recognize that the option to engage with feedback in this manner is only by their own

request. In Rowe and Wood's review of student perceptions of feedback, many students demonstrated a desire for staff to be more proactive in providing feedback to students in the first instance.

Similarly, Lee et al. (2009) noted that, in the absence of appropriate and proactive teacher guidance, students have difficulty in learning to use feedback resources successfully. In their study, staff insights into making the learning process easier for students occurred after the implementation of the learning task – as such, having an opportunity to rectify this throughout the task (rather than at completion) provides a vehicle for students to make larger learning gains. Furthermore, engaging in continual dialogue with students allows staff to also appreciate more fully what has been understood and what has been misinterpreted following the provision of feedback (O'Moore & Baldock, 2007), highlighting the benefit of feedback delivered in return to teaching staff. This is supported by Hounsell et al. (2008), who proposed that feedback as a concept should be conceptualised as a loop, rather than as a linear process, in order to maximize understandings and gains.

The incorporation of continual staff and student consultation time throughout the semester as a component of a feedback program therefore appears crucial in determining student satisfaction and success with feedback. As such, an emphasis on structuring the feedback process as a dialogue between students and staff was incorporated in the design of the FRAMEwork manual.

Element 3: Use of scaffolding in encouraging feedback skills. In their paper exploring feedback perceptions in university, Budge and Gopal (2009)

asserted that learning which is facilitated by scaffolding creates the ideal environment from which students can build upon their existing knowledge and increase the depth of their understanding. Kift and Moody (2009) furthered this by outlining the use of scaffolding within assessment as one of the key ways in which to more effectively engage students in curriculum design. In particular, Kift and Moody advocated the arrangement of assessment tasks cumulatively and the scaling down of larger tasks into component pieces during the first year of study. Support for the use of scaffolding has been demonstrated in assisting first year students to successfully transition to tertiary study (Werth, Southey, & Lynch, 2009). This facilitation of smaller skills in readiness for larger tasks also helps to maintain student interest in learning, with the feedback provided clearly linked to ongoing or further tasks and therefore appearing more relevant and worthy of investment (Freestone, 2009).

These observations from the literature are consistent with the strong student support for a scaffolded assessment piece reviewed in Study 1. Rather than complete an entire research report with no formal feedback, students completed a low stakes introductory task to receive personalized written feedback on their ability to achieve the assessment criteria. This smaller task provided students with an incentive to engage with feedback (in order to assist the development of the final assessment), with tutorial activities helping students learn to engage effectively with this feedback. Students were overwhelmingly positive about this approach to assessment and feedback, requesting that similar assessment tasks be used in future. Scaffolding therefore

has demonstrated value in engaging students with feedback processes in this first year psychology course.

Furthermore, the use of scaffolding to encourage more complex feedback skills is one mechanism by which grade-focused engagement with feedback may be avoided. As noted by Willey and Gardner (2009), there is a tendency for some students to engage with feedback throughout their degree only as a means for securing better assessment grades, rather than actually understanding or learning from the feedback provided. Developing more challenging and intricate methods for engaging with feedback means that students must also continually shift in the way they respond and interact with feedback, ensuring that they do not fall into the trap of using feedback at a surface level throughout their academic careers. Recent research incorporating scaffolding as a means for developing self and peer feedback skills found this practice to be successful (Wood, 2009). In her evaluation of an online peer review tool used to scaffold peer and self assessment skills in 72 first year media students, Wood (2009) found significant improvements in students' confidence and ability to accurately appraise work following engagement with this instrument. As such, a scaffolded approach to developing feedback interaction skills is likely to enhance student success in engaging with feedback. Therefore, care was taken in the design of the activities within the FRAMEwork manual to carefully scaffold feedback skills, gradually moving students away from a reliance on formal feedback from staff to incorporating more sophisticated and independent feedback skills.

Element 4: Encouragement of independent learning. In their manifesto exploring successful provision of feedback, Nicol and Macfarlane-Dick (2006) asserted that “formative assessment and feedback should be used to empower students as self-regulated learners” (p. 2). This claim is supported by Butler and Winne (1995) who noted that the most effective learners are those capable of self-regulating. An ability to self-regulate and achieve confidence in other facets of independent learning is crucial to establishing a foundation for further learning. Furthermore, Butler and Winne maintain that feedback is “an inherent catalyst” for self-regulation, particularly the development of recognising and using internal feedback mechanisms (p. 246). Therefore, engagement with feedback should not only motivate students to use independent learning opportunities but also reinforce engagement with self-regulating practices.

This notion is supported by Kift and Moody (2009) who advocate the need to facilitate autonomy in learning during tertiary study. They note that for a majority of students, the transition to becoming a self-regulated learner is complicated and extremely stressful. As such, Kift and Moody suggest that using self-reflection opportunities and providing room for students to take control over their own learning can lead to empowerment within the tertiary learning process. With this in mind, it appears crucial that the facilitation of independent learning skills, especially self-reflection (see McDonald & Boud, 2003; Thorpe, 2000), become a cornerstone of enhancing student interaction with feedback.

Consistent with Nicol and Macfarlane-Dick's (2006) notion of empowering students through independent learning, the development of academic confidence and self-efficacy should also be considered integral to promoting successful engagement with feedback. Results from Study 1 suggest that academic confidence and general self-efficacy are significant predictors of feedback utility. Enhancing academic confidence and self-efficacy as part of independent skill development therefore appears necessary for students to feel capable of utilizing feedback skills effectively. A focus on facilitating self-regulation and self belief was therefore incorporated in the content of the FRAMEwork manual.

Element 5: Responsiveness to student need. Consistent with the aforementioned research, a need to incorporate feedback strategies preferred by students and utilize a personalized approach where possible was identified in the manual. This approach was specifically intended to assist staff members in being responsive to student need when delivering feedback. Findings from Study 1 suggest that the usability, detail and fairness of the feedback provided is very important to students, as is feedback that is personal rather than generic. Care was taken in the design of this manual to replicate these aspects of feedback in order to respond to student demand. In particular, signalling to students how to interpret and use given feedback, providing ample feedback, and discussing the marking process liberally were all incorporated as important activities for inclusion in the intervention design. It was intended that this approach would assist students who struggle to relate the feedback they receive

to learning in their course; statistics from Study 1 suggest that nearly one-fifth of students have found relating the two aspects difficult.

The individual characteristics students brought to the classroom were also considered. Although Study 1 failed to identify systematic ways in which personal variables interact with feedback preferences, a ‘one-size-fits-all’ approach to designing a feedback intervention was also avoided. This is consistent with Fyfe et al. (2006) who advocated that, due to the immense diversity in background knowledge, experiences, skills, beliefs, expectations, emotional maturity and intelligence encountered within an undergraduate population, feedback approaches should vary accordingly. In accordance with this approach, it was felt that the differing rates of progress made by students and the varying skill sets they bring to the classroom could not be regularly acknowledged by a blanket approach to feedback. Staff can become much more responsive to student need via the use of regular and ongoing collaboration with students, the incorporation of students as active members within the feedback progress and emphasizing flexibility within the content and choice of tasks selected to engage students with feedback.

Consistent dialogue between staff and students (Element 3) is one means for ensuring students receive personalized feedback, which research suggests is highly preferable from a student perspective (Martin et al., 2003; Poulos & Mahony, 2008). In addition, the regularity of feedback interaction between students and staff can promote better student outcomes (Case, 2007). In their review of formative assessment in the classroom, Black and William (1998)

assert that innovations designed to enhance the frequency of feedback delivered to students result in substantial learning gains. As such, heightening the flexibility and frequency of feedback opportunities available to students represents a key strategy for securing better academic outcomes.

Element 6: Time-shifting feedback and use of exemplars. Two strong themes from student perceptions of feedback explored in Study 1 suggest that timeliness and usability are crucial to student engagement. When questioned about ideal timeframes for the return of work, students reported much quicker turnarounds for assessment pieces (between 1-2 weeks) than what is currently practiced in the course (3 weeks for major assessments) or what was nominated by staff as reasonable in Study 2. Similarly, when asked to rate their preferences for 10 feedback attributes, students considered receiving examples to be the most important aspect of useful feedback.

Handley and Williams (2009) have suggested that ‘time-shifting’ feedback, so that delivery of feedback occurs prior to submission of an assignment (e.g. formative feedback), may be one way in which the relevance of the feedback is heightened and students are engaged more actively in the process. They particularly advocate the use of exemplars, in which examples of assignments are annotated by markers for student viewing or by the students themselves (with teacher guidance) against marking criteria. This method engages students as vicarious learners, who first learn to interpret the marking criteria in the context of the exemplar and then translate this knowledge into the context of their own assessment. According to Handley and Williams (2009),

this involves the student much more actively in the feedback and learning process than if they were merely told or provided with the marking criteria.

In addition to the results of Study 1, a focus on more timely feedback is well-supported by existing literature concerning characteristics of effective feedback and student perceptions of good teaching practice (Krause et al., 2005; McGregor et al., 2008; Squires, 2003). Furthermore, the application of exemplars to improve the feedback experience has shown to be successful in a number of studies (Handley & Williams, 2009; Hendry, Armstrong, & Bromberger, 2009; Orsmond, Merry, & Reiling, 2002). Therefore, the use of exemplars and other time-shifting activities was employed in the design of the FRAMEwork intervention, with all tasks receiving immediate feedback or feedback delivered within a one-week period.

Element 7: Recognition of a range of feedback sources. As previously discussed in Chapters 1 and 2, student and staff perceptions of what constitutes feedback are often at odds with each other. Research by Bondy and McCallum (2009) has revealed that students' understanding of feedback is often narrow and focused on assessment outcomes, while Squires (2003) maintains that staff often incorporate various forms of formative feedback into this perception. However, comparison of student and staff perceptions in Study 1 and Study 2 revealed that both parties were concerned with feedback relevant to assessment, as opposed to informal methods in, or beyond, the classroom. It therefore appears necessary to promote additional sources of feedback to both staff members and students beyond the comments and grades attached to formal

assessment that they traditionally recognise. In particular, students should be assisted in identifying and applying feedback from different classroom activities (e.g. Andrade, Wang, Du, & Akawi, 2009), informal communication (Budge & Gopal, 2009), themselves (Belski, 2007, 2009; Castle, Incedon, & Waring, 2008; Cathers, 2006; Harlim, de Silva, & Belski, 2009; Lundstrom & Baker, 2009; Taras, 2001, 2003) and their peers (Bilgin & Fraser, 2007).

In addition to enhancing the opportunities for using feedback on a continual basis during the learning process, this recognition of supplementary feedback sources also decreases the emphasis on end-of-task or end-of-semester feedback in which the feedback may have no immediate or obvious use.

Interventions promoting the use of formative feedback have demonstrated positive student outcomes for learning (Miller, 2009). This focus also allows delivery and recognition of feedback via formats other than those attached to summative assessment. For example, delivering formative feedback orally can allow for the use of emphasis when explaining important issues and facilitate a learning discussion between staff and students (Ellery, 2008). Kerssen-Griep, Trees and Hess (2008) found that skilled use of facial expressions during oral feedback predicted successful mentoring and establishment of a supportive learning environment for undergraduate students. Furthermore, as Ellery (2008) notes, oral delivery of feedback can be extremely time-efficient; utilization of feedback methods such as these may overcome some of the time and workload constraints of providing feedback noted by staff in Study 2. Therefore, the final

element incorporated in the content of the FRAMEwork intervention was the promotion of feedback sources beyond traditional assessment feedback.

Designing the Manual

With these elements in mind, content and activities were devised for inclusion in the FRAMEwork manual to enhance feedback processes in tertiary settings. The manual was composed of eight modules for completion over a semester or entire course. The content of the manual was designed to be embedded within course design, rather than as a separate training program. Four reasons were identified for this. The preferences elicited by students in consideration of a feedback intervention in Study 1 suggest that while over two-thirds of students are interested in developing their feedback skills, only 9.7% would be interested in participating if the program was conducted as an out-of-class learning opportunity. Second, research suggests that additional academic programs are largely taken by already highly-motivated, high-achieving students (Duncan, 2007); as such, the benefits of such an intervention would be available to those in most need of assistance only if embedded in the course design. Furthermore, researchers such as Kift et al. (2010) and Tinto (2009) argue that for significant benefits to the student experience to occur, change must take place not as optional add-ons to university life, but in the classrooms and lecture theatres where learning takes place. Lastly, time constraints on academics have been noted in both the literature (e.g. Glover & Brown, 2006) and in Study 2 exploring staff perceptions of feedback. The additional burden of running a separate program to facilitate more effective feedback was therefore

considered a limitation, with the probability that it would discourage staff from wanting to employ the manual or detract from time that could be spent on being a source of effective feedback.

Although the intended use of the manual was to address findings obtained in Study 1 and Study 2, care was taken in the construction of the materials to promote applicability to other courses. As shown in the previous section, the core elements of the program are likely to be generalisable beyond first year psychology at RMIT University as they support many observations and recommendations in the current literature. While the examples provided in the manual are directly related to the design of the first year psychology course, suggestions were included for ways in which they could be adapted to other disciplines of study. Therefore, the manual itself represents an attempt to improve feedback outcomes in the tertiary environment, regardless of discipline. The need to identify cohort-specific perceptions and preferences for feedback is discussed in the manual to help staff to implement the intervention. As such, findings from Study 1 were particularly relevant to the *application* of the FRAMEwork manual discussed in Chapter 6; however, the content within the manual was not limited to a discussion of course-specific feedback tasks and recommendations.

The decision to utilize modules, rather than weekly tasks, was influenced by the varying length and workload of courses across universities in Australia. Each module was designed to be moderately flexible in order to incorporate existing course material instead of adding considerably to the syllabus. Each

module therefore represented an alternative means for delivering usual course content with a small amount of additional information. A more detailed examination of each module is presented below.

Module I: Establishing the framework. The goal of Module I is to highlight to both the teacher and students their roles in determining the learning experience of the classroom, especially in regard to their responsibilities within the feedback process. This occurs through the use of a needs analysis for the class, selection of appropriate feedback methods for the semester, and development of a Learning Contract between staff and students. Traditionally, students are often very passive in determining the coursework, assessment and learning environment for their classes, with these decisions generally made by the staff involved. As Biggs (1999) notes, these decisions are often motivated by workload or traditional teaching considerations, rather than careful dissection of the learning objectives or needs of the students. Crabbe and Lewis (2002) support this assertion, claiming that too often such decisions are subject to ‘routinisation’ in which reflection and change occur infrequently. Module I asks the staff to re-think this approach and encourage students to have a more active voice in building their learning environment. This then sets the tone for the rest of the semester with students being equal participants in the feedback process.

The first task in Module I, the needs analysis, requires staff to determine the learning opportunities and feedback strategies that will best serve the students. While some of this can be ascertained from past experience and the necessary graduate capabilities for the course, it is suggested that time be given

to discussing with students their strengths, weaknesses, aspirations and requests for support, in order to better understand how their needs may be met. In addition to informing the learning opportunities in the class, this needs analysis also serves as a basis for determining the feedback methods used in the class and for preparing the Learning Contract.

Similar to the needs analysis, it is suggested that determining the feedback methods for the class can be informed by a mixture of past experience, existing literature and dialogues with current students. In this task, staff are encouraged to evaluate the feedback preferences of their students, with a sample survey included for potential distribution to students. In particular, staff are encouraged to ascertain whether a standard approach to providing feedback should be used in the course (e.g. providing one-on-one consultation to every student for a particular assessment, as per a majority vote) or whether there is opportunity for students as individuals to seek feedback opportunities unique to their preferences (e.g. selecting either one-on-one consultation or a written summary for feedback on a particular assessment). These two tasks require staff to further engage students in the establishment of the learning environment rather than to maintain current practices without reflection.

Following dialogue with students during these two tasks, staff are encouraged to formalize the key points and observations in a Learning Contract. The purpose of the Learning Contract is to make the 'unspoken rules' of the classroom explicit for every member, so that expectations of both staff and students are discussed, determined and understood. A sample Learning Contract

is provided in this module as an example to model the development of this task. The distribution of the final version of the Learning Contract to all parties is encouraged for reference purposes throughout the remainder of the semester.

Module II: Understanding feedback practices. Module II seeks to serve both an educational and demonstrative purpose. In this module, an overview of feedback theory is provided and students are taught to develop Feedback Response Checklists. The information in both of these components acts as a foundation on which to scaffold more complex feedback processes and skills in later modules.

The first component of the module delivers background on what feedback is and how it can be applied. In conjunction with informing students about the feedback process, staff and students can also use this activity to align their expectations and beliefs about feedback. In addition, students benefit from being provided an ‘insider’ perspective of the marking experience, demystifying the process and supplementing the information provided to them in assessment breakdowns and marking guides. This information and discussion session should also encourage students to think more actively about the topic of feedback, rather than perceiving it as a passive response to assessment or as a process that bears little relevance to their learning (Bondy & McCallum, 2009).

The second component of this module is concerned with developing the skill of creating Feedback Response Checklists. Feedback Response Checklists are summaries developed by students following delivery of feedback that allow them to ‘action’ teacher suggestions or corrections for use in future learning

tasks. Similar tasks have been shown to result in greater student engagement and performance following more active use of the available feedback (Duncan, 2007). The process and use of Feedback Response Checklists is explored and a sample Feedback Response Checklist provided for distribution during this module. This sample serves two key purposes: to model the development of an effective Feedback Response Checklist and to also provide information regarding common errors made by previous students on an upcoming assessment. This second purpose reinforces the process of recognizing and acting upon various forms of feedback, especially prior to the submission of assessment.

Module III: Reversing roles. Module III marks the first step of encouraging students to critically analyse work from an academic perspective. Each of the three activities within this module aim to scaffold this particular skill for later FRAMEwork applications, including the students' own upcoming assessments. These activities also intend to foster a greater understanding of the processes markers engage in when grading student work, allowing both the student and academic perspectives to align more closely.

The first activity within Module 3, the 'Students as Teachers' activity, aims to make marking criteria transparent by allowing students to read, annotate and grade a sample assessment prior to the students' own submission of a similar task. By using a previously submitted piece of work or an exemplar devised by the marker, students should begin to understand how markers interpret the marking criteria in the context of a real sample of work. This

provision of a sample also serves to demonstrate mechanisms for which the work can be achieved, as well as highlight common errors or areas for improvement. By asking the students to act as markers in this instance, they should also begin to think critically about what works well in the sample and make comparisons to their own standard of work.

The second activity within Module 3 extends on the first by providing a completed marking sheet for the sample assessment, this time written by the marker. This aims to provide feedback on the students' own marking attempt so that they can further refine their critical analysis skills. Using this completed marking sheet also allows for discussion between the academic and students about the marking process, which serves two key purposes. The first real benefit from this dialogue is that students can be taken step-by-step through each marking criteria and shown how it is interpreted by the academic in the context of a real piece of work. The second outcome from this discussion is that the academic can evaluate the ways in which the marking criteria are perceived by the student group as a whole. If there appears to be a discrepancy between what students understand by the criteria and what is intended, there is an opportunity to further revise these criteria for future understanding. Similarly, if students put forward a strong argument for the weighting of particular criteria, or the inclusion of new criteria, both parties can work together to achieve a more representative marking criteria for the work.

The third activity from this module is a discussion of general marking processes within the discipline or faculty to further enhance student

understanding of this procedure. Given that students regularly complain that the time period for returning assessments is too long (Squires, 2003), a frank discussion of the time taken to mark and return work should be undertaken for students to better appreciate the complexities involved. Similarly, such a discussion may allow for students to negotiate a more timely return of particular assessment by impressing this need on the academic. Discussion within this activity should also incorporate topics such as cross-marking procedures, methods for which to follow up feedback, and appeal processes. As with the discussion regarding the return of assessments, this should foster a sense of dialogue between the students and the academic, encouraging students to be more active in their participation and academics to be more aligned with student perspectives on the process.

Module IV: Guided self-assessment. Module IV continues the critical appraisal of work introduced in Module III and directs students in the application of this skill set towards their own work. In particular, two tasks are used in this process: the use of review questions, and the use of marking rubrics in the self-evaluation of work. In using their own work in these activities, students are encouraged to develop their own appraisal skills and enact plans based on their observations. This lessens their dependence on teacher-guided feedback and helps develop their appreciation of the wide range of feedback sources at their disposal.

The first activity asks students to reflect on their completion of a previous assessment by answering several review questions. These questions are

designed to have students think about their use of available resources in preparing the assessment and the strategies they used in dealing with questions and problems arising from the task. In addition, the questions link to forward planning for future assessments. Apart from assisting students in self-reflection, these questions also facilitate peer comparison and teacher-guided suggestions regarding the preparation of assessment. Encouragement of the use of these questions following large work projects or assessment should help students to better understand their own approaches to work and where they can improve in future.

The second activity in this module is designed to teach students the use of marking criterion sheets or marking rubrics as a tool for self-assessment. Following submission of an assessment, students should receive the usual annotations and comments on the work by a member of academic staff but not any marks or final grade. The purpose of the 'Students as Teachers' second activity is to have students review and process this feedback before completing the marking rubric from the point of view of a teacher. In addition to developing their critical appraisal skills, students should develop a greater appreciation for the marking process and increased confidence in interpreting marking criteria by completing this task. Similar tasks have shown that students engage much more meaningfully with feedback following this process (Sendziuk, 2009; Taras, 2001, 2003). In the following module, students must explain their reasoning to the original marker in order to demonstrate their understanding of their own work in relation to the marking criteria.

Module V: Matching student and academic perspectives I. Module V

continues the ‘Students as Teachers’ second activity with an emphasis on further aligning student and staff perspectives by using one-on-one consultation time between the two parties. This theme is also continued in the second task of developing a Feedback Response Checklist in response to the discussed work. Module V therefore provides students with a chance to further engage with and enhance skills developed in the earlier modules. In addition, the module offers built-in time for one-on-one staff and student interaction, allowing more responsiveness to individual student need and a real sense of dialogue between each member of class and the academic.

In the continuation of the ‘Students as Teachers’ second activity, consultation between each student and the marker of their previous assessment occurs. In addition to fostering self-reflection skills, this allows both the marker and student to appreciate each others’ perspective in the marking and feedback process. Where large discrepancies between markers and students occur, an opportunity is presented to staff for the revision of assessment guidelines where they may lead to student misunderstanding or misapplication. Following this consultation, students should develop a better sense of the critical marking process and the staff should better understand the common difficulties students face in matching their work with the stated criteria. This interaction thus highlights the continual dialogue that should take place between staff and students throughout the learning process.

The final task in this module is the completion of a Feedback Response Checklist for this marked assessment. This provides an opportunity for students to further develop feedback skills developed in Module II, including recognizing multiple feedback resources and self-directed learning. In the following module, time is allocated for staff consultation regarding the Feedback Response Checklist in order to further align student and staff perspectives.

Module VI: Matching student and academic perspectives II. As with Module V, the focus of Module VI is to continue to align student and staff perceptions of feedback. In this module one-on-one consultation for students is provided with the marker to discuss the Feedback Response Checklists devised for the previous assessment in Module V. A review of the themes that have emerged from this and previous modules is also used to encourage discussion between staff and students regarding the learning environment established thus far. These two activities are designed to highlight the collaborative and ongoing nature of successful feedback practices in the classroom.

The first activity, the one-on-one consultation exploring the Feedback Response Checklist devised in Module V, is designed to again allow greater alignment between staff and student perspectives of feedback. Students have the opportunity to better understand and ‘action’ feedback provided to them, while staff can gain an appreciation for how the feedback they have provided is initially translated and understood by students. The chance to systematically

observe how feedback is interpreted by students represents a key mechanism for making feedback more workable from the outset in future tasks.

The second activity of re-evaluating and discussing the match between staff and student perspectives of feedback represents a culmination of the observations drawn from the previous modules. It provides an opportunity to take specific themes from an individual level to a more global level and devise strategies to improve feedback mechanisms as a group. This discussion also allows for reiteration of staff and student gains to this point, highlighting the progress made thus far. The dialogue between staff and students during this activity should clearly pinpoint the achievements of students as active members in the feedback process and encourage them to continue to seek further opportunities for such behaviour.

Module VII: Self-assessment in practice. The purpose of Module VII is to introduce the use of Self-Assessment Reflections as a feedback tool for students in their independent learning. Self-Assessment Reflections are the systematic interpretation of marking criteria against a student's own work, leading to the development of an action plan to overcome any identified deficiencies or problems. These reflections build on the critical appraisal skills developed in previous modules but require the student to (eventually) complete them without significant peer or teacher input. As such, Self-Assessment Reflections encourage students to recognise differing sources of feedback and develop independent learning skills. This approach is closely linked to those advocated by Cathers (2006) and Taras (2003).

In the first part of this module, students are provided the opportunity to develop a Self-Assessment Reflection on an assessment piece prior to submission. Students should methodically work through both their work and the marking criteria to comment on and grade the given work. In this, students will use their own knowledge of marking perspectives (developed in Module III) and self-awareness of their work (developed in Modules IV to VI) to complete the task. Students should also use their problem-solving and action-planning skills from devising Feedback Response Checklists (developed in Modules II, V and VI) to nominate a course of action following this task to overcome any problems, questions or deficiencies identified in marking the assessment piece. This task therefore encourages advanced use of skills developed throughout earlier FRAMEwork activities.

The opportunity to provide students with a sample Self-Assessment Reflection is also provided during this session in order to model the necessary appraisal skills. It is recommended that this sample be targeted towards the same piece of assessment students are currently conducting to heighten the relevance and provide an additional source of feedback for them to utilize. This, in addition to staff consultation following the task, should assist students in learning to use Self-Assessment Reflections successfully. It is also suggested that, providing students demonstrate an advanced understanding of critical evaluation and the assessment is low-stakes, students can engage in peer assessment on this task as an additional source of feedback on their progress. As such, the use of Self-Assessment Reflections should minimize student reliance

on summative feedback and recognition of academics as the only sources for potential feedback.

Module VIII: Looking forward. Module VIII serves as both a reflective and forward-planning session for the feedback practices developed during the FRAMEwork program. The purpose of this module is for staff and students to provide feedback on the progress made thus far and to plan how this knowledge may be applied in the future. The observations drawn from Module VIII will help staff in facilitating FRAMEwork or similar feedback programs in future, as well as allow students to transfer these skills to other courses and settings. As such, it is recommended that this particular module take place towards the conclusion of the semester/year.

The first activity, a discussion and series of questions in review of the FRAMEwork program, serves two important functions. The first is to flag to students and staff alike the progress and gains achieved throughout the FRAMEwork program. Highlighting the changes, strengths and skills developed throughout the modules allows both parties to develop mastery over these attributes and develop confidence in employing them in future. The second purpose of this discussion is to review the areas where the FRAMEwork program may be modified or built upon in order to achieve better outcomes for students and staff. This discussion reiterates the extent to which students are an active agent in the feedback process, allowing them the opportunity to shape this or similar programs for future use.

The second activity in this module is an exploration of how the skills and knowledge from the FRAMEwork program may be used or transferred to other settings in the future. It consists of several questions and dialogue between staff and students. The focus of this activity is to again emphasize the active role students may take in determining the amount, quality and opportunities for feedback available to them in other courses or even workplace settings. Given that students frequently lament the lack of quality feedback given in traditional courses (Bondy & McCallum, 2009), the ability to negotiate and seek feedback independently is a vital skill for ensuring feedback satisfaction throughout the entirety of a degree. Therefore, even in situations where there are no existing feedback measures or there is a deficit in the feedback provided, students should be confident in clarifying expectations, self-assessing their progress and actively engaging others in the provision of the feedback necessary to enhance their own learning and skills.

Chapter Summary

In this chapter, the development of a manual for improving student and staff engagement with feedback was described. A comparison of themes and findings from Study 1 and 2 were provided to set the context for this intervention. Seven key strategies for improving feedback outcomes were developed as consistent elements for the manual. The first strategy was to encourage students in taking an active role when engaging with feedback and to encourage them in recognizing the importance of their contributions to this process. An emphasis on promoting quality student and staff dialogue was also

recognized, highlighting feedback as an ongoing loop rather than a linear process. A key aspect of this was the incorporation of one-on-one consultation time between staff and students during several modules, rather than relying solely on group dialogue or a ‘blanket’ approach. Using scaffolding to gradually build upon knowledge and skill sets was also employed as a strategy for encouraging advanced feedback skills. In addition, the manual sought to encourage students to develop mastery and confidence in pursuing independent learning opportunities. The activities within the manual were also designed to be highly flexible and thus tailored to specific course tasks and concerns, as a mechanism for being responsive to individual student need. The content within the manual also sought to incorporate empirically-supported feedback strategies and tools throughout the program. In particular, the use of time-shifting feedback and provision of exemplars were employed in several instances (see Handley & Williams, 2009). Lastly, it was intended that students come to recognize and respond to a variety of feedback sources over the course of the intervention, rather than being reliant on traditional teacher-driven summative feedback opportunities.

The particulars of the manual content were also described in this chapter, detailing each of the eight modules comprising the FRAMEwork (Feedback Resources for Assessors, Mentors and Educators) program and how the manual may be applied in differing tertiary settings. While each of the themes and activities outlined during the manual is based on empirically-supported research and theory, it should be noted that the FRAMEwork manual represents one of

the first efforts at combining this information into a collective package. As such, the viability of incorporating the manual into a tertiary course, including the likelihood of achieving meaningful staff and student gains, needs to be tested. Piloting the FRAMEwork manual in a tertiary setting is therefore required to determine whether these recommendations translate into workable and successful feedback practices.

Chapter 6

Study 3: Piloting a Feedback Intervention in First Year University – The FRAMEwork Program

Chapter Overview

The exploration of student and staff perceptions of feedback in Study 1 and Study 2 identified a number of reasons to account for the widely documented student dissatisfaction with feedback processes in university settings. This led to the development of a comprehensive program, FRAMEwork, to improve student and staff engagement in feedback. This chapter reviews the implementation of the FRAMEwork manual in the first year psychology course at RMIT University. The methodology of the experimental design is explained, before the results of this intervention are explored. The implications of the improved feedback utility and academic performance observed following FRAMEwork are reviewed, leading to a discussion of the limitations of the study and recommendations for future research. While the evaluation of the FRAMEwork program supports the use of this intervention to improve feedback in tertiary settings, a number of adjustments are necessary to establish the extent to which the program is useful to students and academics in engaging successfully with feedback.

Background and Rationale

Despite the focus on feedback as one of the most important facilitators of student learning in university settings, much research has documented the gap between staff and student engagement with this process (Bondy & McCallum,

2009; Gibbs et al., 2003; Hattie & Timperley, 2007; Poulos & Mahony, 2008; Rowe & Wood, 2007). These observations have been supported by the findings of Study 1 and Study 2, which noted the absence of staff and student partnerships in working to achieve quality feedback outcomes. The purpose of this study was to therefore pilot a feedback intervention program in a first year course designed to better engage staff and students in this process. The FRAMEwork (Feedback Resources for Assessors, Mentors and Educators) program (described in detail in Chapter 5), was designed to overcome many of the shortfalls in the feedback process identified in the literature and in Studies 1 and 2.

Despite the emphasis on addressing the discrepancies noted in the feedback process through Studies 1 and 2, formal evaluation is necessary to determine whether rectifying these issues even leads to gains in learning. As noted by Kluger and DeNisi (1994), over one third of the studies reviewed in their meta-analysis of feedback interventions in the workplace reported decreases in workplace performance following the intervention. However, in their review of 607 effect sizes reported in the feedback intervention literature, Kluger and DeNisi found that certain conditions were conducive to large and positive effects on performance. In particular, the use of familiar tasks, incorporation of structures that support learning, and a focus on highlighting discrepancies between the task and criteria, rather than providing feedback focused on the individual, were identified as important. While care was taken in the development of the FRAMEwork intervention to adhere to these

recommendations, it should be noted they are largely determined by how the content and activities are enacted and perceived by staff and students. Piloting the FRAMEwork manual with university staff and students is therefore required to determine whether the material translates into workable and effective feedback practices.

This emphasis on determining whether feedback interventions result in gains for learning is consistent with the observations of Lizzio and Wilson (2008). Lizzio and Wilson's study of 277 psychology, science, criminology and engineering students failed to reveal a significant relationship between student perceptions of feedback effectiveness and self-reported academic achievement. As such, the authors questioned whether determining student perceptions of feedback effectiveness was a valid strategy for assessing the impact of such feedback on student work. While this lack of relationship may be attributable to other factors, such as the fact that academic performance may not influence perceptions of feedback quality (Lizzio & Wilson, 2008), it raises important questions regarding current research into tertiary feedback practices. Many investigations have been based on the premise that identifying student perceptions and preferences for feedback will allow for more effective feedback strategies to be used; these strategies are therefore expected to lead to students being able to apply the feedback more effectively and improve their academic performance. Explicit testing of this underlying premise is therefore warranted to determine whether student perceptions of quality feedback are useful in determining strategies that increase learning in the tertiary environment.

The aim of the study was to explore whether participation in the FRAMEwork program was associated with improvements to feedback use and learning on behalf of students. It was predicted that engagement with the FRAMEwork program would lead to higher levels of feedback use by students following the intervention compared to students who did not complete the intervention. Furthermore, it was expected that student performance, as measured by laboratory report marks (the major written assessment for the semester and focus of the FRAMEwork content), would be higher in students who received the intervention compared to the control group. Lastly, as shown in Study 1, it may be that students also experience gains in academic confidence, self-efficacy and life satisfaction through the process of participating in an academic program or as a result of increasing student engagement and satisfaction with feedback. This complements research that suggests that first year students find feedback that assists with integration into university life and provides emotional support to be particularly important (Poulos & Mahony, 2008). A final exploratory aim of the study was therefore to examine whether participation in the FRAMEwork program was associated with any wellbeing or additional academic benefits, thereby further supporting the transition to university for first year students. Of particular focus was higher rates of life satisfaction and academic skills (expectancy outcome and resource management skills), as well as lower levels of negative affect, in the experimental group following participation in the FRAMEwork intervention.

Method

Participants

Students enrolled in first year psychology tutorial classes at RMIT University, Melbourne, were invited to participate in the study. The 90 participants belonged to four tutorial classes that were randomly selected to participate in the research; these tutorials were also randomly assigned to control and experimental conditions. Students present in these tutorials could opt in or opt out of the research; however, all students chose to participate. The ages of the 46 participants comprising the experimental group (32 females, 14 males) ranged from 18 - 49 years ($M = 22.81$, $SD = 7.39$). The ages of the remaining 44 students comprising the control group (34 females, 10 males) ranged from 18 – 30 years ($M = 20$, $SD = 2.56$).

Materials

During the course of the semester, the FRAMEwork feedback intervention manual (described in Chapter 5; Appendix C) was administered to the experimental group. A questionnaire developed for the purpose of this study was also administered at pre- and post-test, containing demographic questions and perceptions of feedback sections devised by the researchers and four published scales to measure feedback utility, life satisfaction, learning skills, and wellbeing (Appendix D). In addition, an evaluation form was used at post-test in the experimental group, containing 7 items devised by the researchers

(also included in Appendix D) to evaluate the usefulness of particular features of the intervention.

During the course of the intervention, the primary researcher (who also delivered the FRAMEwork content to the experimental group) completed a weekly journal to document the process. The key focus of the journal was to qualitatively capture the benefits and challenges of implementing the manual within the structure of the first year course.

Demographic information. Demographic characteristics of the participants were obtained through 7 items that collected data pertaining to student numbers, sex, date of birth, degree undertaken, country of birth, date of arrival in Australia (where applicable) and hours spent in paid employment or volunteer work.

Feedback perceptions. Student attitudes towards feedback and use of feedback was gauged using 6 items devised by the researchers. Students were also asked to discuss their understanding of feedback and their confidence in using feedback effectively during the semester.

The Feedback Utility subscale, from the Instructional Feedback Orientation Scale (IFOS; King, Schrodt, & Weisel, 2009). The Feedback Utility subscale contains 10 items evaluating student use of corrective feedback. Responses are given using a 5-point Likert scale ranging from ‘Strongly disagree’ (1) to ‘Strongly agree’ (5), with higher total scores indicating more effective engagement with feedback. The Feedback Utility subscale of the IFOS has good internal consistency, with a Cronbach α coefficient reported by the

authors of .85; in the current study, the Cronbach α coefficient was .78. This measure was developed and validated following the implementation of Study 1 where a feedback utility scale was devised by the researchers. Given the low internal consistency observed in this scale during Study 1, the Feedback Utility subscale of the IFOS was selected for the current study due to the adequate psychometric properties reported. The availability of this subscale was also deemed to be advantageous for replication purposes in future studies.

Satisfaction with Life Scale (SWLS; Diener et al., 1985). The SWLS is a brief 5-item measure of subjective wellbeing. Responses are given using a 7-point Likert scale ranging from ‘Strongly disagree’ (1) to ‘Strongly agree’ (7). Total scores range from 5 to 35, with higher scores indicating greater life satisfaction. According to Pavot and colleagues (1991), the SWLS has good internal consistency, with a Cronbach α coefficient reported of .85. In the current study, the Cronbach α coefficient was .79.

The Expectancy Outcomes and Resource Management scales, from the Motivated Strategies for Learning Questionnaire (MSLQ; Pintrich, Smith, Garcia, & McKeachie, 1991). These two scales from the MSLQ consist of 31 items assessing student skills in the expectancy outcomes and resource management domains, with responses provided on a 7-point Likert scale. The variables measured in these scales include control of learning beliefs, self-efficacy, time and study management, effort regulation, peer learning, and help seeking. Higher scores on each subscale indicate greater application of academic skills. According to the original authors, the MSLQ demonstrates

reasonable factor and predictive validity. However, in the current study, only the self-efficacy subscale demonstrated sufficient internal consistency with a Cronbach α coefficient of .88. The α coefficients for the remaining subscales ranged from .38 to .68, demonstrating poor reliability (Field, 2009; Pallant, 2007).

Depression Anxiety Stress Scales (DASS-21; Lovibond & Lovibond, 1995). The revised 21-item version of the DASS assesses psychological wellbeing in the form of levels of depression, anxiety and stress. Responses are scored on a 4-point Likert scale, ranging from 0 (did not apply to me at all) to 3 (applied to me very much or most of the time). Higher scores indicate lower wellbeing. The DASS-21 has been shown to demonstrate adequate reliability and construct validity (Henry & Crawford, 2005). In this study internal consistency was also adequate, with Cronbach α coefficients ranging from .73 to .80.

Procedure

Ethics approval for the study design was granted by the Human Research Ethics Committee at RMIT University. Particular care was given to the issues of voluntary consent and participant confidentiality, with the primary researcher also acting as the tutor responsible for the experimental group. Recommendations made by Nolen and Vander Putten (2007) in regard to ethical research design in the classroom, as well as observation of the guidelines provided by the RMIT Human Research Ethics Committee, were employed to manage this. Use of an impartial third party research assistant was employed for

the distribution, collection and coding of all research data to minimize the potential for informed consent and confidentiality issues to arise. Similarly, to protect the integrity of the marking process, stringent moderation and cross-marking procedures were employed in the teaching team to ensure that allocation to control or experimental conditions did not affect grades assigned to tutor-marked assessments. Blind-marking, in which the identifying details of students were removed from papers, was also implemented where possible.

Consideration was also given to ensuring that the control and experimental conditions were as comparable as possible with the exception of the FRAMEwork intervention. The 2 teaching staff selected to engage with these tutorials were matched on sex, age, education level, teaching orientation and experience to minimize the impact of individual staff characteristics on student engagement. Furthermore, standardized instructions were provided for all tutorials to ensure the similarity of activities and content facilitated (again with the exception of the FRAMEwork content in the experimental group) between the classes.

Questionnaires, together with a plain language statement, were distributed during the first tutorial for the semester in four first year psychology classes at RMIT University. Students who chose to participate were able to complete the questionnaire within the classroom, with administration taking approximately 15 minutes.

Following this, the FRAMEwork manual was implemented in two classes which served as the experimental group over the course of the first

semester. Students in the two classes which formed the control group continued to receive their usual coursework and tutorial activities. The first year psychology course used in the present study was taught over a 13-week semester, with 13 lectures of 2 hours duration and 12 tutorials of 2 hours duration occurring weekly. Differences in the implementation of the coursework across the control and experimental groups was limited to the tutorials; students continued to attend the same lectures and have the same availability to other course materials (e.g. online Discussion Boards, tutor consultation, access to lecturers etc.).

Care was taken when enacting the FRAMEwork manual to incorporate course-specific feedback recommendations observed in Study 1. These included timely delivery of feedback (immediate or within one week), an emphasis on personalized written comments where possible and a focus on highlighting the learning implications and fair assessment procedures when providing feedback. These inclusions are in keeping with recommendations made in the FRAMEwork manual in soliciting input from students in order to address the specific needs of the group.

Over the course of the semester, students in the experimental group engaged in a range of activities during tutorials including negotiating a work agreement between staff and students (i.e. a 'Learning Contract') which specified the expectations of both parties in regard to the semester and conducting an overview of what feedback is, how it can be used and some of the key literature findings in the area. Students also developed Feedback Response Checklists

(student-written action plans following receipt of feedback) and engaged in the marking of exemplars within class to compare and align student and staff perceptions of the marking criteria. Self-assessment was used in two different ways: practicing self-assessment of major pieces of work before submission to ensure it met the marking criteria and practicing self-assessment following submission of work to evaluate how effectively strategies and resources were used in preparing for the assessment. Opportunities were also devised to allow students to assign their own grade to work annotated by staff, again to align marking perceptions between both parties, and to learn how to use outside resources for feedback, rather than being solely dependent on direct feedback from staff.

In the final tutorial of the semester, questionnaires were again distributed to the four classes by an impartial third party research assistant. Confidentiality of this data, as per the pre-test, was protected via the coding of identifying information (student numbers) and publication of group results only.

Results

Data Analysis

Quantitative data was entered and scored using the Statistical Package for Social Sciences (SPSS, standard version 17, 2008). Given the small number of missing data fields for each of the scale totals, these participant totals were removed from the relevant procedures to adopt a cautious approach to the quantitative analyses. Assumption testing was also conducted prior to inferential testing to ensure that the assumptions of each analysis were met.

A review of the qualitative data was conducted to identify emergent themes, before a list of key words and descriptors were developed for each theme. Individual participant responses were then grouped under each theme. It should be noted that several student responses loading onto more than one theme. The total number of participant responses was then calculated for each theme to ascertain the extent of these trends amongst the sample.

Experimental and Control Group Comparisons

The experimental and control groups were compared for differences in post-test scores after controlling for initial pre-test scores (see Table 11 for descriptive statistics).

Table 11

Well-being and Academic Pre- and Post-Test Scores for Control and

Experimental Groups

	Control		Experimental	
	Pre	Post	Pre	Post
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Life satisfaction	23.54 (6.38)	24.5 (7.27)	24.2 (5.49)	25.4 (5.35)
Stress	13.32 (9.31)	13 (12.82)	10.05 (7.80)	12.2 (9.34)
Anxiety	9.07 (7.36)	7.8 (8.75)	6.60 (6.28)	5.4 (6.26)
Depression	9.17 (7.36)	10 (12.12)	5.65 (4.83)	7.6 (8.19)
Feedback utility	4.29 (0.43)	3.96 (0.75)	4.28 (0.42)	4.35 (0.53)
MSLQ - control of learning	5.40 (0.67)	5.26 (0.83)	5.51 (0.79)	5.62 (0.86)
MSLQ – self efficacy	4.94 (0.79)	5.06 (0.93)	5.17 (0.58)	5.23 (0.93)
MSLQ - time management	5.12 (0.86)	4.46 (1.08)	4.98 (0.73)	4.45 (0.79)
MSLQ - effort management	4.85 (1.18)	4.75 (1.16)	4.83 (0.73)	4.72 (1.04)
MSLQ – help seeking	4.51 (0.91)	4.58 (0.98)	4.50 (0.78)	4.1 (0.96)
MSLQ - peer learning	3.91 (1.29)	3.97 (1.52)	3.87 (1.21)	3.71 (1.26)

A one-way between-groups analysis of covariance was conducted to explore the effectiveness of the intervention in enhancing feedback utility after controlling for the pre-test scores. A test of the assumption of homogeneity of slopes revealed no significant interaction between pre-test scores and the treatment groups, $F(1, 37) = .26, p = .61$. A Levene's test revealed that the assumption of homogeneity was also not violated, $p = .21$. The results showed

that there was a significant difference between feedback utility scores obtained by the control and experimental groups following the intervention, $F(1, 38) = 8.43, p = .006$, partial $\eta^2 = .18$. No other significant between-group differences were revealed.

Comparisons were also made between the control and experimental groups for marks obtained across the semester (as shown in Table 12, with assessments presented in order of completion throughout the semester). A Levene test found that the assumption of homogeneity of variance was met, $p = .88$; therefore a two-tailed independent samples t -test based on equal variances was carried out comparing the two groups for laboratory report marks. Marks for the experimental group were significantly higher than the control group, $d = 1.08$. No significant differences were observed for any other assessments.

Table 12
Mean Scores Obtained by the Experimental Group and Control Group for each Assessment Task

Assessment Task	Experimental		Control		$t(34)$	p	95% CI	
	M	SD	M	SD			LL	UL
Assignment 1	8.53	1.41	8.48	1.43	.10	.92	-.92	1.01
Test 1	14.46	2.35	14.88	2.29	-.54	.59	-2.0	1.16
Assignment 2	4.28	1.04	4.17	1.30	.27	.79	-.70	.91
Lab Report	26.79	3.27	22.99	4.03	3.12	.004	1.32	6.26
Participation	9.25	1.29	8.69	1.09	1.39	.17	-.26	1.39
Test 2	14.17	2.94	13.78	2.43	.43	.67	-1.46	2.25

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Experimental Group Outcomes

Student perceptions of FRAMEwork program. Descriptive statistics for the quantitative data in the FRAMEwork evaluation form were computed, while a thematic analysis of qualitative data was conducted to explore student perceptions of the FRAMEwork program. Data from the five sections of the evaluation form are summarised below under the headings of usefulness, future use, best aspects, perceived gains, and improvements to the FRAMEwork program.

Usefulness of the FRAMEwork tasks. Participants in the experimental group were asked to rate the usefulness of 10 key tasks within the FRAMEwork program on a 5-point scale, with 5 indicating a high level of usefulness. A distinct preference for participating in one-on-one consultation with the tutor was shown, while developing a class contract was considered to be the least useful aspect of the program (Table 13).

Table 13

Perceived Usefulness of and Likelihood of Future Engagement with FRAMEwork Tasks

FRAMEwork Task	Student Rating			
	Usefulness		Future Use	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
One-on-one consultation with staff	4.57	0.59	4.44	0.64
Completing Feedback Response Checklist	4.04	0.69	3.89	0.75
Grading own work to check marker alignment	4.00	0.82	3.75	1.00
Completing self-assessments prior to submission of work	3.97	0.73	3.93	0.66
Using review questions to reflect on use of feedback	3.96	0.96	3.81	1.08
Marking sample assessments	3.89	0.79	3.68	1.02
Using examples of how to engage with feedback	3.50	1.02	3.36	1.13
Learning to transfer feedback skills to other settings	3.48	0.77	3.46	1.26
Learning about feedback theory	3.28	0.88	2.86	1.30
Developing a class contract	3.16	0.99	2.70	1.03

Use of FRAMEwork skills in future. Following this, students were asked to rate the likelihood of engaging in 10 key skills/tasks in their future study after the FRAMEwork program. Each skill was rated on a 5-point Likert scale, with 5 indicating a high level of likelihood. Similar to the perceived usefulness of the FRAMEwork tasks, engaging in one-on-one consultations with staff was identified as the task most likely to be pursued and asking staff to develop Learning Contracts was considered the least likely task to be pursued in the future. The descriptive data for this question are also presented in Table 13.

The relationship between the perceived usefulness of each FRAMEwork task and the intention to use these tasks in future study was explored. Pearson’s product-moment correlations revealed significant moderate correlations between perceived usefulness and future use for all tasks with the exception of one-on-one consultation with staff and grading of own work to check marker alignment (Table 14).

Table 14
Correlations between the Perceived Usefulness of and Likelihood of Future Engagement with the 10 FRAMEwork Tasks

FRAMEwork Task	<i>n</i>	<i>r</i>	<i>p</i>
Using review questions to reflect on use of feedback	24	.62	.001
Learning about feedback theory	28	.61	.001
Learning to transfer feedback skills to other settings	24	.59	.002
Completing Feedback Response Checklist	26	.59	.002
Marking sample assessments	27	.54	.004
Using examples of how to engage with feedback	23	.52	.01
Completing self-assessments prior to submission of work	27	.46	.02
Developing a class contract	24	.44	.03
One-on-one consultation with staff	22	.33	.13
Grading own work to check marker alignment	26	.29	.15

Best aspects of FRAMEwork. An open-ended question was posed to students asking them to identify the best aspects of the program. Responses were analysed using a thematic analysis approach. Responses from the 25 participants who completed this question fell into two main categories:

identification of key tasks in FRAMEwork and perceived academic benefits. One-on-one consultation was identified as the most popular task ($n = 7$) within those students who identified tasks as the best aspect, with two students nominating the opportunity to have drafts marked prior to the submission of assessment. Single responses were recorded for Feedback Response Checklists, self-grading, marking sample assessments, review questions, and exemplars. The most widely noted academic benefit was the perceived ability to improve, with 13 students nominating this as the best aspect of FRAMEwork. Four students felt that FRAMEwork was important for fostering self-reflection and a greater understanding of their academic ability, while three felt that they gained a deeper appreciation for the marking of assessment. Single responses were noted for improved time/task-management, enhanced academic confidence, and the opportunity to receive feedback.

Perceived gains from the FRAMEwork program. A further open-ended question was posed to the experimental group, asking participants whether they felt they gained from the program and to identify reasons for their response. All 23 participants who responded to this question agreed that they had benefited from FRAMEwork, although not all identified the reasons for this. Thematic analysis for this qualitative data identified four key trends. The first theme was improved academic self-understanding ($n = 9$), with students feeling as though they had a greater sense of their progress and learning tendencies within the course. This was followed by the perceived opportunity to participate in a good learning environment ($n = 5$), with the chance to engage in activities and tasks

not available in other classes. Enhanced academic performance and confidence was also identified ($n = 5$) as a perceived gain. The final theme identified was greater alignment with staff and course expectations ($n = 3$), with students feeling they better understood what was expected of them within their work and assessment.

Improvements to the FRAMEwork program. Two final open-ended questions were posed, asking students to identify the aspects of FRAMEwork most in need of improvement and whether they felt anything was missing from the program. Only 6 students responded to these items in total, with no clearly identifiable themes. One student felt that spending less time on feedback theory would be useful; this directly contrasted with another student requesting more emphasis on feedback theory. More clarification of Learning Contracts was also perceived as useful, as would more time for one-on-one consultation and further provision of examples of work that demonstrates the use of feedback. The final improvement suggested was to allocate less time for the FRAMEwork program in the overall scheme of the Foundations of Psychology course. This notion of time was also highlighted by a response provided in the additional comments section of the evaluation, in which a student commented on needing more time to complete the FRAMEwork tasks than was allowed by the course timeline.

Staff Observations

The tutor for the experimental condition (and primary researcher for the intervention) used a weekly written journal to compile a list of observations

over the course of the semester to document the facilitation of the FRAMEwork manual. In regards to benefits of the intervention, strong themes emerged regarding satisfaction with the facilitation of individual student consultations and regular student dialogues. Due to this heightened interaction and the degree to which students influenced the feedback process, it was noted that a much more consistent sense of how individual students were performing throughout the semester was achieved. In particular, it was reported that:

‘Students who are at risk for falling through the gaps – the quiet ones, the ones who struggle with time management, the ones who believe their effort warrants a larger mark than what their performance suggests, and the ones who ‘just don’t get it’ – are all being picked up much earlier in the learning process, allowing me to assist them better and understand their unique difficulties’.

It was also found that the FRAMEwork intervention had benefits for both student and staff time management. Students began planning their major written assessment, the lab report, earlier than usual and used tutorial time much more effectively to achieve this. As such, it was noted that out-of-class responsibilities, such as student consultations, responding to student emails and monitoring the online discussion board, were much lower than other semesters. Students’ expectations were much more in line with their performance following the FRAMEwork program, with the tutor commenting at the end of semester ‘not one single mark dispute! Normally at this time of year I have at least three to five consultations booked with unhappy students’.

The largest difficulty noted in enacting the FRAMEwork manual was the incorporation of all of the FRAMEwork manual content into a single semester, particularly in attempting to retain the usual coursework encountered in the other tutorials. On several occasions it was not possible to facilitate all of the usual content during the tutorial, potentially putting the students in the experimental group at a disadvantage with lecture content review and exam preparation. Furthermore, due to the competing demands for tutorial time, student demand for assessment-related content at times overshadowed interest in completing FRAMEwork activities. An effort was therefore made to shorten the length of the FRAMEwork activities where possible to better accommodate this existing material and to maintain student interest.

An additional issue with running the FRAMEwork manual was the voluntary nature of some of the FRAMEwork activities. Given the experimental nature of this intervention, students were given the option to participate in any activities that required out-of-class attention. Given the time constraints mentioned, several activities were largely conducted between tutorials; as such, not all students completed the full FRAMEwork program.

Final observations documented in the researcher journal included a willingness to facilitate the FRAMEwork program in future, feeling that it led to real gains for student and staff interaction, student learning and management of the major written assessment for the semester. However, the possibility of a modified version of the FRAMEwork program was raised in an attempt to circumvent the time management difficulties mentioned earlier. In particular,

rolling out the program over the entire first year of study was perceived as a more manageable means for enacting the FRAMEwork program.

Discussion

The results of this study support the prediction that better engagement in the process of feedback, as achieved through participation in the FRAMEwork intervention, would lead to higher feedback utility in students. Furthermore, the hypothesized gains in student learning following the intervention were also observed, with students in the experimental group achieving significantly higher scores on their major written assessment when compared to the control group. The FRAMEwork program was successful in achieving better engagement and use of feedback in first year students.

The intervention did not significantly affect student wellbeing, other academic skills or scores in other assessment tasks. While the aim of the FRAMEwork manual was not to specifically target these outcomes, exploratory analyses were conducted to see whether the FRAMEwork program could be used as an additional aid in easing the transition of first year students into tertiary study. It appears that the FRAMEwork program may be useful in targeting student use of feedback and academic achievement, but these differences do not necessarily translate into holistic benefits for the overall student experience in first year.

This observation is further compounded by difficulties the researcher faced in enacting the FRAMEwork program within a single semester during the first year psychology program. While many of the FRAMEwork activities were

easily embedded within the usual coursework, there were a number of competing demands for the use of the time in the two-hour tutorial slots. A particular difficulty with the experimental design was maintaining consistency with the remaining ‘control’ tutorials to ensure that the experimental participants did not miss out on typical tutorial activities to accommodate the FRAMEwork content. The emphasis on FRAMEwork activities on a weekly basis (i.e. during every tutorial) also resulted in several challenges to maintaining student enthusiasm and engagement with this content in the context of the competing coursework.

As such, it would appear the FRAMEwork manual may not be best suited to solely a first year approach. While the need to introduce an understanding of effective feedback and to facilitate feedback skills in first year cannot be understated (particularly in light of the literature reviewed in Chapters 1 and 2), a progressive approach to the FRAMEwork content may be warranted. Introducing these skills more gradually over an entire program may allow easier incorporation of FRAMEwork from a time and engagement perspective. The design of the FRAMEwork manual allows this adjustment to occur easily, given the scaffolded nature of the content and activities. Staff members can therefore select one or two modules to implement per semester to allow ample time for other coursework commitments.

In addition to these recommendations, several limitations and suggestions for future research must be noted. The main limitation of the current study was the facilitation of the FRAMEwork intervention in the classroom by

the researcher. This must be taken into account in the interpretation of the data provided, given the active role of the researcher in the learning environment. Care was taken where possible to minimise the potential bias within this research design. The selection of the tutor to facilitate the control tutorials ensured that sex, age, education level, teaching orientation and teaching experience was matched to the researcher to reduce the impact of individual staff characteristics on research outcomes. Standardized instructions were provided for all tutorials to ensure the similarity of activities and content facilitated (with the exception of the FRAMEwork content in the experimental group) between the classes in order to minimise confounding variables.

The marking processes for all subjective assessment of student work (such as the lab report) also followed stringent procedures to ensure equity across the two conditions. Where possible, blind-marking was used to ensure that identification of students was not possible during the assessment of work. Moderation meetings were conducted in the teaching team to align each tutors' appraisal of student work against the marking rubric. As part of this, several papers were copied and distributed to each tutor for independent marking, with scores compared and discussed to ensure consistency. Furthermore, after initial marking for each tutorial was concluded, cross-marking occurred for a random selection of papers within each of the performance categories (pass, credit, distinction and high distinction). This process showed agreement amongst the tutor team, ensuring that a paper that was, for example, allocated a low credit in one tutorial would also receive a low credit in all other tutorials. These

processes helped to add validity to the assessment of academic performance in this research design.

Despite these attempts to reduce bias in the evaluation of the FRAMEwork program, several issues must be acknowledged. The act of combining teaching and research in the classroom is a form of action research; a focus on linking theory to activity is evident in this practice to improve educational outcomes and employ mindful teaching methods (Megowan-Romanowicz, 2010). This research is typically motivated by identification of deficits in the learning environment (Postholm, 2011); as such, it is in the researcher's interest to determine solutions to these problems. While the researcher can attempt to be mindful of these motivations, it is impossible to ensure impartiality, particularly when documenting the researcher's perceptions of the efficacy of the program. Furthermore, as Postholm (2011) identifies, the involvement of teachers as researchers introduces a new dynamic to the interaction of staff and students in the classroom. The implications of this cannot be reliably separated from the effects of the intervention; as such, caution needs to be employed when evaluating the efficacy of the FRAMEwork manual based on this research design.

Further consideration therefore needs to be given to replicating the study with teaching staff not involved in the FRAMEwork design. The need for this is threefold. The first reason is to establish whether the findings in this study are able to be replicated by teachers who do not have a vested interest in the program's efficacy. The second reason is to explore whether the manual can be

used effectively by staff unfamiliar with the program, to ensure that the content is user-friendly and comprehensive. The third research question that needs to be addressed is whether the program is readily adaptable to courses beyond first year psychology at RMIT University. Although the FRAMEwork manual incorporates evidence-based literature from the education field and is designed to be flexible to varying coursework approaches, many observations about feedback practice were also drawn from research using psychology staff and students at RMIT (Study 1 and Study 2). The degree to which the content is applicable beyond this particular course and university must be established for the FRAMEwork manual to be considered successful.

Similarly, further research would benefit from trialling the FRAMEwork intervention across a range of courses to test its effectiveness in modifying approaches to feedback. The first year psychology course at RMIT already utilizes a number of evidence-based feedback initiatives, such as immediate feedback sessions, rubrics, and self-assessment pro formas; as such, the impact of the FRAMEwork manual may not be as substantial in this course compared to others which do not currently utilize such strategies. In these instances, consideration also needs to be given to why teaching staff do not utilize such strategies. If there are barriers to implementing feedback strategies in the classroom, such as time restrictions or staff motivation, it may be likely that the FRAMEwork manual would be equally as ineffective in securing better feedback outcomes for staff and students. Therefore, research exploring staff perceptions of the FRAMEwork program across different faculties will help to

better predict the usefulness and implementation of the content across universities.

Lastly, the limitation of the poor reliability of the Expectancy Outcomes and Resource Management scales (from the MSLQ) in this study is important to consider. As these scales were the sole measures of the academic skills variables targeted in this research (with the exception of feedback utility), caution must be applied when interpreting the impact of the FRAMEwork program on academic ability. It is possible that the failure to yield significant findings regarding a change in academic skills following the intervention may be partly attributable to the scales used. While including grades for the course allowed a measure of academic progress for comparison between the control and experimental groups, a more detailed investigation of possible effects on academic skills would help to illustrate the ways in which feedback interventions interact with student performance. Future research would benefit from utilizing a greater mix of scales to measure academic skills in order to avoid such problems in future.

Despite the need for further replication of the FRAMEwork program, this pilot study represents an important first step in implementing a comprehensive feedback intervention in a university setting and testing its effectiveness empirically. The results are extremely promising, demonstrating a significant improvement in feedback utility and grades for students who completed the intervention. Qualitative data regarding the program and students' intention to further engage with the skills developed throughout the semester also indicate that the program is perceived favourably from a learning

viewpoint. These outcomes are further discussed in Chapter 7. As such, this exploration of the FRAMEwork manual suggests that the content and activities are a successful means for improving student and staff engagement with feedback in the tertiary setting.

Chapter Summary

The implementation of a feedback intervention in an undergraduate university setting was documented in this chapter. The 90 first year psychology students belonged to four tutorials randomly selected to participate, with two tutorials forming the experimental group and two forming the control group. Surveys were administered at the start and end of semester, with students in the experimental group participating in the intervention throughout the semester. Findings support the use of FRAMEwork in improving feedback in tertiary settings. The gains observed in feedback utility and academic performance, in addition to the positive qualitative evaluations of the program, highlight the usefulness of a comprehensive intervention embedded in the tertiary curriculum. Recommendations for implementing FRAMEwork at the program level and replicating the study beyond the first year psychology course at RMIT University provide pathways for further exploration. These suggestions for future research are explored in greater detail in Chapter 7.

Chapter 7

General Discussion

Chapter Overview

The research overviewed in this thesis has attempted to capture a comprehensive picture of feedback processes in tertiary settings, including strategies by which staff and student engagement with feedback may be enhanced. Study 1 explored student perceptions of feedback, revealing a preference for personalized, timely, and fair feedback that made use of examples to learn from; results also indicated that there were many areas within the feedback process that could be improved. Similar themes emerged from Study 2, which sought to ascertain staff perceptions of feedback in tertiary settings. This chapter examines the development of the themes from Study 1 and Study 2 in devising and implementing the feedback intervention that was the focus of a pilot study in Study 3. Implications for tertiary teaching practice are discussed, as well as limitations of the current research and suggestions for further research undertakings.

Student Perceptions of Feedback

Key findings from Study 1 suggest that there are a number of universal characteristics students identify as important in the provision of feedback. These include preferences for feedback that is relevant, fair and utilizes exemplars; this feedback should also be provided in a timeframe that is considered reasonable and useful to the student. These findings are consistent with research outcomes across a number of different cohorts, courses and campuses (e.g. Bondy &

McCallum, 2009; Handley & Williams, 2009; Orsmond et al., 2002; Poulos & Mahony, 2008).

Further observations may be limited to the first year psychology cohort examined. A large discrepancy between engagement with feedback (as per feedback skills utilized) and perceived success in using feedback was noted, with students generally perceiving themselves as successful in engaging with feedback but only reporting limited use of a number of feedback practices during the semester. This may account for the number of students (one-fifth of the sample) who struggled to relate the feedback provided to them to their learning in the course. Encouragingly, students were shown to be open to developing their ability to engage with feedback, with the majority indicating they would like to see feedback facilitation content incorporated into their university coursework. In terms of implementing changes to feedback processes at the tertiary level, this finding is promising in that it suggests students recognize the value of feedback engagement and are receptive to content aimed at facilitating this.

Staff Perceptions of Feedback

Similar to Study 1, a mixed methods approach was employed in Study 2 to investigate staff perceptions and preferences for feedback. Analysis of staff preferences for feedback suggests that academic staff value feedback that is applicable to other assessments, is perceived as fair and demonstrates that they have genuinely thought about the student's work. As predicted, time issues were identified as the largest constraint in the provision of effective feedback. This

was seen in a number of ways. Apart from nomination as the most pressing limitation in providing feedback when asked to respond to an open-ended item, staff also revealed significantly different ideals for providing feedback than what they were able to provide in reality. Specifically, a preference for individual consultation was revealed, as was a desire to rely less on generic feedback orientated at the group, rather than the individual. Lastly, when questioned about what staff would like to see incorporated into future feedback training initiatives, the most common response was information to assist them in providing effective feedback while under the time pressures they faced in their role.

Despite this notable constraint in providing feedback, staff members were motivated to access assistance in delivering feedback effectively. All staff identified themselves as willing to receive training or resources to improve their interaction with feedback. As analysis of open-ended items also revealed that many staff believed that students were not engaged in the feedback process, the strong support demonstrated by staff for students also participating in a feedback program was not surprising. Three quarters of the staff surveyed felt that it was ‘important’ or ‘very important’ for undergraduate students to attend a program to enhance feedback skills and engagement.

Contrasting Staff and Student Perceptions of Feedback

Research outcomes from Study 1 and Study 2 were largely consistent with existing research exploring the separate perceptions of students and staff in regard to feedback. However, few attempts at systematically analysing the

differences between the staff and students in the same University discipline have been initiated, particularly with respect to how they contribute to dissatisfaction with the feedback process. A comparison of results from Study 1 and Study 2 shed some light on these factors.

While staff preferences for personalized written comments and typed personalized comments were relatively comparable with students, results showed that staff were more likely to prefer summary or generalized feedback formats than students and were less likely to prefer one-on-one consultation in day-to-day practice. The finding that staff favour less time-intensive feedback methods in comparison to students was consistent with a thematic analysis of staff responses to an open-ended item on the survey which asked ‘What are the main constraints in providing feedback to your students?’ The majority of staff members who responded to this item identified time as the main constraint in the delivery of feedback to students.

Time was also a key source of difference when analysing the return of work to students. When asked what would be an acceptable timeframe for the return of a 1000 word assessment piece, the average response provided by staff was more than twice the length provided by students. These findings may suggest that students lack an understanding of the complexities of the marking and feedback process. Therefore, if feedback is delivered well beyond what is considered an acceptable timeframe for students, students may be less willing to engage with that feedback when delivered. Similarly, these results suggest that staff may be likely to select feedback methods that assist them in managing the

time and workload constraints of their position, rather than those that are considered optimal by students. Finding a way to better align these feedback methods is likely to increase student engagement with the feedback provided.

Staff and student engagement with feedback was also criticized from both sides, with several themes of dissatisfaction emerging. In particular, when asked to provide suggestions for the other party in regard to feedback, both staff and students suggested that more responsibility was required by the other in enacting their roles within feedback. Students recommended that staff needed to put more effort into making their feedback usable, detailed and fair; staff encouraged students to make sufficient use of the feedback provided and avoid being focused on grades, as well as take the time to read the feedback to begin with.

These discrepancies in staff and student perceptions of feedback may be in part attributable to the emphasis on formalized feedback processes. Many descriptions of feedback in both Study 1 and 2 indicated that feedback was perceived as a linear process in which: i) students submitted assessment work to demonstrate their knowledge or ability, ii) staff reviewed the work and provided commentary, and iii) students then received the feedback. Little mention was made of the way in which the understanding and use of feedback was monitored by either party. This emphasis on summative feedback and perception of feedback as a linear process is likely to discourage students from engaging with feedback more actively, as their role in this model is limited and largely undefined. Their resulting disengagement is also likely to explain staff

frustration with feedback, leading them to question whether more investment on their behalf is worthwhile.

Aligning Staff and Student Roles in the Feedback Process

The focus on formal summative feedback identified in Study 1 and Study 2 leads to a number of potential problems for students and staff in gaining satisfaction from the feedback process. One of the initial steps in challenging this view begins with course design and class structure. Educators should assess the extent to which non-formalized feedback is emphasized, including whether feedback is reserved solely for assessment or whether it occurs continuously throughout the course. Further to this, consideration should be given to how often non-formalized feedback is actually labelled as feedback rather than relying on the assumption that students will inherently recognize it as such.

Educators should also consider whether students are taught to seek and recognize feedback from sources other than staff, such as viewing themselves or peers as potential opportunities for gaining information about their learning. Similarly, staff should evaluate the efforts made towards teaching students to engage with feedback, rather than assuming that students can automatically understand and enact the feedback provided. It is especially important that, in addition to this feedback education, regular efforts are made to check students' interaction with feedback to ensure they are making the most effective use of what has been provided. As such, promotion of feedback processes as ongoing dialogues, rather than as final stages to student work, is required. Lastly, educators should consider whether students are regarded as passive creatures to

which feedback ‘happens’ or whether they have the opportunity to work with staff in shaping the feedback processes that they will be involved in.

Furthermore, research outcomes from Study 1 and Study 2 suggest a number of deficits in the current provision of feedback beyond course design. As the biggest constraint in providing high-quality feedback identified by staff was time, the need to devise more efficient ways of delivering feedback to students is apparent. While there are many tools available for facilitating feedback in a time-effective manner (e.g. Blayney & Freeman, 2004; Freney & Wood, 2006; Heinrich, Milne, Ramsay, & Morrison, 2008; Jordan & Mitchell, 2009; Sanders et al., 2007; Shortis & Burrows, 2009), much of this pressure can also be alleviated by reducing student dependence on summative feedback. By encouraging, labelling and making more use of formative feedback in classrooms, not only is the need to provide onerous summative feedback reduced, but students are also provided with additional opportunities to revise their learning throughout the semester rather than at the end of the assessment process. It is contended that if the process of feedback is made more effective for staff, both in time taken to provide the feedback and in the outcomes it has for student learning, staff will become much more invested in maximizing feedback in tertiary settings.

Designing the FRAMEwork manual. Following the outcomes from Study 1 and Study 2, a need to facilitate opportunities for feedback was recognized. In particular, it was noted that students especially needed to understand that feedback should not just be relegated to formal assessment;

instead feedback should actively be highlighted by staff as something that occurs in learning activities and class discussion. Further to this, it was clear that students needed to recognize that dialogue with peers, responses to formative work and their own self-assessment are valuable tools for feedback, rather than being solely reliant on staff and summative assessment for all feedback on their progress.

Similarly, it was noted that rather than students just receiving feedback, they should be taught how to process feedback and develop skills that will allow them to transfer this information into action. This proactive stance to engagement with feedback should also mean that feedback has an ongoing place in the classroom, rather than being limited to the few students who seek consultation outside of the class. As such, for students to play an active role in the feedback process, they need to recognize their power within the feedback dialogue to work with staff in achieving better feedback outcomes for all.

Outcomes of the FRAMEwork Program

The results of Study 3 support the prediction that better engagement in the process of feedback, as achieved through participation in the FRAMEwork intervention, would lead to higher feedback utility in students. Furthermore, the hypothesized gains in student learning following the intervention were also observed, with students in the experimental group achieving significantly higher scores on their major written assessment (a research report) when compared with the control group. However, the intervention did not significantly affect academic scores on other assessed tasks. There may be two potential reasons for

this. In the current intervention, delivery of FRAMEwork materials centred on the major written assessment of a research report. The relevance of the skills developed through these activities to other assessment modalities, such as multiple choice exams, is limited. Further implementations of FRAMEwork that incorporate a more rounded approach to assessment preparation may result in gains for all assessment tasks. However, it is also possible that the success of FRAMEwork is limited to particular assessment tasks and the skills developed do not readily generalize beyond this focus. Additional research across different assessments and course designs will help to ascertain the usefulness of such a feedback intervention for all facets of tertiary learning.

Further to this observation, no significant differences were observed in wellbeing scores between students who participated in the FRAMEwork intervention and those who did not. In this, it appears that the FRAMEwork program may be useful in targeting student use of feedback and academic achievement, but these differences do not translate into other significant benefits for the overall student experience in first year University. Given the number of other factors known to influence the first year university experience (ACER, 2010; Chemers et al., 2001; Dietrich, 1999; Field & Kift, 2010; Friedlander et al., 2007; Gall et al., 2000; James et al., 2010; Kift & Moody, 2009; Krause et al., 2005; Tinto, 2009), it would be useful to track the impact of these feedback and academic gains longitudinally. It may be that student wellbeing is in flux during the transition into university, whereas more pronounced benefits would be observable during the second or third year of study. Research by Peat,

Franklin, Devlin and Charles (2005) supports this notion and will be explored in more detail further in the chapter.

Despite this failure to achieve significant gains in wellbeing, the results suggest that the FRAMEwork program was perceived favourably by the students. All key tasks and activities in the program were rated as somewhat to extremely useful in assisting with their progress in the course. Similarly, responses from participants suggest that the program will lead to long-term gains, with all key skills promoted within the program nominated as very likely to somewhat likely to be engaged in during further study. The superior utility of the one-on-one consultation aspect of the FRAMEwork program, as noted by students, supports the approach of embedding this content within the course. By incorporating this student preference into the tutorial classes, staff-student dialogue regarding feedback is no longer restricted to those students who have the time and motivation to seek this outside of usual teaching hours. In this, it appears that two key principles in the design of the FRAMEwork program, promotion of continual staff-student dialogue and responsiveness to student need, are well-received by those students who participated in the intervention.

Encouragingly, every participant who responded to the item asking whether participation in the FRAMEwork program was beneficial agreed that they had found the program worthwhile. Analysis of open-ended responses suggest that these students perceived a variety of benefits resulting from this program, most notably an enhanced sense of academic self-understanding, the promotion of a positive learning environment, improved self-confidence and

greater alignment with both course and staff expectations. Strong support for the usefulness of the FRAMEwork tasks was found; significant relationships were also observed between the perceived effectiveness and intention to use these skills for eight of the ten FRAMEwork tasks, suggesting that students felt that the content of the FRAMEwork program was beneficial and that they are likely to continue to use these skills in future learning. Similarly, perceptions of the researcher who facilitated the FRAMEwork program were also positive, noting the improvements to the overall learning environment as a result of this intervention. In this, it appears the FRAMEwork program was successful in achieving a beneficial dialogue and relationship between staff and students to foster academic growth.

Despite these benefits arising from the implementation of the FRAMEwork program, a number of limitations must be noted. In particular, the dual role of the researcher acting as the teacher in the experimental condition and evaluating the intervention is problematic, introducing greater possibility of error when determining the impact of the FRAMEwork program. While care was taken to reduce the possibility of bias and experimenter effects, replication of this research is necessary. In particular, using tertiary staff who do not have a vested interest in the success of the intervention would add credibility to the evaluation.

Furthermore, the poor reliability of the Expectancy Outcomes and Resource Management scales (from the MSLQ) in this sample represents an important limitation. Given that these scales related to all of the academic skills

variables tested (with the exception of feedback utility which was measured by the IFOS), caution must be applied when interpreting these results. It may be possible that the failure to yield significant findings for the academic skills measured may be partly attributable to the scales used. Future research would benefit from utilizing a greater mix of scales in ascertaining academic skills in order to avoid such problems in future. Furthermore, as this was a small-scale study, further work is necessary to replicate the findings in larger and more diverse settings. In particular, replication of this manual is warranted to explore its usefulness across cohorts, courses and campuses in order to account for the many differences students bring to tertiary settings (Burke, 2009; Lee et al., 2009; Lizzio & Wilson, 2008; Nesbit & Burton, 2006; Rowe & Wood, 2009).

In addition to trialling FRAMEwork in differing educational settings, further research would benefit from exploring the use of this program in conjunction with existing feedback and assessment technologies. The use of information technologies in the provision of automated feedback, for example, has gained prominence in recent years and has been documented as offering significant gains in the timeliness, quantity, flexibility and consistency of feedback provided to students (Blayney & Freeman, 2004; Debuse, Lawley, & Shibl, 2008; Freney & Wood, 2006; Jordan & Mitchell, 2009; Sanders et al., 2007; Shortis & Burrows, 2009). These and other modes of paperless modes of feedback have also been shown to offer accessibility, storage, and legibility benefits when compared to more traditional feedback methods (Dalgarno, Chan, Adams, Roy, & Miller, 2007; Denton, Madden, Roberts, & Rowe, 2008;

Heinrich et al., 2008; McCormack & Taylor, 2006; McGregor et al., 2008; Meyer et al., 2007). Similarly, a growing emphasis on interactive feedback, such as embedding audio files and linking relevant demonstrative weblinks to assessment (Krucli, 2004), could be reflected in further revisions of FRAMEwork. The combination of the FRAMEwork program with these resources and tools may represent a multi-tiered approach to feedback in university settings that allows for additional gains in student learning. Furthermore, this partnership would also better reflect the current shift in university settings towards utilizing more dynamic and interactive learning resources in the classroom.

The first year psychology course in which FRAMEwork was implemented during Study 3 has not been immune to these shifts in incorporating more dynamic educational resources and technology. In the time since Study 3 was conducted, the submission and return of several assessments has moved online. This has represented many changes to how assessment feedback is delivered. In particular, the use of electronic rubrics has been employed; removing issues of legibility and lack of space when providing comments on student work. The cross-marking process to ensure consistency and equity between different markers has also been made easier by instant access to student work online, as opposed to relying on physical copies of work. However, this paperless mode of assessment submission and feedback represents a challenge to how many FRAMEwork tasks are enacted in the classroom. The reliance on bringing self-assessment sheets, drafts and feedback

to a classroom represents a limitation of the current version of the FRAMEwork manual when many students do not otherwise require hard copies of these resources. Flexibility in the delivery of FRAMEwork content therefore is required to accommodate the various modes of course delivery that are emerging in tertiary environments.

Similarly, future applications of the FRAMEwork manual may consider modifications appropriate to facilitating the manual over an entire tertiary program, rather than during a singular course. The time constraints noted by the instructor in this instance suggest that the scope of the intervention may be too large for a single semester, both in terms of managing course content and in keeping with student ability and interest. Redesigning the FRAMEwork manual to encompass a three- to four-year degree would result in considerable benefits, including the option to build more strongly upon additional feedback practices and incorporate other feedback tools over this extended timeframe. In particular, the inclusion of material related to developing the necessary knowledge and skills to effectively deliver and receive peer feedback would be well in keeping with the intended aims of the manual. While a significant focus on facilitating peer feedback was beyond the scope of the original manual, the increased documentation of the benefits associated with peer feedback (see Bilgin & Fraser, 2007; Raban & Litchfield, 2007; Squires, 2003; Van der Pol, Ven den Berg, Admiraal, & Simons, 2008; Willey & Freeman, 2006) suggest that it would be a worthy inclusion during the later stages of the FRAMEwork manual

when students have the necessary skills to engage with this type of critical appraisal.

Revising the FRAMEwork manual to allow the modules to be conducted over a larger span of time may also alleviate the transitional effects experienced by the first year first-semester students in this cohort. In their first year tertiary intervention, Peat et al. (2005) found that students did not demonstrate quantitative gains in learning when an intervention promoting formative assessment resources was delivered during semester one; however, when the experiment was replicated in a similar sample during the second semester, significant gains were observed. The researchers proposed that these differences were likely due to transitional effects, in which the first semester students lacked the necessary critical appraisal and independent learning skills to gain full benefit from the resources, and therefore advocated the use of such interventions at later stages of study. While the delivery of the FRAMEwork manual in this study was delivered during the first semester in order to assist students in their transition to tertiary study, it may be that these particular effects override or confound the potential quantitative gains in academic skills and wellbeing that may result if implemented in later stages of study. This reasoning is supported by research conducted by Fyfe et al. (2006) who found that previous experience with feedback is related to perceiving and engaging with feedback more successfully. Further research would benefit from contrasting the experiences of differing tertiary levels to explore this proposal more thoroughly. Extending the FRAMEwork program to postgraduate study would also be

warranted, given that the focus on developing independent study and critical appraisal skills inherent in this intervention complements the nature of postgraduate study programs. An additional consideration is that postgraduate programs are also typically run on a much smaller level than undergraduate programs (in terms of class size); as such, they would be an ideal environment for academics to trial the implementation of the FRAMEwork manual for the first time. Applying FRAMEwork to a postgraduate setting would also serve to demonstrate the extent to which the intervention is applicable beyond the first year tertiary environment.

Conclusion

Academics play an important role in the success of students at the tertiary level, with research suggesting that feedback is the most important determinant of student performance (Hattie, 2003). However, research consistently identifies feedback as a key source of student dissatisfaction in university settings (Krause et al., 2005; Nicol, 2008). The research undertaken in this study supports many observations in the literature that staff and student engagement with feedback requires improvement. In Study 1 and Study 2, student and staff perceptions of feedback were ascertained through survey research, identifying a reliance on summative feedback and an inability for students and staff to fully enact their respective roles in the feedback process. Based on this, a revised approach to feedback was formulated, leading to the development of a manual to improve feedback processes in the tertiary environment. Encouragingly, the evaluation of the FRAMEwork manual in

Study 3 revealed the usefulness of this intervention in enhancing feedback utility and academic performance; however, it was noted that these benefits may not extend into further wellbeing or academic gains. As this research represents the first time the FRAMEwork program has been piloted, a number of adjustments for both the intervention design and the research methodology have been suggested. Despite these limitations, the FRAMEwork program appears to be reasonably successful in overcoming many of the shortfalls in the feedback process noted by both staff and students in Study 1 and Study 2. Further facilitation of staff and student engagement in the feedback process through revisions to the FRAMEwork program therefore appears warranted, in order to secure better satisfaction and student learning outcomes than traditional approaches to feedback.

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Appendix A Supplementary Material for Study 1



INVITATION TO PARTICIPATE IN A RESEARCH PROJECT: PROJECT INFORMATION STATEMENT

Project Title:

- Expectations and Use of Feedback in First Year University

Investigators:

- Karen Elgar (Psychology PhD candidate, karen.elgar@rmit.edu.au)
- Dr Andrea Chester (Primary Project Supervisor: Senior Lecturer, Psychology, RMIT University, andrea.chester@rmit.edu.au, 03 9925-3150)
- Dr John Reece (Project Supervisor: Coordinator of Postgraduate Research Studies, Associate Professor, Psychology, RMIT University, john.reece@rmit.edu.au, 03 9925-7512)

You are invited to participate in a research project being conducted by RMIT University. This information sheet describes the project in straightforward language, or 'plain English'. Please read this sheet carefully and be confident that you understand its contents before deciding whether to participate. If you have any questions about the project, please ask one of the investigators.

Who is involved in this research project? Why is it being conducted?

This research project is being conducted by Karen Elgar under the supervision of Dr. Andrea Chester and Dr. John Reece. It is designed to explore perceptions and use of feedback in first year University, with a focus on using the data to inform a feedback program designed to help first-time students and educators. This project has been approved by the RMIT University Human Research Ethics Committee and is being funded by RMIT University.

Why have you been approached?

You have been approached to participate in this research as a student at RMIT University. This research project seeks to recruit first year students.

What is the project about? What are the questions being addressed?

This project seeks to ascertain what factors are associated with feedback satisfaction and successful use of feedback in first year University. It also seeks to examine student perceptions of feedback, in order to later design an intervention program to help educators and students better use feedback in their courses.

If I agree to participate, what will I be required to do?

If you agree to participate in this study you will be asked to complete a 10 minute online questionnaire in regards to your demographic details, personality, wellbeing, study beliefs and skills, as well as your experiences of feedback this semester. Most questions require you to tick or rate the importance of a statement. For example, you will be asked to indicate from a scale of 1-5 how important 'seeing how it relates to the final mark' is to your sense of helpful or useful feedback. There are no right or wrong answers, only honest answers.

What are the risks or disadvantages associated with participation?

Participating in this study should pose few, if any, risks to you outside your normal daily activities. However, if you are unduly concerned about your responses to any of the questionnaire items or if you find participation in the project distressing, you should contact the primary supervisor to this project, Dr Andrea Chester, as soon as convenient. Andrea will discuss your concerns with you confidentially and suggest appropriate follow-up, if necessary. Any concerns regarding your progress in first year can also be directed to the RMIT University Counselling Service on 9925 4365.

What are the benefits associated with participation?

Your responses will be used to inform a feedback program (FRAMEwork) that can assist other students in their transition to University. Participating in this study will provide you with an opportunity to actively share information that can be used to support the learning and wellbeing of higher education students.

What will happen to the information I provide?

You will be required to provide informed consent in order to participate in the study. This can be done by ticking the 'I consent' box on the main study website before completing the initial questionnaire. As you are not required to provide identifying details in the questionnaires, your participation in this study will remain anonymous

and you will not be personally identified in any publication arising from the study. However, any information that you provide can be disclosed only if (1) it is to protect you or others from harm, (2) a court order is produced, or (3) you provide the researchers with written permission. The information that you provide will only be accessible to the identified researchers and will be retained in a locked filing cabinet within the Discipline of Psychology at RMIT University for 5 years before being destroyed.

What are my rights as a participant?

Participation in this study is on a voluntary basis and you are under no obligation to be involved. You have the right to withdraw your participation at any time, without prejudice. In such a case, any unprocessed data will be withdrawn and destroyed, provided it can be reliably identified. You also have the right to have any questions regarding the study answered at any time.

Whom should I contact if I have any questions?

If you have any questions about this study, please do not hesitate to contact the investigator Karen Elgar via email at karen.elgar@rmit.edu.au, or the primary supervisor Dr Andrea Chester on (03) 9925 3150 during business hours or via email at andrea.chester@rmit.edu.au

Thank you for your time and interest. Your participation is greatly appreciated.



Karen Elgar
BAppSci(Psych)(Hons)



Andrea Chester
PhD



John Reece
PhD

Any complaints about your participation in this project may be directed to the Executive Officer, RMIT Human Research Ethics Committee, Research & Innovation, RMIT, GPO Box 2476V, Melbourne, 3001. The telephone number is (03) 9925 2251.

Details of the complaints procedure are available from the above address.



Informed Consent

Portfolio	Science, Engineering and Health
School of	Health Sciences
Project Title:	Expectations and Use of Feedback in First Year University
Name(s) of investigators: (1)	Karen Elgar Phone:
(2)	Dr. Andrea Chester Phone: 9925-3150

1. I have received a statement explaining the questionnaire involved in this project.
2. I consent to participate in the above project, the particulars of which - including details of the questionnaire - have been explained to me.
3. I authorise the investigator to administer the questionnaire online.
4. I acknowledge that:
 - (a) Having read Plain Language Statement, I agree to the general purpose, methods and demands of the study.
 - (b) I have been informed that I am free to withdraw from the project at any time and to withdraw any unprocessed data previously supplied.
 - (c) The project is for the purpose of research. It may not be of direct benefit to me.
 - (d) The privacy of the personal information I provide will be safeguarded and only disclosed where I have consented to the disclosure or as required by law.
 - (e) The security of the research data is assured during and after completion of the study. The data collected during the study may be published, and a report of the project outcomes will be provided to RMIT University as a part of a PhD thesis. Any information which will identify me will not be used.
5. I acknowledge that I am currently enrolled in my first year of study at RMIT University.

Participant's Consent

Please tick the box to consent to participate in this study and access the questionnaire

Please print the current page for your records .

Any complaints about your participation in this project may be directed to the Executive Officer, RMIT Human Research Ethics Committee, Research & Innovation, RMIT, GPO Box 2476V, Melbourne, 3001. The telephone number is (03) 9925 2251.
Details of the complaints procedure are available from the above address.



Feedback in Higher Education Questionnaire

This booklet contains a series of questionnaires designed to measure a variety of individual attitudes and beliefs. There are no right or wrong responses so try very hard to be completely honest in your answers.

SECTION A: PERSONAL INFORMATION

Tick the box to indicate your response.

- 1) What is your sex? Female Male

- 2) What is your date of birth?

- 3) What degree are you currently studying?

- 4) What is your country of origin (birthplace)?
 Australia United Kingdom
 North America
 Other European (please specify) _____
 Asia (please specify) _____
 Africa (please specify) _____
 Other (please specify) _____

- 5) If you were born outside Australia, when did you arrive in Australia?

- 6) Please rate your proficiency in written English.
 poor moderate good

- 7) Please rate your proficiency in spoken English.
 poor moderate good

- 8) How many hours a week (on average) do you work in a paid or volunteer role?
____ hours

- 9) Would you describe yourself as a:
 Local student International student

Other _____

10) Have you sought assistance with your study skills this year (e.g. from the Study & Learning Centre, personal tutoring etc.)?

Yes No

11) What would be your average mark (out of 100) this semester?

Less than 50 50-59 60-69 70-79 80+

12) In regard to your marks this semester, would you describe yourself as:

Very unhappy Unhappy Satisfied Happy Very happy

SECTION B: YOUR THOUGHTS ABOUT FEEDBACK

In this section we are interested in hearing about your thoughts on the feedback you have received for your work (graded or ungraded) this semester.

1) Think about the most useful feedback you received this semester. What are the characteristics of this feedback that made it so effective in your opinion?

2) Think about the least useful feedback you received this semester. What are the characteristics of this feedback that made it so ineffective in your opinion?

3) In regard to the feedback you received this semester in your core subject(s), would you describe yourself as:

Very unsatisfied Unsatisfied Satisfied Very satisfied

4) Did you find it easy to relate the feedback you received to other assessments or learning?

Very easy Easy Mostly easy
 Somewhat difficult Very difficult

5) How effective do you think you are in using feedback?

Not at all Somewhat Moderately Extremely

6) What do you think is a reasonable amount of time for staff to provide feedback?

- 7) On a scale of **1** (*not at all likely*) to **5** (*extremely likely*), how likely would you be to:
- Approach a marker for clarification prior to submitting work for feedback _____
 - Follow-up with a marker to clarify feedback _____
 - Follow-up with a marker to dispute/challenge feedback _____
 - Concentrate on only the mark for an assessment, not the feedback _____
 - Use the feedback in completing future assessments _____

8) Please rank the following methods of assessment feedback in order (**1** being most favoured, **5** being least favoured) of preference:

- _____ Personalized written comments on your work
 _____ A standard typed summary for all students, with examples of correct or 'best' responses
 _____ Typed personalized comments on a marking sheet
 _____ Oral summary of group strengths and weaknesses, with examples of correct responses
 _____ Speaking one-on-one with the marker about your strengths and weaknesses

9) Please rank the following methods of feedback delivery in order (**1** being most favoured, **4** being least favoured) of preference:

- _____ Available during class time
 _____ Available for pick-up
 _____ Given during consultation with marker
 _____ Delivered to your inbox

10) In regard to helpful or useful feedback, how important is:

		Very Important			Not at all Important	
1	Seeing how it relates to the final mark	0	0	0	0	0
2	Being able to use it for other assessments	0	0	0	0	0
3	Being able to relate it to your learning for the subject	0	0	0	0	0
4	Receiving examples on how to improve your work	0	0	0	0	0
5	Being shown what you have done well	0	0	0	0	0
6	Feeling that the marker really thought about your work	0	0	0	0	0
7	Receiving comments on content-related matters	0	0	0	0	0
8	Receiving comments on presentation-related matters	0	0	0	0	0
9	Receiving comments on spelling and grammar	0	0	0	0	0
10	Feeling that the assessment process was fair	0	0	0	0	0

11) What suggestions would you have for markers to make their feedback more useful?

12) If the University were to offer training to assist you in getting the most out of feedback, would you be interested in participating?

Yes, either a part of my coursework or as an additional learning experience

Yes, but only as a part of my coursework

Yes, but only as an additional learning experience

No, I would not be interested in participating

13) If the University were to offer additional training to assist markers in making their feedback more effective, how important would it be to you that your markers attend?

Very important

Important

Somewhat important

Not at all important

14) Is there anything else you would like to share or add about your experience with feedback?

SECTION C: STUDY SKILLS

How confident are you that you will be able to:

		Very Confident			Not at all Confident	
1	Study effectively on your own in independent/private study	0	0	0	0	0
2	Produce your best work under examination conditions	0	0	0	0	0
3	Respond to questions asked by a lecturer in front of a full lecture theatre	0	0	0	0	0
4	Manage your work load to meet coursework deadlines	0	0	0	0	0
5	Give a presentation to a small group of fellow students	0	0	0	0	0
6	Attend most taught sessions	0	0	0	0	0
7	Attain good grades in your work	0	0	0	0	0
8	Engage in profitable academic debate with your peers	0	0	0	0	0

9	Ask lecturers questions about the material they are teaching, in a one to one setting	0	0	0	0	0
10	Ask lecturers questions about the material they are teaching, during a lecture	0	0	0	0	0
11	Understand the material outlined and discussed with you by lecturers	0	0	0	0	0
12	Follow the themes and debates in lectures	0	0	0	0	0
13	Prepare thoroughly for tutorials	0	0	0	0	0
14	Read the recommended background material	0	0	0	0	0
15	Produce coursework at the required standard	0	0	0	0	0
16	Write in an appropriate academic style	0	0	0	0	0
17	Ask for help if you don't understand	0	0	0	0	0
18	Be on time for lectures	0	0	0	0	0
19	Make the most of the opportunity of studying for a degree at university	0	0	0	0	0
20	Pass assessments at the first attempt	0	0	0	0	0
21	Plan appropriate revision schedules	0	0	0	0	0
22	Remain adequately motivated throughout	0	0	0	0	0
23	Produce your best work in coursework assignments	0	0	0	0	0
24	Attend tutorials	0	0	0	0	0

SECTION D: LIFE SCALE

Below are five statements that you may agree or disagree with. Using the 1-7 scale below indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

7 = Strongly agree	6 = Agree	5 = Slightly agree
4 = Neither agree or disagree		
3 = Slightly disagree	2 = Disagree	1 = Strongly disagree

- ___ In most ways my life is close to my ideal
- ___ The conditions of my life are excellent
- ___ I am satisfied with my life
- ___ So far I have gotten the important things I want in life
- ___ If I could live my life over, I would change almost nothing

SECTION E: SELF-EFFICACY

		Not at all true	Barely true	Moderately true	Exactly true
1.	I can always manage to solve difficult problems if I try hard enough.	1	2	3	4
2.	If someone opposes me, I can find means and ways to get what I want.	1	2	3	4
3.	It is easy for me to stick to my aims and accomplish my goals.	1	2	3	4
4.	I am confident that I could deal efficiently with unexpected events.	1	2	3	4
5.	Thanks to my resourcefulness, I know how to handle unforeseen situations.	1	2	3	4
6.	I can solve most problems if I invest the necessary effort.	1	2	3	4
7.	I can remain calm when facing difficulties because I can rely on my coping abilities.	1	2	3	4
8.	When I am confronted with a problem, I can usually find several solutions.	1	2	3	4
9.	If I am in a bind, I can usually think of something to do.	1	2	3	4
10.	No matter what comes my way, I'm usually able to handle it.	1	2	3	4

SECTION F: YOUR PERSONALITY

How well does the following describe you?

		Very Inaccurate			Very Accurate	
1	Often feel blue	0	0	0	0	0
2	Feel comfortable around people	0	0	0	0	0
3	Do not like art	0	0	0	0	0
4	Have a good word for everyone	0	0	0	0	0
5	Am always prepared	0	0	0	0	0
6	Dislike myself	0	0	0	0	0
7	Make friends easily	0	0	0	0	0
8	Have a vivid imagination	0	0	0	0	0

9	Believe that others have good intentions	0	0	0	0	0
10	Pay attention to details	0	0	0	0	0
11	Am often down in the dumps	0	0	0	0	0
12	Am skilled in handling social situations	0	0	0	0	0
13	Have a rich vocabulary	0	0	0	0	0
14	Respect others	0	0	0	0	0
15	Get chores done right away	0	0	0	0	0
16	Have frequent mood swings	0	0	0	0	0
17	Am the life of the party	0	0	0	0	0
18	Carry the conversation to a higher level	0	0	0	0	0
19	Accept people as they are	0	0	0	0	0
20	Carry out my plans	0	0	0	0	0
21	Panic easily	0	0	0	0	0
22	Know how to captivate people	0	0	0	0	0
23	Enjoy hearing new ideas	0	0	0	0	0
24	Make people feel at ease	0	0	0	0	0
25	Make plans and stick to them	0	0	0	0	0
26	Seldom feel blue	0	0	0	0	0
27	Have little to say	0	0	0	0	0
28	Am not interested in abstract ideas	0	0	0	0	0
29	Have a sharp tongue	0	0	0	0	0
30	Waste my time	0	0	0	0	0
31	Feel comfortable with myself	0	0	0	0	0
32	Keep in the background	0	0	0	0	0
33	Enjoy wild flights of fantasy	0	0	0	0	0
34	Cut others to pieces	0	0	0	0	0
35	Find it difficult to get down to work	0	0	0	0	0

36	Rarely get irritated	0	0	0	0	0
37	Would describe my experiences as somewhat dull	0	0	0	0	0
38	Avoid philosophical discussions	0	0	0	0	0
39	Suspect hidden motives in others	0	0	0	0	0
40	Do just enough work to get by	0	0	0	0	0
41	Am not easily bothered by things	0	0	0	0	0
42	Don't like to draw attention to myself	0	0	0	0	0
43	Do not enjoy going to art museums	0	0	0	0	0
44	Get back at others	0	0	0	0	0
45	Don't see things through	0	0	0	0	0
46	Am very pleased with myself	0	0	0	0	0
47	Don't talk a lot	0	0	0	0	0
48	Rarely look for a deeper meaning in things	0	0	0	0	0
49	Insult people	0	0	0	0	0
50	Shirk my duties	0	0	0	0	0

Thank you very much for taking the time to share with us your experiences – your contribution will go a long way in improving our understanding of feedback in first year University. If you have any questions about your participation, please feel free to contact the principal investigators, Karen Elgar (karen.elgar@rmit.edu.au) or Andrea Chester (andrea.chester@rmit.edu.au).

Appendix B
Supplementary Material for Study 2



**INVITATION TO PARTICIPATE IN A RESEARCH PROJECT: PROJECT
INFORMATION STATEMENT**

Project Title:

- Providing Feedback in Higher Education

Investigators:

- Karen Elgar (Psychology PhD candidate, RMIT University, karen.elgar@rmit.edu.au)
- Dr Andrea Chester (Primary Project Supervisor: Senior Lecturer, Psychology, RMIT University, andrea.chester@rmit.edu.au, 03 9925-3150)
- Dr John Reece (Project Supervisor: Coordinator of Postgraduate Research Studies, Associate Professor, Psychology, RMIT University, john.reece@rmit.edu.au, 03 9925-7512)

You are invited to participate in a research project being conducted by RMIT University. This information sheet describes the project in straightforward language, or 'plain English'. Please read this sheet carefully and be confident that you understand its contents before deciding whether to participate. If you have any questions about the project, please ask one of the investigators.

Who is involved in this research project? Why is it being conducted?

This research project is being conducted by Karen Elgar under the supervision of Dr. Andrea Chester and Dr. John Reece. It is designed to explore the provision of feedback in University settings, with a focus on using the data to inform a feedback program designed to help first-time students and educators. This project has been approved by the RMIT

University Human Research Ethics Committee and is being funded by RMIT University.

Why have you been approached?

You have been approached to participate in this research as a member of teaching staff at RMIT University.

What is the project about? What are the questions being addressed?

This project seeks to understand feedback methods and satisfaction in higher education. It also aims to explore perceptions of feedback in teaching staff, in order to later design an intervention program to help educators and students better use feedback in their courses.

If I agree to participate, what will I be required to do?

If you agree to participate in this study you will be asked to complete a 5 - 10 minute online questionnaire in regards to your demographic details, wellbeing, confidence and personality, as well as your experiences in providing feedback this semester. Most questions require you to tick or rate the importance of a statement. For example, you will be asked to indicate from a scale of 1-5 how important you think it is for students to see how your feedback relates to the final mark. There are no right or wrong answers, only honest answers.

What are the risks or disadvantages associated with participation?

Participating in this study should pose few, if any, risks to you outside your normal daily activities. However, if you are unduly concerned about your responses to any of the questionnaire items or if you find participation in the project distressing, you should contact the primary supervisor to this project, Dr Andrea Chester, as soon as convenient. Andrea will discuss your concerns with you confidentially and suggest appropriate follow-up, if necessary.

What are the benefits associated with participation?

Your responses will be used to inform a feedback program (FRAMEwork) that will be implemented at RMIT University to assist educators in providing quick and effective feedback. Participating in this study will provide you with an opportunity to actively share information that can be used to support the learning of higher education students, as well as the wellbeing of feedback providers.

What will happen to the information I provide?

You will be required to provide informed consent in order to participate in the study. This can be done by ticking the 'I consent' box on the main study website before completing the questionnaire. As you are not required to provide identifying details in the questionnaires, your participation in this study will remain anonymous and you will not be personally identified in any publication arising from the study. However, any information that you provide can be disclosed only if (1) it is to protect you or others from harm, (2) a court order is produced, or (3) you provide the researchers with written permission.

What are my rights as a participant?

Participation in this study is on a voluntary basis and you are under no obligation to be involved. You have the right to withdraw your participation at any time, without prejudice. In such a case, any unprocessed data will be withdrawn and destroyed, provided it can be reliably identified. You also have the right to have any questions regarding the study answered at any time.

How secure is the website being used?

Users should be aware that the World Wide Web is an insecure public network that gives rise to the potential risk that a user's transactions are being viewed, intercepted or modified by third parties or that data which the user downloads may contain computer viruses or other defects.

How secure is the data?

This project will use an external site to create, collect and analyse data collected in a survey format. The site we are using is Survey Monkey. If you agree to participate in this survey, the responses you provide to the survey will be stored on a host server that is used by Survey Monkey. No personal information will be collected in the survey so none will be stored as data. Once we have completed our data collection and analysis, we will import the data we collect to the RMIT server where it will be stored securely for a period of five (5) years. The data on the Survey Monkey host server will then be deleted and expunged.

Whom should I contact if I have any questions?

If you have any questions about this study, please do not hesitate to contact the investigator Karen Elgar via email at karen.elgar@rmit.edu.au, or the primary supervisor Dr Andrea Chester on (03) 9925 3150 during business hours or via email at andrea.chester@rmit.edu.au

Thank you for your time and interest. Your participation is greatly appreciated.



Karen Elgar
BAppSci (Psych) (Hons)



Andrea Chester
PhD



John Reece
PhD

Any complaints about your participation in this project may be directed to the Executive Officer, RMIT Human Research Ethics Committee, Research & Innovation, RMIT, GPO Box 2476V, Melbourne, 3001. The telephone number is (03) 9925 2251.

Details of the complaints procedure are available from the above address.



Informed Consent

Portfolio	Science, Engineering and Health
School of	Health Sciences
Project Title:	Providing Feedback in Higher Education
Name(s) of investigators: (1)	Karen Elgar Phone:
(2)	Dr. Andrea Chester Phone: 9925-3150

1. I have received a statement explaining the questionnaire involved in this project.
2. I consent to participate in the above project, the particulars of which - including details of the questionnaires - have been explained to me.
3. I authorise the investigator to administer the questionnaire online.
4. I acknowledge that:
 - (a) Having read Plain Language Statement, I agree to the general purpose, methods and demands of the study.
 - (b) I have been informed that I am free to withdraw from the project at any time and to withdraw any identifiable unprocessed data.
 - (c) The project is for the purpose of research. It may not be of direct benefit to me.
 - (d) The privacy of the personal information I provide will be safeguarded and only disclosed where I have consented to the disclosure or as required by law.
 - (e) The security of the research data is assured during and after completion of the study. The data collected during the study may be published, and a report of the project outcomes will be provided to RMIT University as a part of a PhD thesis. Any information which will identify me will not be used.
5. I acknowledge that I am currently engaged as a member of academic staff at RMIT University.

Participant's Consent

Please tick the box to consent to participate in this study and access the questionnaire

Please print the current page for your records .

Any complaints about your participation in this project may be directed to the Executive Officer, RMIT Human Research Ethics Committee, Research & Innovation, RMIT, GPO Box 2476V, Melbourne, 3001. The telephone number is (03) 9925 2251.
Details of the complaints procedure are available from the above address.



Providing Feedback in Higher Education Questionnaire

This booklet contains a series of questionnaires designed to measure a variety of individual attitudes and beliefs. There are no right or wrong responses so try very hard to be completely honest in your answers.

SECTION A: PERSONAL INFORMATION

- 1) Where were you born?
 - Australia
 - Asia (please specify) _____
 - Europe (please specify) _____
 - North America
 - South America
 - Africa (please specify) _____
 - Other (please specify) _____

- 2) If you were born outside Australia, when did you arrive in Australia?

- 3) What is your current position?
 - Sessional
 - Level A
 - Level B
 - Level C
 - Level D
 - Level E

- 4) If applicable, what is your time fraction (e.g. 0.5, 1.0)? _____

- 5) How many years have you been employed in a teaching role? _____

SECTION B: LIFE SCALE

Below are five statements that you may agree or disagree with. Using the 1-7 scale below indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

7 = Strongly agree	6 = Agree	5 = Slightly agree
4 = Neither agree or disagree		
3 = Slightly disagree	2 = Disagree	1 = Strongly disagree

- ___ In most ways my life is close to my ideal
- ___ The conditions of my life are excellent
- ___ I am satisfied with my life
- ___ So far I have gotten the important things I want in life
- ___ If I could live my life over, I would change almost nothing

SECTION C: SELF-EFFICACY

		Not at all true	Barely true	Moderately true	Exactly true
1.	I can always manage to solve difficult problems if I try hard enough.	1	2	3	4
2.	If someone opposes me, I can find means and ways to get what I want.	1	2	3	4
3.	It is easy for me to stick to my aims and accomplish my goals.	1	2	3	4
4.	I am confident that I could deal efficiently with unexpected events.	1	2	3	4
5.	Thanks to my resourcefulness, I know how to handle unforeseen situations.	1	2	3	4
6.	I can solve most problems if I invest the necessary effort.	1	2	3	4
7.	I can remain calm when facing difficulties because I can rely on my coping abilities.	1	2	3	4
8.	When I am confronted with a problem, I can usually find several solutions.	1	2	3	4
9.	If I am in a bind, I can usually think of something to do.	1	2	3	4
10.	No matter what comes my way, I'm usually able to handle it.	1	2	3	4

SECTION D: YOUR PERSONALITY

How well does the following describe you?

		Very Inaccurate			Very Accurate		
1	Often feel blue	0	0	0	0	0	
2	Feel comfortable around people	0	0	0	0	0	
3	Do not like art	0	0	0	0	0	
4	Have a good word for everyone	0	0	0	0	0	
5	Am always prepared	0	0	0	0	0	
6	Dislike myself	0	0	0	0	0	
7	Make friends easily	0	0	0	0	0	
8	Have a vivid imagination	0	0	0	0	0	
9	Believe that others have good intentions	0	0	0	0	0	
10	Pay attention to details	0	0	0	0	0	
11	Am often down in the dumps	0	0	0	0	0	
12	Am skilled in handling social situations	0	0	0	0	0	
13	Have a rich vocabulary	0	0	0	0	0	
14	Respect others	0	0	0	0	0	
15	Get chores done right away	0	0	0	0	0	
16	Have frequent mood swings	0	0	0	0	0	
17	Am the life of the party	0	0	0	0	0	
18	Carry the conversation to a higher level	0	0	0	0	0	
19	Accept people as they are	0	0	0	0	0	
20	Carry out my plans	0	0	0	0	0	
21	Panic easily	0	0	0	0	0	
22	Know how to captivate people	0	0	0	0	0	
23	Enjoy hearing new ideas	0	0	0	0	0	
24	Make people feel at ease	0	0	0	0	0	

25	Make plans and stick to them	0	0	0	0	0
26	Seldom feel blue	0	0	0	0	0
27	Have little to say	0	0	0	0	0
28	Am not interested in abstract ideas	0	0	0	0	0
29	Have a sharp tongue	0	0	0	0	0
30	Waste my time	0	0	0	0	0
31	Feel comfortable with myself	0	0	0	0	0
32	Keep in the background	0	0	0	0	0
33	Enjoy wild flights of fantasy	0	0	0	0	0
34	Cut others to pieces	0	0	0	0	0
35	Find it difficult to get down to work	0	0	0	0	0
36	Rarely get irritated	0	0	0	0	0
37	Would describe my experiences as somewhat dull	0	0	0	0	0
38	Avoid philosophical discussions	0	0	0	0	0
39	Suspect hidden motives in others	0	0	0	0	0
40	Do just enough work to get by	0	0	0	0	0
41	Am not easily bothered by things	0	0	0	0	0
42	Don't like to draw attention to myself	0	0	0	0	0
43	Do not enjoy going to art museums	0	0	0	0	0
44	Get back at others	0	0	0	0	0
45	Don't see things through	0	0	0	0	0
46	Am very pleased with myself	0	0	0	0	0
47	Don't talk a lot	0	0	0	0	0
48	Rarely look for a deeper meaning in things	0	0	0	0	0
49	Insult people	0	0	0	0	0
50	Shirk my duties	0	0	0	0	0

SECTION E: YOUR THOUGHTS ABOUT FEEDBACK

In this section we are interested in hearing your thoughts about the feedback you have provided on students' work (graded or ungraded) last semester. We ask that you think about feedback relating to teaching and assessment, rather than research supervision, here.

- 1) What is your sex? Female Male
- 2) What is your date of birth? _____
- 3) In general, how effective do you think you are in providing feedback?
 Not at all Somewhat Moderately Extremely
- 4) How effective do you think your students were in applying your feedback last semester?
 Not at all Somewhat Moderately Extremely
- 5) In regard to how students used your feedback last semester, would you describe yourself as:
 Very unsatisfied Unsatisfied Satisfied Very satisfied
- 6) In any programs that you teach, do you have measures in place to rate the usefulness of the feedback you provide (e.g. student-completed rating forms on assessment feedback)? If yes, please explain.
 Yes No
- 7) In any programs that you teach, do you have measures in place to enhance the usefulness of the feedback you provide (e.g. criteria-based marking pro formas for assessments)? If yes, please explain.
 Yes No
- 8) Have you ever undergone any training or accessed resources to improve your feedback?
 Yes No
- 9) What are the main constraints in providing feedback to your students?
- 10) What do you think is a reasonable amount of time for staff to take in marking / providing feedback on one 1000 word assessment? _____
- 11) What do you think is a reasonable amount of time for staff to take in returning feedback to students on a 1000 word assessment? _____

12) Given your current workload, please rank the following methods of assessment feedback in order (1 being most favoured, 5 being least favoured) of preference:

- _____ Personalized written comments on students' work
- _____ A standard typed summary for all students, with examples of correct or 'best' responses
- _____ Typed personalized comments on a marking sheet
- _____ Oral summary of group strengths and weaknesses, with examples of correct responses
- _____ Speaking one-on-one with students about their strengths and weaknesses

13) In an ideal world, what would be your preference for the following methods of assessment feedback (1 being most favoured, 5 being least favoured):

- _____ Personalized written comments on students' work
- _____ A standard typed summary for all students, with examples of correct or 'best' responses
- _____ Typed personalized comments on a marking sheet
- _____ Oral summary of group strengths and weaknesses, with examples of correct responses
- _____ Speaking one-on-one with students about their strengths and weaknesses

14) Please rank the following methods of returning work in order (1 being most favoured, 5 being least favoured) of preference:

- _____ Available during class time
- _____ Available for pick-up outside of class time
- _____ Given during consultation with student
- _____ Delivered to the students' inboxes
- _____ Online

15) In regard to helpful or useful feedback, how important do you think it is for the students to:

		Very Important				Not at all Important
1	See how it relates to their final mark for the assessment	0	0	0	0	0
2	Be able to use it for other assessments	0	0	0	0	0
3	Be able to relate it to their learning for the course	0	0	0	0	0
4	Receive examples on how to improve their work	0	0	0	0	0
5	Be shown what they have done well	0	0	0	0	0
6	Feel that the marker really thought about their work	0	0	0	0	0
7	Receive comments on content-related matters	0	0	0	0	0
8	Receive comments on presentation-related matters	0	0	0	0	0
9	Receive comments on spelling and grammar	0	0	0	0	0
10	Feel that the assessment process was fair	0	0	0	0	0

11	Be shown where they lost marks on the assessment	0	0	0	0	0
----	--	---	---	---	---	---

16) What suggestions would you have for students to get the most out of the feedback you provide?

17) If the University were to offer training and resources to enhance your ability to give feedback quickly and effectively, would you be interested in participating?

- Yes, I would be interested in participating
- Perhaps, but only if I was offered additional incentives
- I would be interested in additional resources but not training
- No, I would not be interested in participating at all

18) If the University were to offer such a program, are there any particular skills or information you would like to be addressed?

19) If the University were to offer additional training to assist students in using feedback more effectively, how important would it be to you that your students attend?

- Very important
- Somewhat important
- Important
- Not at all important

20) Is there anything else you would like to share or add about your experience with feedback?

Thank you very much for taking the time to share with us your experiences – your contribution will go a long way in improving our understanding of the provision of feedback in University settings. If you have any questions about your participation, please feel free to contact the principal investigators, Karen Elgar (karen.elgar@rmit.edu.au) or Andrea Chester (andrea.chester@rmit.edu.au).

Appendix C
FRAMEwork Manual

FRAMEWORK

FEEDBACK
RESOURCES FOR
ASSESSORS,
MENTORS AND
EDUCATORS

KAREN ELGAR,
ANDREA CHESTER
AND JOHN REECE



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INTRODUCTION

The following manual has been developed in response to increasingly documented student and staff dissatisfaction with feedback practices in higher education. It is clear that when students do not perceive feedback as being essential or useful to their learning (note the emphasis on learning, rather than purely assessment), and staff view providing feedback as a time-intensive activity that is rarely valued or used by their students, little effort will be expended by either party into this essential dialogue. While educators must assume the responsibility for establishing the framework for this dialogue to take place, it is vital that both students and staff work together to ensure each of their needs are being met. For the most part, this manual seeks to engage educators and students as active members of feedback processes and to highlight the belief that learning to use feedback effectively (for both parties) should be as essential to the learning outcomes of the course as the traditional content matter itself.

The information in this manual has been drawn from a number of sources: successful practices in the undergraduate psychology program at RMIT University (Melbourne), a mixture of quantitative and qualitative studies exploring feedback in first year university by the authors, and evidence-based practice in this field. While the content is no doubt influenced by the subject matter and assessment methods in the first year psychology program at RMIT, the manual is designed to be readily adaptable by other educators who wish to use the framework and materials in their own course.

For this purpose, the manual has been designed in eight modules, rather than 'weeks' – so as to be flexible to the time demands and length of varying higher degree courses and programs. It is expected that implementing each module will require approximately 15-30 minutes of class time, while also being driven by the necessary content from the course and thereby working as an alternative format for delivery of your usual materials. The objectives of each module are viewed as incremental in learning and should be reviewed throughout the semester. By incorporating these into your course design, it is likely that you will achieve a solid framework to guide staff-student interactions beyond the traditional 'feedback as a response to assessment' mindset that encourages students to be passive and staff to be apathetic or frustrated. Enhancing this dialogue between students and staff, while helping them to engage back into the key goal of learning, will hopefully result in greater satisfaction in the higher education process for both parties.

MODULE ONE: Establishing the Framework

By the end of this module, you will have:

- ✓ Established the needs of your class

 - ✓ Determined appropriate methods of feedback for your class

 - ✓ Developed a 'Learning Contract' with your students
-

The purpose of this module is to establish a framework which will guide the interaction you have with students over the semester. This framework will be driven by the needs you identify in your students, the preferences students bring for feedback themselves and your own thoughts on what should be achieved in the classroom.

Establishing the needs of your class

For most educators, designing learning opportunities and feedback strategies evolves from what we know: how we ourselves were educated, what we have seen implemented by other educators, or what has become 'standard' practice within the discipline in which we teach. With the other numerous demands that fall upon our time and resources, it is understandable that in many instances staff will assume that these practices are sufficient or best for their students and progress onto the task of enacting them. However, it is our view that for feedback to really work as a continuous dialogue between staff and students, some time needs to be allocated in determining the essential requirements for this dialogue to take place.

Determining the needs of your students can be informed up to a point by past experience and literature in the field. Thought should also be given to the graduate capabilities identified for the program, such as whether their career path calls for more developed verbal or written skills in communication. However, engaging in discussion with your students about what they perceive to be their strengths and weaknesses, what they would like assistance with during the class, and whether they have any requests for support can be a useful mechanism for identifying core issues with your students. Furthermore, allowing students to take part in 'setting the terms' of what they would like in the feedback they receive encourages them to be active members in the process, even prior to any feedback being delivered. Following such a discussion, these points should be noted and included in the Learning Contract you will later develop with your class.

Determining feedback methods for your class

While there is a wealth of information available for determining and designing assessments for students that best meet the necessary learning objectives for

their course, generally little attention is paid to selecting the feedback methods that will assist these students in making the most out of each of these tasks. As with determining the needs of your class, some decisions in this area can be informed by existing literature or past experience in the subject. For example, we surveyed students undertaking first year psychology and found a high preference for personalized, written feedback directly on the students' work as opposed to other methods of delivery. Similarly, other studies have found a relationship between study disciplines and particular learning preferences, indicating that the learning styles of, for example, medical students are significantly different to that of engineering students. In the absence of existing research or in an attempt to more specifically tap into the needs of your class, a brief survey can be administered at this point to ascertain what methods will be preferred by most students (see Appendix G for a sample preferences survey). Using this type of research and your own observations is a useful way of determining feedback methods for a large class.

Another consideration for less time-intensive or smaller classes is to allow students to tailor their own feedback program, by nominating the methods used for feedback during class and for assessment. While this may require a little more work in setting up the necessary tools, students will be much more likely to engage with the feedback provided. In the long term, this may result in a reduction of time spent providing formal feedback as the students may be more successful in rectifying key issues early on. As above, you may do this via a brief survey in which students indicate their preferences or you may use other screening tools. Early research suggests that personality is associated with successful use of feedback, with students who score high on extraversion, conscientiousness, openness and agreeableness being more likely to engage in successful feedback practices and more likely to be satisfied with feedback. Using personality measures, such as the Australian Personality Inventory, or other screening tools may be effective in identifying students who are likely to struggle with feedback processes early on, allowing you to work more closely with them to circumvent issues before they arise.

- **Using Rubrics**

A small note is made here about the use of rubrics to guide feedback and marking of assessments. Rubrics are scoring tools that divide an assessment into key components, outlining the specific criteria for each via a detailed description of high quality and poor quality work in this regard. When used effectively, rubrics can be easily applied by the student to engage with the learning objectives and marking criteria for a piece of work. A benefit of these tools is that they can operationalize criteria which may otherwise be perceived as abstract, as well as allow markers to spend their time more effectively when commenting on work.

While many pages could be devoted here to exploring these tools and their development, much is said elsewhere, such as Stevens and Levi's (2005) text, *Introduction to rubrics: An assessment tool to save grading time, convey effective feedback and promote student learning*. Instead, we would like to highlight the

benefits of using these tools and encourage their use in your teaching. Several of the following modules will make reference to and use of rubrics based on our observations of their effectiveness and ease of use. It should be noted, however, that there are many contexts where rubrics can be misapplied or detract from high quality feedback provision. It is our belief that rubrics should always be coupled with annotation/comments on work to cater for the variety of feedback teachers should supply. With this in mind, if care is applied when using rubrics and steps are taken to ensure that they are thoroughly piloted before adapting them across your course, they can be an invaluable marking and feedback tool for assessment.

Developing a ‘Learning Contract’ with your class

A problem often encountered when students first enter a new classroom, particularly those who are making the transition into first year university, is that the expectations for their behaviour and that of the teacher is not explicitly addressed. Thus, many classes are reliant on the more extroverted students to engage others, for students to take weeks in learning the ‘unspoken’ rules of interaction and administration – often through trial and error, and at the risk of penalizing learning and assessment, and for some students never to really feel comfortable with the staff or their own role. With most higher education courses only providing 12 weeks of class interaction (many with only 1 or 2 hour sessions per week), coupled with the dropout rates encountered during non-compulsory education, the need to inform students about the these processes in the first session becomes apparent.

Negotiating a ‘Learning Contract’ with your students helps to overcome the lack of clarity with what is expected in the class, as well as encourage the students to feel like active members in determining their learning environment. Learning Contracts stipulate the expectations of both the teacher and the students with regard to their roles and responsibilities. By addressing these expectations in the first week of class, students will be able to better engage with staff and the tasks expected of them early on.

There are two key methods to designing a Learning Contract with the class. The first is to take a draft, or an existing version from previous years, and discuss each point with the class in order to approve or modify it (see Appendix A for a sample Learning Contract). This method is much quicker but may result in some students feeling as though the options are being dictated to them, rather than being an active member in developing them. The second method is to take a series of questions in class and use them to invite student opinion, debate and consensus on each key issue. These questions may include:

- What is an appropriate timeframe for the teacher to respond to emails?
- How often should the teacher be available for face-to-face consultation?
- In what ways should the teacher assist you in progressing through this subject?
- What should each student bring to the class to make the most of it?

- What expectations are there for feedback in this subject?

It is important when negotiating the Learning Contract that the 'why' of each point is addressed (i.e. why is issue important to the class setting), so that students and staff understand what is being asked of them and can appreciate the value of this. Once the Learning Contract has been negotiated, a copy should be provided to each member of the class and referred to/amended if dissatisfaction arises during the remainder of the semester.

MODULE TWO: Understanding Feedback Processes

By the end of this module, you will have:

- ✓ Discussed the purpose, process and pitfalls of feedback with your class
 - ✓ Outlined the process of developing 'Feedback Response Checklists' to your class
 - ✓ Provided a sample 'Feedback Response Checklist' to your students for an upcoming assessment
-

The purpose of the following module is to educate your students in the use of 'Feedback Response Checklists' in order for them to actively engage in the feedback process and avoid many of the pitfalls encountered when staff and student expectations of feedback do not correlate.

Feedback: How does it work and how can we make it work well?

As mentioned earlier, staff and student perceptions of feedback rarely align without work from both parties. Time should be taken early on to discuss the process of feedback with students. This began in the last module when determining the needs of your class and developing the Learning Contract with them, but in this module the students will be provided with time to reflect more meaningfully on their conceptualizations and use of feedback. In small groups, pose the following questions to your students and invite class discussion on these issues after 10 minutes.

1. What is feedback?
2. What is the purpose of feedback?
3. How should feedback be used?
4. Where can feedback go wrong? How can this be avoided?

By allowing discussion on these issues, you have an opportunity to address any gaps in knowledge students may have. Some key points to ensure students clearly understand include:

1. *What is feedback?*
 - Feedback does not just refer to written comments back on an assignment – it is any dialogue between the student and staff

that guides the student in their learning and ability to produce excellent work.

- Feedback can take many forms, such as oral or written comments regarding an assignment, discussion about a topic or concept, an automated response to an online quiz etc.

2. *What is the purpose of feedback?*

- Despite popular belief, the purpose of feedback is not just a mandated response to set work or justification of marking for an assignment.
- The purpose of feedback, whatever its form, is to clarify to the student what has been done well, what could be done better and, most importantly, how they can progress with their understanding and achievement in the subject.

3. *How should feedback be used?*

- Receiving feedback from a teacher should never be the end to the feedback process – it is just the start.
- Students need to be certain that they fully understand what the teacher is trying to convey to them and feel confident in using this advice.
- Staff need to provide opportunities for students to clarify feedback, as well as opportunities for demonstrating their growth as a result of this advice.
- Feedback should always be viewed as an ongoing dialogue between both parties.

4. *Where can feedback go wrong? How can this be avoided?*

- Feedback can go wrong on many levels: not being used correctly, not being useful to the student, not being followed up, not being delivered promptly etc.
- The key to good feedback processes is by ensuring it is maintained as a constant dialogue.

- If students are unhappy with the usability, timeliness, or tone of the feedback provided on their work, they need to ensure that the teacher is aware of this in order to rectify these issues.
- If students do not act on feedback provided, the teacher needs to follow-up with these students to discover why this is occurring and implement a solution.

Following this discussion you should revisit the Learning Contract developed in the earlier module and determine whether any points regarding feedback should be added or amended.

Developing Feedback Response Checklists

One aspect that makes it difficult for students to engage with feedback is that they may not perceive the feedback to be useful in the near future or to be clear enough to engender change in future learning and assessment. Developing feedback response checklists is one way in which these issues can be circumvented. Once students receive feedback on a piece of assessment or work (whether graded or ungraded), they should spend the following period developing a checklist of all key issues to be watched or improved upon in the future. A sample checklist derived from feedback on an essay may look like:

<p><i>FEEDBACK RESPONSE CHECKLIST</i></p> <p><input type="checkbox"/> <i>Make sure contention (key argument) is also stated in first paragraph</i></p> <p><input type="checkbox"/> <i>Use more linking sentences between paragraphs to improve flow</i></p> <p><input type="checkbox"/> <i>Make sure all claims are supported by evidence</i></p> <p><input type="checkbox"/> <i>Avoid introducing new material in the conclusion paragraph</i></p>
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This list can therefore be kept by the student for the semester/year/ course and used to proof other assessment or learning tasks prior to submission.

Further benefits of generating a Feedback Response Checklist include:

- Ensuring the student has thoroughly read and processed the feedback provided
- Providing the student with an opportunity to respond to and clarify feedback that may not be fully understood or able to be acted upon
- Allowing the marker to review the Checklist and ensure all feedback has been appropriately understood and addressed

- Engaging the student in the process of *learning* from the feedback provided, with opportunities to demonstrate this growth in further tasks and assessment
- Eliminating marker frustration when students continue to make the same errors

As the practice of developing and using Feedback Response Checklists requires work and refinement itself, it is recommended that follow-up sessions be conducted throughout the subject to ensure the student is getting the most out of this tool. These follow-up sessions should be conducted a week after the return of work/assessment to review the Checklist the student has developed against the feedback you have provided, as well as directly after the submission of the next related work/assignment to evaluate how well the student used the Checklist and to assist them in achieving more effective routines. This process will be explored in Modules Five and Six.

Providing a sample Feedback Response Checklist

Another consideration in assisting students to use Feedback Response Checklists is to provide a worked example based on common errors/issues that you have identified in similar tasks and assessments. Many educators, especially those who re-use the same learning tasks from year-to-year, comment that they are able to predict the key errors or issues that will result in a deduction of marks from an assignment - prior to the assignment even being submitted! Highlighting these in a sample Feedback Response Checklist thus serves two purposes: (i) delivering content related to assisting the student with the learning task, and (ii) providing the student with a model for which to base their personal Feedback Response Checklists in the future.

A sample Feedback Response Checklist for psychology lab reports is included in Appendix B for further consultation. In using this or developing your own for a specific piece of assessment, it is important to emphasize to students that the Checklist is based on common errors made by students in the course and thus provides them with an 'inside' marking perspective for that piece of work. If the student understands that this is, in essence, another piece of feedback and a source of more personalized information (as opposed to information they could retrieve in a 'How To' guide for that piece of work), they are more likely to perceive it as important and to dedicate more time to its use.

MODULE THREE: Reversing Roles

By the end of this module, you will have:

- ✓ Allowed your students to understand the marking perspective using the ‘Students as Teachers’ Activity I
 - ✓ Provided a sample annotated paper and marked rubric/grading sheet to your students
 - ✓ Discussed differences in marking with your students to better align student and academic perspectives of feedback within your classroom
-

The purpose of this module is to allow students to better understand marking considerations from an academic perspective. By allowing students to become assessors in an activity and then comparing those responses with your own assessment of the work, student and academic perspectives of feedback will become more aligned with each other in regard to upcoming work.

‘Students as Teachers’ Activity I

Students regularly request that assessors be transparent with ‘what’ they will be getting marked on in regard to upcoming assessment. The ‘Students as Teachers’ Activity I aims to make this transparent by allowing students to read, annotate and grade a similar or sample assessment prior to the students’ own submission. This may be derived from a previously submitted piece of work (pending the student’s agreement for it to be used as a class activity) or devised by yourself to provide examples of good work and/or highlight commonly made errors (see Appendix C for a sample). This sample piece of work should be distributed to students and in small groups discussed, annotated and marked. This should be done using the same marking sheet/rubric/criteria that you will be using to mark their assessment.

Once the students have had a chance to do this, have them answer the following questions:

1. What were the best features of this piece of work?
2. What needs improvement in this piece of work?
3. How does the grade you have assigned this work fit in with your notion of the grading system used at this University (e.g. Fail/Pass/Credit/Distinction/High Distinction)?

Following this, students should have the opportunity to share their opinions on the piece of work with the class as a whole. It would also be interesting to discuss how much consensus there was amongst the class members as to the strengths, weaknesses and grade assigned to the work. Another important

aspect to refer to is the use of numerical scores to assess marking criteria and the use of grading systems (such as the usual Fail – High Distinction categories used in Higher Education). Many students, particularly those unfamiliar with these systems, can be dubious (and rightly so) about how these mechanisms are applied and what they mean. Explaining this can have a twofold benefit: i) ensuring you have a consistent and justifiable method for how you mark (i.e. explaining how students can obtain 10 out of 10 for a certain criteria, and being able to differentiate this from a response which would only score 9 out of 10), and ii) removing student anxiety/apprehension about this often mysterious process.

At this point, if applicable, you can discuss the measures taken in the subject or course to ensure consistency between markers or fairness in marking in general. For example, allowing all assessors to mark several pieces of work together prior to marking the group can be a useful method for ensuring all members are interpreting the criteria similarly. It is also a useful practice to cross-mark several pieces of assessment in each range of marks prior to handing them back to students in order to ensure that a 'Fail' from one assessor would also be deemed a 'Fail' by others, and so on for each range.

Providing feedback on 'Students as Teachers' Activity I

At this point, it is essential for students to receive feedback on their contributions to 'Students as Teachers' Activity I. Each student should therefore receive a copy of the work again, this time with your annotations, comments and completed marking sheet/rubric with final grade (see Appendix D for a sample, written in response to the piece in Appendix C). Allow students a few minutes to compare their own observations with yours, before talking them through your thought process in reviewing the work and opening the floor up for questions/discussions. By being transparent in the method in which you mark, and for a piece of work that is similar to or the same as their upcoming assessment, students should have a clear feel for the markers' perspective when attempting to meet each marking criteria. Furthermore, by promoting discussion around these issues, you will develop a better sense of how your students are approaching their work and therefore may be able to pre-empt key issues or be mindful of other considerations when you come to provide feedback on their own assessment.

Encourage your students to go away and reflect on your comments/grading while they continue to complete their next assessment. Ensure you provide time during your next class to discuss any questions that students may have as they continue to address discrepancies between their own work and the learning objectives for that task.

MODULE FOUR: Guided Self-Assessment

By the end of this module, you will have:

- ✓ Encouraged your students to revise their current assessment practices and engagement with feedback
 - ✓ Demonstrated to your students the use of rubrics in guiding self-assessment
 - ✓ Assisted your students in becoming critical graders using the 'Students as Teachers' Activity II
-

The purpose of the following module is to enhance your students' ability to critically review their own work. The role of review questions, rubrics and teacher guidance is highlighted in this process.

Using review questions to guide self-assessment

Following submission of an assessment, it is useful to ask students to critically assess the manner in which they completed their work. By fostering a sense of self-evaluation early in the semester, students will develop the ability to be mindful of their working processes and anticipate deficits in their current arrangements. In particular, student use of feedback resources should be highlighted at this stage, so that students do not wait passively for feedback in receipt of assessment, especially in cases where the student is struggling with or does not understand the task at hand. The following task will allow students to reflect on their use of feedback resources and learning strategies so that they can be more successfully applied in future learning tasks.

In small groups, pose the following questions to your students and invite class discussion on these issues after 10 minutes.

1. How well did you use the following resources to complete your assessment? (*This should be accompanied by a list of resources - such as the textbook for the subject, yourself, students, and additional research - and a ranking table with options ranging from 'Not at all well' to 'Used extensively'*)
2. If you had questions about or problems completing the assignment, how did you resolve these?
3. What worked well for you in completing this assignment? Is there anything you would change?
4. From this experience, what are your suggestions for completing assignments effectively in the future?

As students are invited to share their thoughts, you should work to supplement their current strategies with useful tips or more effective processes. Particular emphasis should be made on the variety of feedback resources available beyond your role as a marker after the work has been submitted. Some suggestions to make to your students include:

- Using class time to ‘sound out’ ideas with staff and/or classmates
- Soliciting feedback on ideas/excerpts on scholarly web boards or forums
- Seeking feedback on excerpts/plans/drafts of the assessment with the marker
- Thoroughly clarifying understandings of the task with staff prior to submission
- Utilizing resources at the University, such as learning centers that provide proofreading of assessments and skill-building courses
- Using peer-assessment with classmates (taking care not to invite plagiarism)

Following this discussion, it may be useful to invite your students to devise an action plan for an upcoming assessment that utilizes these new strategies. Providing that time is available, regular work-shopping of these issues for each assessment can be conducted to circumvent new issues and streamline existing practices further. At the least, encouragement of routinely self-assessing working practices and engagement with feedback should be made in order to develop these critical analysis skills within your students.

Using rubrics to guide self-assessment

Earlier in Module One we encouraged the use of marking rubrics to allow marking criteria to be much clearer to students (as well as to ensure easier and more consistent marking). Another benefit of using a rubric is that it can double as a tool for self-assessment when students are completing such work. With practice, students should be encouraged to complete these rubrics against their own work (as detailed in Module Seven). However, effective use of self-assessment tools rely on building the skills necessary to objectively evaluate their own work – after all, many students submit their work with the belief they have addressed the criteria and yet still fail to obtain a high mark. This is captured by one student’s response to filling out an unguided self-assessment evaluation: ‘[I] ... don't see why we should fill in an evaluation with our reports - clearly we think it's good, otherwise we wouldn't hand it in’ (Elgar, Chester, & Reece, in press). Such responses, which fail to perceive the

worth of true self-assessment, highlight most students' inability to critically evaluate themselves against set criteria without teacher assistance.

For this reason, we recommend using guided self-assessment prior to the student self-directing their own evaluation entirely. Guided self-assessment refers to the teacher providing annotations and comments on the student's work using a rubric (see Appendix E for an example), but omitting marks for each section, as well as the final grade. The student is then asked to re-evaluate their work against the criteria, using the teacher's feedback, and suggest their own mark and justification of this. This process requires students to fully process teachers' comments and feedback, rather than being preoccupied with the marks obtained. It also allows students an opportunity to re-engage with the marking criteria and learning objectives in reflective manner that is guided by the teacher's more critical outlook.

'Students as Teachers' Activity II

Prior to conducting this activity, you will need to have students submit a piece of work to be graded. It is recommended that this be a plan, draft or subsection of a larger assessment so that the students have an opportunity to demonstrate their improvement in the subsequent piece. Furthermore, this piece of work should be considered a 'hurdle' task or low stakes (worth only a minor amount of their final grade for the subject), to ensure students are not penalized severely should they misunderstand or fail to do well on the task. This would then justify allocating a significant portion of their grade to the larger assessment, given the amount of guidance and work-shopping they will receive on the piece.

Conduct a review of each student's work, annotating the piece and completing the marking rubric. Bring both the students' work and the rubrics to class, but ensure the rubrics do not include any marks or grade allocations (these copies should be kept by you for the following session). Hand the work back to the students and ask them to review your comments. They should then complete the ungraded rubric by allocating marks to each section and determining what grade they believe they should receive in light of your observations. Allow students to take time out of class to reflect on this and let them know you will inform them of the marks you allocated during the next class.

MODULE FIVE: Matching Perspectives I

By the end of this module, you will have:

- ✓ Conducted one-on-one consultations to align students' marking and observations on their own piece of work with your own

- ✓ Assisted students to develop their own 'Feedback Response Checklist' to this work

The purpose of this module to compare academic and student perspectives of the students' own work, in order to better align expectations for achieving marking criteria. Students will then take these understandings and develop them into an action plan for bettering their work.

Comparing student and academic perspectives

Time should be taken during this class to allow each student to have a brief consultation with you while the other members of the class progress with another task. Each student should bring their completed rubric to this consultation to discuss their marking with you. In doing this, you should present your version of the rubric and compare the marks given for each section. Where there is high agreement between mark and rationale for the mark, you should commend your student on their understanding and encourage them to apply this in future work.

In cases where there is a large discrepancy between marks or rationale, time should be taken to carefully listen to the student's justification and understanding of the criteria. In some cases, you may wish to alter your marking if you feel the student has better addressed the marking criteria than you originally thought. In other cases, you will need to take the time to explain where marks were allocated and/or deducted and why the criteria was not fully or adequately fulfilled. Be sure to provide the student with clear examples of how this criteria may be better met and how they can address this in future work. For this reason, it can be handy to ask one or multiple students who performed well on a criteria point for use of their work as an example. This can be referred to during the consultations or even provided to students as a handout they can study outside of class. You should also direct students to useful resources that they should follow-up following the session. It is vital that each student leaves the consultation with an insight into what they did well, what they could do better and a greater sense of how to complete such tasks next time.

Using Feedback Response Checklists

In Module Two, the process of developing Feedback Response Checklists was discussed and you provided your students with a sample to clarify this process. Now that the students have had an opportunity to submit work, receive feedback on the assessment and clarify these comments with you, this would be

an ideal time to have your students develop a checklist in response. Students should be given time to reflect on your consultation and then provide a structured Feedback Response Checklist that addresses each of your key suggestions for improvement. You should also encourage them to include reminders for aspects that they have done well and should replicate in future. Some questions you may like to pose in order to start them thinking critically about their paper include:

1. What are the key strengths of this paper?
2. What aspects of the paper need improving?
3. Do I have a plan for improving these aspects?
4. Is there any feedback that I don't understand?

While these questions are best answered during class, allow the students to devise their Feedback Response Checklists in their own time so that they have ample time to reflect and develop strategies. Let students know that they will have time during the next class to show you this checklist in order to check that they are on the right track.

MODULE SIX: Matching Perspectives II

By the end of this module, you will have:

- ✓ Conducted one-on-one consultations to align students' Feedback Response Checklists with your own observations of their assessment

 - ✓ Re-evaluated the match between student and academic perspectives of feedback in your classroom
-

The purpose of the following module is to continue your one-on-one consultations with students to ensure they are clear about how to progress with their work following your feedback.

Comparing student and academic perspectives

Time should be taken during this class to allow each student to have a brief consultation with you while the other members of the class progress with another task. Each student should bring their completed Feedback Response Checklist to this consultation to discuss their plan with you. As with the previous module, time should be taken to ensure the student fully understands all feedback provided to them and has an appropriate plan for replicating high quality work and rectifying low quality work. Students who have completed their Feedback Response Checklist successfully should be commended, while those who have struggled will require more thorough consultation to engage them with appropriate courses of action.

This time should also be viewed as an opportunity for receiving feedback from students on the feedback you have provided. If students as a whole struggle with this task, it may be because the feedback you have provided does not easily translate into workable solutions to errors or problems with the students' work. Taking your own notes during these consultations will allow you to evaluate and improve feedback you provide to students in the future.

Re-evaluating the match between yourself and your students

Now that you have had the opportunity to discuss with each student their understandings and use of feedback, it would be useful to explore any key issues or consistent themes with the class. If you identify themes in students' lack of understanding around a topic, there may be a breakdown in effective communication around a particular skill or perhaps a lack of clarity around certain marking criteria. Opening these observations up for class discussion will allow you the opportunity to revise any aspect of the program/topic/assessment that could be better administered, as well as provide students with a final chance to clarify expectations and use each other in their learning process.

MODULE SEVEN: Self-Assessment in Practice

By the end of this module, you will have:

- ✓ Outlined the process of completing 'Self-Assessment Reflections' to your class
 - ✓ Provided a sample 'Self-Assessment Reflection' to your students for an upcoming assessment
 - ✓ Assisted your students to use their own 'Self-Assessment Reflection' to revise and refine their work
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The purpose of the following module is to encourage your students in becoming more independent in their work by developing self-assessment skills. These skills include clarifying teacher expectations, satisfying marking criteria and enacting action plans in response to poor work or unclear understanding.

Completing Self-Assessment Reflections

Now that your students have had the opportunity to engage in guided self-assessment in conjunction with your comments and annotations, it is time for them to trial enacting their own self-assessment. A simple way to do this is via the marking rubric developed for an upcoming assessment, turning it into a 'Self-Assessment Reflection'. Students will use their own knowledge of marking perspectives (developed in Module Three), coupled with a self-awareness of their own work (as reviewed in Modules Four through Six), to annotate, comment on and grade their upcoming assessment. In doing so, students should also problem-solve deficiencies they identify in their work. In particular, they should nominate a course of action to resolve these issues, such as discussing the problem with the tutor or referring to their set text to clarify a point.

Providing a sample Self-Assessment Reflection

Another consideration in assisting students to use Self-Assessment Reflections is to provide a worked example based on common errors/issues that you have identified in similar tasks and assessments, as well as clear solutions for resolving these. An example of a worked Self-Assessment Reflection is included in Appendix F for your reference.

As students become more advanced with these self-assessment skills, you may like to branch out into peer assessment where students provide a marking perspective on other students' work. While peer assessment has shown to be a very successful feedback mechanism, caution must be used when students are new to feedback processes. This step should only be considered for students who are advanced in their understanding of critical evaluation and initially for low stakes assessment.

Checking your students' understanding

Once the students have had the opportunity to develop their Self-Assessment Reflection, time should be provided to troubleshoot any difficulties in completing the task. While it may not be reasonable to check the reflection against the assessment until after submission, you should allow students time to work in small groups to resolve issues while you circle the room to answer any questions.

Time should also be allocated for students to ask any questions relating to their assessment, as many are likely to nominate you as a source of information for material they do not understand or require clarification on following the issues they identify as a result of their Self-Assessment Reflection. In order for students to really engage with the Self-Assessment Reflection, it is suggested that this session be the primary allocation for last minute troubleshooting on the assessment, rather than encouraging last minute emails/calls/consultations for students who have not appropriately identified and resolved issues as a result of this task.

MODULE EIGHT: Looking Forward

By the end of this module, you will have:

- ✓ Discussed the outcomes of FRAMEwork with your class, including revisions for the future

- ✓ Enabled students to transfer these feedback skills to other subjects, courses and careers

The purpose of this final module is to review the framework you have established within your class in order to look towards the future. By discussing your progress, you will have the opportunity to revise the program for further classes or sessions and your students will be clear about how to transfer their skills to other settings.

Reviewing FRAMEwork

An important aspect of this program is for students and staff to appreciate what has been achieved as a result of working together towards making feedback more effective and what continues to require work. Highlighting the strengths and skills that have been developed is especially important, as this allows students to develop mastery over these attributes and develop their confidence in using them again. As such, engaging in discussion about what students will take away from FRAMEwork and what they would like to see improved in FRAMEwork will add to both academic and student use of feedback in the future.

Ask students to spend a few moments in jotting down responses to the following questions and then invite group discussion on themes identified.

1. What have you learned about feedback during this course?
2. What skills have you developed?
3. What areas do you think you need to work further on?
4. What would you like to see changed or added to this course?

Looking Forward

Now that you have discussed FRAMEwork with your students and reflected on what you have gained, it is important to look ahead to the future. For yourself, this is an excellent opportunity to use your students' commentary on the process to make adjustments to the program in order to better engage these or new students. In doing this, you can demonstrate to your students the power of their feedback in informing course content and reassess how much you value their input. Through this process, your ability to deliver these

modules will be refined and will eventually take much less time and energy to implement.

It is also important for students to look ahead and evaluate how they can transfer these skills to other settings, particularly those run without a traditional focus on effective feedback. Some useful questions to pose to your class include:

1. What are some ways you can use these skills beyond our classroom?
2. How might you handle a lack of feedback or ineffective feedback in the future?

Responses to the above questions will be varied but an important point to reiterate to your students is that they have been as active partners in this program as yourself and have engaged just as fully in the feedback process. Traditionally, feedback has been posited as a mechanism where students are reliant on staff to provide high quality and useful feedback. However, in this program students have negotiated the terms of feedback and have learnt to deal with these processes without the direct influence of the teacher. Therefore, even in situations where there is no existing feedback measures or there is a reluctance to provide feedback, the students now have the skills to clarify expectations, self-assess and actively engage others in providing the information necessary to enhance their own learning and skills.

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APPENDIX A: Sample Learning Contract

LEARNING CONTRACT for OUR TUTORIAL

Shared Responsibility

As a class we acknowledge that learning environments, such as tutorials, work best when each member approaches all activities and tasks with enthusiasm, honesty and an acceptance of each other. Every member should feel comfortable in being open and venturing forth questions, opinions or experiences.

We agree to work together with this in mind.

The Tutor

I agree to:

- ❖ respond to all emails within 24 hours, excepting weekends
- ❖ be available for weekly face-to-face consultation outside of class
- ❖ assist with any course, content or assessment-related queries you may have, or direct you to the relevant staff member where this extends beyond my role or knowledge
- ❖ assist students in fully understanding and using the feedback provided

The Class

I agree to:

- ❖ Participate in all activities and tasks during the tutorial to the best of my ability
- ❖ Address all concerns and questions about the course, content or assessment with the tutor or relevant party
- ❖ Follow-up any information or feedback that I need clarified
- ❖ Be proactive in seeking assistance for any difficulties I may face during the semester
- ❖ Ensure that I catch up on all work missed if I fail to attend a class

APPENDIX B: Sample Feedback Response Checklist

FEEDBACK RESPONSE CHECKLIST

Title

- Make sure all key variables are included.
- Make sure it is 12 words or less.

Abstract

- Make sure each key section of the lab report (Intro, Method, Results, Discussion) is represented in 1-2 lines.
- Ensure this section is concisely worded and is no more than 150 words in total.

Introduction

- Include definitions of key variables in the first paragraph.
- In the body of this section, make it clear to the reader why the study is necessary/important.
- In the body of this section, use past research and theory to demonstrate why each hypothesis has been developed.
- State all aims and hypotheses in past tense in the final paragraph of this section

Method

- Ensure enough detail is included to replicate the study but omit all unnecessary information/words – keep this section succinct.
- Avoid using dot points/numbers here – convert all information to paragraph summaries.
- In the Materials, a reference to the original authors is required in the first sentence introducing a measure. In the final sentence relating to that measure, comment on the reliability and validity of the instrument.

Results

- Avoid cutting and pasting tables directly from SPSS into this section – convert to paragraph summaries of the data.

- Include descriptive statistics (e.g. *Ms* and *SDs*) are included before all inferential statistics (e.g. correlations, t-tests etc.).
- Make sure the data needed to evaluate every hypothesis is included here, regardless of whether or not the results are statistically significant. This interpretation belongs in the next section, not here.

Discussion

- Begin this section by restating the aims and hypotheses of the study.
- When discussing each hypothesis and whether or not it was supported, link this back to existing literature/theory and explain how this knowledge can be used.
- Avoid speculating about limitations to the study. Keep these limited to 1-2 key limitations and explain how they limit the usability/interpretation of the results.
- End this section with a conclusion, summarizing the key points from above.

References

- Ensure all references mentioned in-text appear here and vice versa.
- Have at least 6 references that are scholarly (e.g. journal articles, specific texts etc.).
- Alphabetical order and a hanging indent are required.
- Ensure referencing style is consistent with the APA Manual (6th ed.).

Overall

- Use 1.5 or double spacing throughout entire paper.
- Signal new paragraphs only through indentation (1 TAB space), not extra spacing.

APPENDIX C: Sample Lab Report Introduction for Grading

Gender differences in abnormal eating attitudes and the relationship between eating attitudes and negative affect

Eating disorders such as Anorexia Nervosa and Bulimia Nervosa are associated with a range of adverse effects on an individual's psychological and physical health. In recent times, the social issue of eating disorders amongst young Australians has caused much interest and investigation. Anorexia Nervosa is characterized by an individual having a low body weight and body image distortion with an obsessive fear of weight gain (Lask & Bryant, 2000). Furthermore, the Diagnostic and Statistical Manual of Mental Disorders (1994) describes Bulimia Nervosa as an eating disorder characterized by "recurrent binge eating, followed by compensatory behaviours, referred to as 'purging'".

Eating disorders affect an estimated 0.05-0.1% of the Australian population respectively (Gilchrist, 1970), but the prevalence of eating disorders amongst women is significantly higher than males, with up to 90% of eating disorders (anorexia nervosa and bulimia nervosa) occurring in women (Smithson, 2008). Furthermore, in a study conducted by Hautala, Junila, Helenius, Vaanene, Aiaa, Liuksia, Riha, Valimaki and Saarijarvi (2000) it was concluded that 14-15 year old females reported a higher rate of self-reported self disorder symptoms (24%) than males (16%). Fallon and Rozin (1985) conducted a study where both females and males had to choose a basic drawing of a body shape that they thought the opposite sex would find more attractive. They concluded that men's perceptions serve to keep them satisfied with their figures, whereas women's perceptions place pressure on them to lose weight.

Although there are many risk factors contributing to an individual developing an eating disorder, one main contributor is negative self affect, which includes depression, anxiety and stress. Fisher and Smythe (1991) tested this topic, and found that subjects who were more unhappy with their weight and had higher scores on the eating attitudes tests (indicating disordered eating) had higher anxiety levels and lower self-esteem. In a study of 609 15-year old school girls, Button, Laon, & Davies (1997) found that the greater the eating pathology, the lower the individual would score on the Hospital Anxiety and Depression Scale and the Rosenberg Self-Esteem Scale.

The present study is designed to further the past research and findings in this area of eating disorders and the gender differences. It also aims to further investigate the possible link between low self-affect and eating disorders. It was predicted that females will express higher rates of abnormal eating attitudes than males. Furthermore it was predicted that there will be a positive relationship between eating attitudes and negative affect.

Foundations of Psychology
Lab Report Introduction Marking Guide

Section	Poor	Satisfactory	Good	Comments
Title /5	One or more major variables missing in title.	All key variables are included, but expression may be poor or wordy.	Concise, clear description of report.	
First Paragraph /10	Important information is missing from the opening statement, definition of terms or outline of study focus.	Most facets are described accurately.	Succinct introduction to the study provided, including definition of key terms. The section is brief and functional in introducing the reader to the study.	
Body /25	Important information is missing, such as key theory, research or rationale for the study. APA style is not followed.	Most important information (theory, research and rationale for study) included, but section may be too brief, too wordy or lacking in logical development. APA errors in citation may be present	Provides an appropriate and relevant review of the literature that supports the development of all aims and hypotheses. APA style is correct and expression is clear.	
Final Paragraph /15	Important information is missing from one or more aims or hypotheses.	Contains relevant information but may be incorrectly stated or wordy.	Logically derived aims and hypotheses are stated clearly and succinctly.	
References /5	Insufficient number of or inappropriate references.	At least 6 references cited in report. Minor errors in referencing style may be present. Some references may be dated.	Key sources are used and acknowledged. Minimum of 6 references cited in the report. All references are appropriate to the topic.	

Mark:

APPENDIX D: Sample Lab Report Introduction – Annotated and Graded

Gender differences in abnormal eating attitudes and the relationship between eating attitudes and negative affect

Eating disorders such as Anorexia Nervosa and Bulimia Nervosa are associated with a range of adverse effects on an individual's psychological and physical health. In recent times, the social issue of eating disorders amongst young Australians has caused much interest and investigation. Anorexia Nervosa is characterized by an individual having a low body weight and body image distortion with an obsessive fear of weight gain (Lask & Bryant, 2000). Furthermore, the Diagnostic and Statistical Manual of Mental Disorders (1994) describes Bulimia Nervosa as an eating disorder characterized by "recurrent binge eating, followed by compensatory behaviours, referred to as 'purging'".

Eating disorders affect an estimated 0.05-0.1% of the Australian population respectively (Gilchrist, 1970), but the prevalence of eating disorders amongst women is significantly higher than males, with up to 90% of eating disorders (anorexia nervosa and bulimia nervosa) occurring in women (Smithson, 2008). Furthermore, in a study conducted by Hautala, Junila, Helenius, Vaanene, Aiaa, Liuksia, Riha, Valimaki and Saarijarvi (2000) it was concluded that 14-15 year old females reported a higher rate of self-reported self disorder symptoms (24%) than males (16%). Fallon and Rozin (1985) conducted a study where both females and males had to choose a basic drawing of a body shape that they thought the opposite sex would find more attractive. They concluded that men's perceptions serve to keep them satisfied with their figures, whereas women's perceptions place pressure on them to lose weight.

Although there are many risk factors contributing to an individual developing an eating disorder, one main contributor is negative self affect, which includes depression, anxiety and stress. Fisher and Smythe (1991) tested this topic, and found that subjects who were more unhappy with their weight and had higher scores on the eating attitudes tests (indicating disordered eating) had higher anxiety levels and lower self-esteem. In a study of 609 15-year old school girls, Button, Laon, & Davies (1997) found that the greater the eating pathology, the lower the individual would score on the Hospital Anxiety and Depression Scale and the Rosenberg Self-Esteem Scale.

The present study is designed to further the past research and findings in this area of eating disorders and the gender differences. It also aims to further investigate the possible link between low self-affect and eating disorders. It was predicted that females will express higher rates of abnormal eating attitudes than males. Furthermore it was predicted that there will be a positive relationship between eating attitudes and negative affect.

**Foundations of Psychology
Lab Report Introduction Marking Guide**

Section	Poor	Satisfactory	Good	Comments
Title 2.5/5	One or more major variables missing in title.	All key variables are included, but expression may be poor or wordy.	Concise, clear description of report.	All key variables mentioned but needs to be less than 12 words. APA style not followed.
First Paragraph 3/10	Important information is missing from the opening statement, definition of terms or outline of study focus.	Most facets are described accurately.	Succinct introduction to the study provided, including definition of key terms. The section is brief and functional in introducing the reader to the study.	The link between the title and first paragraph is not clear (e.g. the title mentions eating attitudes but first paragraph only refers to eating disorders). Key variables (abnormal eating attitudes and negative affect) should be defined here and the focus of the report (as per the title) clearly stated.
Body 13/ 25	Important information is missing, such as key theory, research or rationale for the study. APA style is not followed.	Most important information (theory, research and rationale for study) included, but section may be too brief, too wordy or lacking in logical development. APA errors in citation may be present	Provides an appropriate and relevant review of the literature that supports the development of all aims and hypotheses. APA style is correct and expression is clear.	Some good identification of key research but this needs to be used more strongly alongside theory and a rationale for the study, so that it is clear why the hypotheses and aims have been developed.
Final Paragraph 11.5/15	Important information is missing from one or more aims or hypotheses.	Contains relevant information but may be incorrectly stated or wordy.	Logically derived aims and hypotheses are stated clearly and succinctly.	Despite awkward expression in the first sentence, all key information is included – this just needs to be stated in past tense.
References 3/5	Insufficient number of or inappropriate references.	At least 6 references cited in report. Minor errors in referencing style may be present. Some references may be dated.	Key sources are used and acknowledged. Minimum of 6 references cited in the report. All references are appropriate to the topic.	Appropriate references used, although several APA style errors evident. All claims must be supported by an appropriate citation.

Mark: 33/60 (55%) – *PASS*. This Introduction has a good sense of the format required but the confusion between 'eating disorders' and 'abnormal eating attitudes' throughout made for complicated reading. This could easily be rectified in the first paragraph by defining the key terms and being consistent in the terminology used throughout. The material/references were mostly appropriate but needed to be used more effectively to convince the reader why the study's aims were necessary and why those specific hypotheses were developed.

APPENDIX E: Sample Rubric

Section	Poor	Satisfactory	Good	Comments
<p style="text-align: center;">Title</p> <p style="text-align: center;">/5</p>	One or more major variables missing in title.	All key variables are included, but expression may be poor or wordy.	Concise, clear description of report.	
<p style="text-align: center;">Abstract</p> <p style="text-align: center;">/10</p>	Important facets of the study are missing or information is incorrect.	Most facets of study are described accurately.	Succinct description of all key facets of the study, including research problem, method (participants and procedures), key findings, and implications. Abstract is correct length and follows APA style.	
<p style="text-align: center;">Introduction</p> <p style="text-align: center;">/25</p>	Heading "Introduction" is used. Important information is missing, such as key theory, research or hypotheses. APA style is not followed.	All important information (theory, research, hypothesis) included, but section may be too brief or too wordy. APA errors in citation may be present	Provides an appropriate and relevant review of the literature. Key sources are used and acknowledged. Logically derived aims and hypotheses are stated clearly and succinctly. APA style is correct and expression is clear.	
<p style="text-align: center;">Method</p> <p style="text-align: center;">/15</p>	Important information is missing from one or more subsection or information is in wrong subsection.	Contains relevant information in the right subsections, but may be wordy or include too much information.	A succinct description of the participants, measures and procedure that would permit replication of the study. APA style is correct and expression is clear.	

Section	Poor	Satisfactory	Good	Comments
Results /15	Summaries of key data may be missing. APA style is not followed.	Appropriate presentation of all summary data. Minor APA errors may be present.	Presentation of data in appropriate format. Written description of major trends. Correct data analysis. APA style is correct and expression is clear.	
Discussion /25	Key information missing or incorrect, such as: results may be misinterpreted; no links to existing literature; no limitations of study noted; no suggestions for future research directions; no conclusion; too brief.	Some aspects may not be covered in sufficient depth, but key material is included.	Hypothesis restated. Interpretation of results, with links back to the literature presented in Introduction. Methodological problems and limitations of the study are considered. Suggestions for future research noted. Concluding remarks included. APA style is correct and expression is clear.	
References /5	Insufficient number of or inappropriate references.	At least 6 references cited in report. Minor errors in referencing style may be present. Some references may be dated.	Minimum of 6 references cited in the report. All references are appropriate to the topic. Reference list is accurate and uses correct APA style.	

Percentage:

APPENDIX F: Sample Self-Assessment Reflection

Students: Indicate your assessment of your lab by providing a mark and circling a category (poor, satisfactory, or good) for each section of the report. In the comments box, include a brief rationale for this mark and rating and, where appropriate, detail what action you can take to improve each section.

Student Name: *Sally Sample*

Section	Poor	Satisfactory	Good	Comments
Title 2 / 5	One or more major variables missing in title.	All key variables are included, but expression may be poor or wordy.	Concise, clear description of report.	<i>I have included all of the key variables but it is more than 12 words - I need to be more concise here by cutting out unnecessary phrases like 'A study of.'</i>
Abstract 10 / 10	Important facets of the study are missing or information is incorrect.	Most facets of study are described accurately.	Succinct description of all key facets of the study, including research problem, method (participants and procedures), key findings, and implications. Abstract is correct length and follows APA style.	<i>I believe this section is quite good - the length is under 150 words and I have touched on the key aspects from the Intro, Method, Results and Discussion.</i>
Introduction 18 / 25	Heading "Introduction" is used. Important information is missing, such as key theory, research or hypotheses. APA style is not followed.	All important information (theory, research, hypothesis) included, but section may be too brief or too wordy. APA errors in citation may be present	Provides an appropriate and relevant review of the literature. Key sources are used and acknowledged. Logically derived aims and hypotheses are stated clearly and succinctly. APA style is correct and expression is clear.	<i>I have covered relevant literature, but I am not sure whether they have been used strongly enough to develop a rationale for the study's aims and hypotheses. I need to have someone proof this section to check this.</i>
Method 11 / 15	Important information is missing from one or more subsection or information is in wrong subsection.	Contains relevant information in the right subsections, but may be wordy or include too much information.	A succinct description of the participants, measures and procedure that would permit replication of the study. APA style is correct and expression is clear.	<i>At 560 words, this is too long. I need to revise my expression here and avoid repeating myself in sections.</i>

Section	Poor	Satisfactory	Good	Comments
Results 11 / 15	Summaries of key data may be missing. APA style is not followed.	Appropriate presentation of all summary data. Minor APA errors may be present.	Presentation of data in appropriate format. Written description of major trends. Correct data analysis. APA style is correct and expression is clear.	<i>All relevant data is included but I am not sure how to write the results of the t-tests for Hypotheses 2 and 3. I need to check this with my tutor.</i>
Discussion 18 / 25	Key information missing or incorrect, such as: results may be misinterpreted; no links to existing literature; no limitations of study noted; no suggestions for future research directions; no conclusion; too brief.	Some aspects may not be covered in sufficient depth, but key material is included.	Hypothesis restated. Interpretation of results, with links back to the literature presented in Introduction. Methodological problems and limitations of the study are considered. Suggestions for future research noted. Concluding remarks included. APA style is correct and expression is clear.	<i>I am finding it difficult to link our findings with existing literature - I should look at some existing journal articles to see how I can do this better. I am not too sure about the limitations I have identified, so I should talk to my classmates and tutor to see if I can write these better or select more appropriate ones.</i>
References 5 / 5	Insufficient number of or inappropriate references.	At least 6 references cited in report. Minor errors in referencing style may be present. Some references may be dated.	Minimum of 6 references cited in the report. All references are appropriate to the topic. Reference list is accurate and uses correct APA style.	<i>9 scholarly references included and APA style adhered to. I think I have done this well.</i>

Percentage: *75% (DISTINCTION)*

I have made a good start to my lab report but there are a few issues which I can address to make it better. I've also spotted several spelling mistakes and formatting errors, so I can fix these to improve the overall presentation of the report.

APPENDIX G: Sample Feedback Preferences Survey

- When a teacher is commenting on your work (graded or ungraded), what elements are most important to you?

- What would you like to see as part of the feedback you receive this semester?

- Please rank the following methods of assessment feedback in order (**1** being most favoured, **5** being least favoured) of preference:
 - _____ Personalized written comments on your work
 - _____ A standard typed summary for all students, with examples of correct or 'best' responses
 - _____ Typed personalized comments on a marking sheet
 - _____ Oral summary of group strengths and weaknesses, with examples of correct responses
 - _____ Speaking one-on-one with the marker about your strengths and weaknesses

- Please rank the following methods of feedback delivery in order (**1** being most favoured, **4** being least favoured) of preference:
 - _____ Available during class time
 - _____ Available for pick-up
 - _____ Available on the Learning Hub
 - _____ Given during consultation with marker
 - _____ Delivered to your inbox

Appendix D
Supplementary Material for Study 3



**INVITATION TO PARTICIPATE IN A RESEARCH PROJECT: PROJECT
INFORMATION STATEMENT**

Project Title:

- Piloting FRAMEwork: Feedback Resources for Assessors, Mentors and Educators

Investigators:

- Karen Elgar (Psychology PhD candidate, RMIT University, karen.elgar@rmit.edu.au)
- Dr Andrea Chester (Primary Project Supervisor: Senior Lecturer, Psychology, RMIT University, andrea.chester@rmit.edu.au, 03 9925-3150)
- Dr John Reece (Project Supervisor: Coordinator of Postgraduate Research Studies, Associate Professor, Psychology, RMIT University, john.reece@rmit.edu.au, 03 9925-7512)

You are invited to participate in a research project being conducted by RMIT University. This information sheet describes the project in straightforward language, or 'plain English'. Please read this sheet carefully and be confident that you understand its contents before deciding whether to participate. If you have any questions about the project, please ask one of the investigators.

Who is involved in this research project? Why is it being conducted?

This research project is being conducted by Karen Elgar under the supervision of Dr. Andrea Chester and Dr. John Reece. It is designed to test the feasibility of a feedback program designed to help first year students and educators. This project has been approved by the RMIT University Human Research Ethics Committee and is being funded by RMIT University.

Why have you been approached?

You have been approached to participate in this research as a student enrolled in first year psychology at RMIT University.

What is the project about? What are the questions being addressed?

This project seeks to improve the use of feedback in first year university students. The efficacy of this program in assisting students to understand and interact with feedback, as well as improve the student experience, will be explored to determine the viability of implementing these strategies over a wider domain.

If I agree to participate, what will I be required to do?

If you agree to participate in this study you will be initially be asked to complete a 15 minute questionnaire in regards to your demographic details, wellbeing, academic skills and personality, as well as your understanding of feedback. Most questions require you to tick or rate the importance of a statement. For example, you will be asked to indicate your confidence in using feedback this semester, ranging from 'not at all' to 'extremely'. There are no right or wrong answers, only honest answers.

Some participants will then be asked to complete activities during their tutorials to improve their use of feedback. These will not require additional time outside of class and will not be eligible for grading. If choose not to participate in these activities, you will Regardless of whether you

participate in these activities, you will be asked to complete a final 15 minute questionnaire at the end of semester. Similar to the initial questionnaire, demographic details, wellbeing, academic skills, personality and understandings of feedback will be evaluated.

What are the risks or disadvantages associated with participation?

Participating in this study should pose few, if any, risks to you outside your normal daily activities. However, if you are unduly concerned about your responses to any of the questionnaire items or if you find participation in the project distressing, you should contact the primary supervisor to this project, Dr Andrea Chester, as soon as convenient. Andrea will discuss your concerns with you confidentially and suggest appropriate follow-up, if necessary.

What are the benefits associated with participation?

Your responses will be used to evaluate a feedback program (FRAMEwork) to determine whether it is effective in improving the first year experience. Participating in this study will provide you with an opportunity to actively share information that can be used to support the learning of higher education students. Furthermore, students involved with the feedback program during tutorials will be able to access a range of materials and information that can support their academic progress.

What will happen to the information I provide?

You will be required to provide informed consent in order to participate in the study. While you are required to provide your student number for identification purposes, the information you provide will be de-identified throughout the semester via the following strategies: the collection of data by a third party, random assignment of participant codes for each questionnaire, and removal of identifying information from the data set. These steps will ensure that the researchers will not be able to identify you from your responses during the semester. This will prevent any undue

influence on the quality of teaching or marking you receive. Furthermore, only group data will be published, so that you will not be personally identified in any publication arising from the study. However, any information that you provide can be disclosed only if (1) it is to protect you or others from harm, (2) a court order is produced, or (3) you provide the researchers with written permission.

What are my rights as a participant?

Participation in this study is on a voluntary basis and you are under no obligation to be involved. You have the right to withdraw your participation at any time, without prejudice. In such a case, any unprocessed data will be withdrawn and destroyed, provided it can be reliably identified. You also have the right to have any questions regarding the study answered at any time.

Whom should I contact if I have any questions?

If you have any questions about this study, please do not hesitate to contact the investigator Karen Elgar via email at karen.elgar@rmit.edu.au, or the primary supervisor Dr Andrea Chester on (03) 9925 3150 during business hours or via email at andrea.chester@rmit.edu.au

Thank you for your time and interest. Your participation is greatly appreciated.



Karen Elgar
BAppSci (Psych) (Hons)



Andrea Chester
PhD



John Reece
PhD

Any complaints about your participation in this project may be directed to the Executive Officer, RMIT Human Research Ethics Committee, Research & Innovation, RMIT, GPO Box 2476V, Melbourne, 3001. The telephone number is (03) 9925 2251.

Details of the complaints procedure are available from the above address.



Informed Consent

Portfolio	Science, Engineering and Health
School of	Health Sciences
Project Title:	Piloting FRAMEwork: Feedback Resources for Assessors, Mentors and Educators
Name(s) of investigators: (1)	Karen Elgar Phone: _____
(2)	Dr. Andrea Chester Phone: 9925-3150

1. I have received a statement explaining the questionnaires involved in this project.
2. I consent to participate in the above project, the particulars of which - including details of the questionnaires - have been explained to me.
3. I authorise the investigator to administer the questionnaires.
4. I acknowledge that:
 - (a) Having read Plain Language Statement, I agree to the general purpose, methods and demands of the study.
 - (b) I have been informed that I am free to withdraw from the project at any time and to withdraw any identifiable unprocessed data.
 - (c) The project is for the purpose of research. It may not be of direct benefit to me.
 - (d) The privacy of the personal information I provide will be safeguarded and only disclosed where I have consented to the disclosure or as required by law.
 - (e) The security of the research data is assured during and after completion of the study. The data collected during the study may be published, and a report of the project outcomes will be provided to RMIT University as a part of a PhD thesis. Any information which will identify me will not be used.

Participant's Consent

Participant: _____ **Date:** _____
 (Signature)

Witness: _____ **Date:** _____
 (Signature)

Participants should be given a photocopy of this consent form after it has been signed.

Any complaints about your participation in this project may be directed to the Executive Officer, RMIT Human Research Ethics Committee, Research & Innovation, RMIT, GPO Box 2476V, Melbourne, 3001. The telephone number is (03) 9925 2251. Details of the complaints procedure are available from the above address.



FRAMEwork Pre Student Questionnaire, 2010

This booklet contains a series of questionnaires designed to measure a variety of individual attitudes and beliefs. There are no right or wrong responses so try very hard to be completely honest in your answers.

SECTION A: PERSONAL INFORMATION

- 1) What is your student number? _____
- 2) What is your sex? Female Male
- 3) What is your date of birth? _____
- 4) Where were you born?
 - Australia
 - Asia (please specify) _____
 - Europe (please specify) _____
 - North America
 - South America
 - Africa (please specify) _____
 - Other (please specify) _____
- 5) If you were born outside Australia, when did you arrive in Australia?

- 6) What degree are you currently studying? _____
- 7) How many hours a week (on average) do you work in a paid or volunteer role ?
_____hours

SECTION B: THOUGHTS ABOUT THE SEMESTER

- 1) How confident are you that you will do well academically this semester?
 - Not at all Somewhat Moderately Extremely

- 2) What do you think is meant by the term ‘feedback’?
- 3) How confident are you about using feedback effectively this semester?
 Not at all Somewhat Moderately Extremely
- 4) What do you think is a reasonable amount of time (in minutes) for a marker to spend grading and providing feedback on a 1500 word report?

- 5) What do you think is a reasonable timeframe for staff to return a 1500 word report to students (in days)? _____
- 6) On a scale of **1** (*not at all likely*) to **5** (*extremely likely*), how likely would you be to:
- a) _____ Approach a marker for clarification prior to submitting work for feedback
- b) _____ Follow-up with a marker to clarify feedback _____
- c) _____ Follow-up with a marker to dispute/challenge poor or unhelpful feedback
- d) _____ Concentrate on only the mark for an assessment, not the feedback
- e) _____ Use feedback in completing future assessments _____

SECTION C: FEEDBACK UTILITY

The following questions concern your feelings about receiving corrective feedback from teachers. Please answer as honestly and carefully as possible.

		Strongly Disagree				Strongly Agree
1	I think feedback from teachers is vitally important in improving my performance	1	2	3	4	5
2	I will usually reflect on a teacher’s feedback	1	2	3	4	5
3	I listen carefully when a teacher provides feedback	1	2	3	4	5
4	I am extremely encouraged by positive feedback from teachers	1	2	3	4	5
5	I think that feedback provides clear direction on how to improve my performance	1	2	3	4	5

6	Feedback from my teachers can be a valuable form of praise	1	2	3	4	5
7	I pay careful attention to instructional feedback	1	2	3	4	5
8	Feedback from my teachers motivates me to improve my performance.	1	2	3	4	5
9	Feedback from teachers is a waste of time	1	2	3	4	5
10	I feel relieved when I receive positive feedback	1	2	3	4	5

SECTION D: LIFE SCALE

Below are five statements that you may agree or disagree with. Using the 1-7 scale below indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

7 = Strongly agree	6 = Agree	5 = Slightly agree
4 = Neither agree or disagree		
3 = Slightly disagree	2 = Disagree	1 = Strongly disagree

- ___ In most ways my life is close to my ideal
- ___ The conditions of my life are excellent
- ___ I am satisfied with my life
- ___ So far I have gotten the important things I want in life
- ___ If I could live my life over, I would change almost nothing

SECTION E: LEARNING

The following questions ask about your motivation for and attitudes about this class. Remember there are no right or wrong answers, just answer as accurately as possible.

		Not at all true of me						Very true of me
1	If I study in appropriate ways, then I will be able to learn the material in this course.	1	2	3	4	5	6	7
2	It is my own fault if I don't learn the material in this course.	1	2	3	4	5	6	7

3	If I try hard enough, then I will understand the course material.	1	2	3	4	5	6	7
4	If I don't understand the course material, it is because I didn't try hard enough.	1	2	3	4	5	6	7
5	I believe I will receive an excellent grade in this class.	1	2	3	4	5	6	7
6	I'm certain I can understand the most difficult material presented in the readings for this course.	1	2	3	4	5	6	7
7	I'm confident I can understand the basic concepts taught in this course.	1	2	3	4	5	6	7
8	I'm confident I can understand the most complex material presented by the instructor in this course.	1	2	3	4	5	6	7
9	I'm confident I can do an excellent job on the assignments and tests in this course.	1	2	3	4	5	6	7
10	I expect to do well in this class.	1	2	3	4	5	6	7
11	I'm certain I can master the skills being taught in this class.	1	2	3	4	5	6	7
12	Considering the difficulty of this course, the teacher, and my skills, I think I will do well in this class.	1	2	3	4	5	6	7
13	I usually study in a place where I can concentrate on my course work.	1	2	3	4	5	6	7
14	I make good use of my study time.	1	2	3	4	5	6	7
15	I find it hard to stick to a study schedule.	1	2	3	4	5	6	7
16	I have a regular place set aside for studying.	1	2	3	4	5	6	7
17	I make sure I keep up with the weekly readings and assignments for my courses.	1	2	3	4	5	6	7
18	I attend class regularly.	1	2	3	4	5	6	7
19	I often find that I don't spend very much time on school work because of other activities.	1	2	3	4	5	6	7
20	I rarely find time to review my notes or readings before an exam.	1	2	3	4	5	6	7
21	I often feel so lazy or bored when I study that I quit before I finish what I planned to do.	1	2	3	4	5	6	7
22	I work hard to do well even if I don't like what we are doing.	1	2	3	4	5	6	7

23	When course work is difficult, I give up or only study the easy parts.	1	2	3	4	5	6	7
24	Even when course materials are dull and uninteresting, I manage to keep working until I finish.	1	2	3	4	5	6	7
25	When studying for a class, I often try to explain the material to a classmate or a friend.	1	2	3	4	5	6	7
26	I try to work with other students to complete the course assignments.	1	2	3	4	5	6	7
27	When studying for a class, I often set aside time to discuss the course material with a group of students from the class.	1	2	3	4	5	6	7
28	Even if I have trouble learning the material in a class, I try to do the work on my own, without help from anyone.	1	2	3	4	5	6	7
29	I ask the instructor to clarify concepts I don't understand well.	1	2	3	4	5	6	7
30	When I can't understand the material in a course, I ask another student in this class for help.	1	2	3	4	5	6	7
31	I try to identify students in my classes whom I can ask for help if necessary.	1	2	3	4	5	6	7

SECTION F: WELLBEING

Please read each statement and circle a number 0, 1, 2, or 3 which indicates how much the statement applied to you *over the last week*. We are asking about your life in general, not just your study. There are no right or wrong answers. Do not spend too much time on any statement. The rating scale is as follows:

- | | |
|----|--|
| 0. | Did not apply to me at all |
| 1. | Applied to me to some degree, or some of the time |
| 2. | Applied to me to a considerable degree, or a good part of the time |
| 3. | Applied to me very much, or most of the time |

1	I found it hard to wind down	0	1	2	3
2	I was aware of dryness of my mouth	0	1	2	3
3	I couldn't seem to experience any positive feeling at all	0	1	2	3
4	I experienced breathing difficulty (eg, excessively rapid	0	1	2	3

breathing, breathlessness in the absence of physical exertion)

5	I found it difficult to work up the initiative to do things	0	1	2	3
6	I tended to over-react to situations	0	1	2	3
7	I experienced trembling (eg, in the hands)	0	1	2	3
8	I felt that I was using a lot of nervous energy	0	1	2	3
9	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
10	I felt that I had nothing to look forward to	0	1	2	3
11	I found myself getting agitated	0	1	2	3
12	I found it difficult to relax	0	1	2	3
13	I felt down-hearted and blue	0	1	2	3
14	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
15	I felt I was close to panic	0	1	2	3
16	I was unable to become enthusiastic about anything	0	1	2	3
17	I felt I wasn't worth much as a person	0	1	2	3
18	I felt that I was rather touchy	0	1	2	3
19	I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)	0	1	2	3
20	I felt scared without any good reason	0	1	2	3
21	I felt that life was meaningless	0	1	2	3

SECTION G: YOUR PERSONALITY

How well does the following describe you?

		Very Inaccurate			Very Accurate	
		1	2	3	4	5
1	Often feel blue	1	2	3	4	5
2	Feel comfortable around people	1	2	3	4	5
3	Do not like art	1	2	3	4	5

4	Have a good word for everyone	1	2	3	4	5
5	Am always prepared	1	2	3	4	5
6	Dislike myself	1	2	3	4	5
7	Make friends easily	1	2	3	4	5
8	Have a vivid imagination	1	2	3	4	5
9	Believe that others have good intentions	1	2	3	4	5
10	Pay attention to details	1	2	3	4	5
11	Am often down in the dumps	1	2	3	4	5
12	Am skilled in handling social situations	1	2	3	4	5
13	Have a rich vocabulary	1	2	3	4	5
14	Respect others	1	2	3	4	5
15	Get chores done right away	1	2	3	4	5
16	Have frequent mood swings	1	2	3	4	5
17	Am the life of the party	1	2	3	4	5
18	Carry the conversation to a higher level	1	2	3	4	5
19	Accept people as they are	1	2	3	4	5
20	Carry out my plans	1	2	3	4	5
21	Panic easily	1	2	3	4	5
22	Know how to captivate people	1	2	3	4	5
23	Enjoy hearing new ideas	1	2	3	4	5
24	Make people feel at ease	1	2	3	4	5
25	Make plans and stick to them	1	2	3	4	5
26	Seldom feel blue	1	2	3	4	5
27	Have little to say	1	2	3	4	5
28	Am not interested in abstract ideas	1	2	3	4	5
29	Have a sharp tongue	1	2	3	4	5

30	Waste my time	1	2	3	4	5
31	Feel comfortable with myself	1	2	3	4	5
32	Keep in the background	1	2	3	4	5
33	Enjoy wild flights of fantasy	1	2	3	4	5
34	Cut others to pieces	1	2	3	4	5
35	Find it difficult to get down to work	1	2	3	4	5
36	Rarely get irritated	1	2	3	4	5
37	Would describe my experiences as somewhat dull	1	2	3	4	5
38	Avoid philosophical discussions	1	2	3	4	5
39	Suspect hidden motives in others	1	2	3	4	5
40	Do just enough work to get by	1	2	3	4	5
41	Am not easily bothered by things	1	2	3	4	5
42	Don't like to draw attention to myself	1	2	3	4	5
43	Do not enjoy going to art museums	1	2	3	4	5
44	Get back at others	1	2	3	4	5
45	Don't see things through	1	2	3	4	5
46	Am very pleased with myself	1	2	3	4	5
47	Don't talk a lot	1	2	3	4	5
48	Rarely look for a deeper meaning in things	1	2	3	4	5
49	Insult people	1	2	3	4	5
50	Shirk my duties	1	2	3	4	5

If you agree to allow the researchers access to your grades for this subject to evaluate the FRAMEwork program, please tick this box. Your individual results will not be disseminated to other parties.

- If you would like a personalized summary of your results from this survey, please tick this box. Your results will be provided to your student email in the following weeks.

Thank you very much for taking the time to share with us your experiences. If you have any questions about your participation, please feel free to contact the principal investigators, Karen Elgar (karen.elgar@rmit.edu.au) or Andrea Chester (andrea.chester@rmit.edu.au)

FRAMEwork Evaluation, 2010

Over the last semester you have participated in activities designed to enhance your ability to understand and actively work with feedback. The following questions aim to discover the effectiveness of these activities and your thoughts for future study.

1) In regard to learning how to work with feedback, how useful was:

		Not at all Useful				Very Useful
1	Learning about feedback theory	1	2	3	4	5
2	Developing a Learning Contract for the class	1	2	3	4	5
3	Using Feedback Response Checklists to improve on future assessments	1	2	3	4	5
4	Practising your critical analysis skills by marking sample assessments	1	2	3	4	5
5	Using review questions to self-reflect on your use of feedback	1	2	3	4	5
6	Grading your own work based on feedback provided, to check that it aligns with the marker's perspective	1	2	3	4	5
7	Using Self-Assessment Reflections to rectify gaps in knowledge or performance before you submit work	1	2	3	4	5
8	Learning how to transfer your feedback skills to other settings	1	2	3	4	5
9	Receiving examples of how to use feedback successfully	1	2	3	4	5
10	Receiving one-on-one consultation time with the tutor	1	2	3	4	5

2) What are the best aspects of this feedback program?

3) Do you feel that you have gained from participating in this program? Why?

4) What aspects of this program are most in need of improvement?

5) Is there anything that you felt was not addressed?

6) In the future, how likely are you to:

		Not at all Likely				Very Likely
1	Try to learn more about feedback theory	1	2	3	4	5
2	Ask staff to develop a Learning Contract for the class	1	2	3	4	5
3	Use Feedback Response Checklists to improve on future assessments	1	2	3	4	5
4	Practise your critical analysis skills by marking sample assessments	1	2	3	4	5
5	Use review questions to self-reflect on your use of feedback	1	2	3	4	5
6	Grade your own work based on feedback provided, to check that it aligns with the marker's perspective	1	2	3	4	5
7	Use Self-Assessment Reflections to rectify gaps in knowledge or performance before you submit work	1	2	3	4	5
8	Think about how to transfer your feedback skills to other settings	1	2	3	4	5
9	Ask staff for examples of how to use feedback successfully	1	2	3	4	5
10	Ask staff for one-on-one consultation time	1	2	3	4	5

7) Do you have any other comments to make about this feedback program?

Thank you very much for your participation. The information that you provide will be used to refine and improve the FRAMEwork program that you were a part of this semester. If you have any questions, please feel free to contact the principal investigators, Karen Elgar (karen.elgar@rmit.edu.au) or Andrea Chester (andrea.chester@rmit.edu.au).