

Conceptualising the problematic nature of feedback in  
higher education: Mapping the path to enabling  
student engagement



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## **Declaration of Authorship**

I, Claire Moscrop, hereby declare that this thesis titled "Conceptualising the problematic nature of feedback in higher education: Mapping the path to enabling student engagement", and the work presented in it is my own work. The work is done wholly for the purpose of the PhD degree at Lancaster University.

Any contribution made to the research project by others has been explicitly acknowledged. I declare that there is no material in this thesis that has been accepted for the award of any other degrees at Lancaster University or any other educational institution, except for those that have been clearly acknowledged in the thesis. When citing the work of others, references have always been given.

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## **Abstract**

The aim of this thesis is to provide a framework that integrates the literature on the problems with student feedback engagement with student perspectives to provide an institutional roadmap to effective development of student engagement with feedback. Much of the current feedback research explores individual issues and problems with feedback without considering how these problems impact on each other. There is comparatively little available research on the impacts of institutional structures and policies and their impacts on feedback delivery and engagement, with little appreciation of the interplay between tutor teaching practices, student feedback engagement and what institutions do. Using a three-stage pragmatic mixed methods process, the research sought to identify, from the literature, the problem factors that inhibit assessment feedback engagement in higher education. It then identified the problem factors with feedback engagement from the student point of view. Finally, linkages between each of the eight problem factors identified were considered to conceptualise the interplay between the problem factors. The framework for enabling student development through feedback engagement was developed as the main output of this research. The significance of this study is that the framework presents a multilayered viewpoint on the linkages between the problems with feedback engagement, including student, staff, and institutional factors, giving readers a framework off which to hang future research, staff development, and institutional policies.

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## Chapter 1: Introduction

Students' experience with assessment feedback has become a preoccupation for many higher education establishments since the introduction of the National Student Survey (NSS) in 2005 due to consistently lower results for questions relating to assessment and feedback (OFS, 2019). While many universities have seen improvements in the NSS over time (Burgess et al., 2019), the NSS has highlighted students' concerns about issues relating to assessment and feedback (Bell & Brooks, 2016; Carey et al., 2010; Walker et al., 2019; Williams & Kane, 2008). These issues range from problems with tutor handwriting, comprehensibility of feedback, and promptness of feedback to perceptions of unfair and unequal treatment in marking and assessment practices (Bell & Brooks, 2016; Carless, 2007; Kovacs et al., 2010).

In addition to the student experience of feedback, we also have the key issue of student engagement with feedback and how to encourage student uptake and use of feedback (Price, Handley, & Millar 2011a; Price, Handley, & Millar 2011b; Han & Hyland 2015; Pitt & Norton 2017; Winstone et al., 2021; Zhang, 2020). The literature also explores the efficacy of surveys such as the NSS in measuring feedback engagement, as many emphasise the 'giving' of feedback, rather than considering feedback as a process students are involved in (Winstone et al., 2021b)

The literature on feedback is vast, and covers many different aspects from formative feedback, audio feedback, peer feedback, self-evaluation, and many more lenses through which feedback is viewed. Feedback engagement literature has three broad foci. The first is a focus on improving the feedback process through feedback method and design (Orsmond et al., 2013; Beaumont et al., 2011; Carless et al., 2011). The second is a focus on tutor perceptions of the feedback process (Tang & Harrison, 2011), with the final focus on student perceptions of, and engagement with, feedback (Poulos & Mahony, 2008; Price et al., 2011a; Scott et al., 2011; Weaver, 2006; Winstone & Carless, 2019).

The feedback literature first shifted towards student engagement in 2011 when Price et al. suggested that the substantial body of literature on feedback *effectiveness* required a shift towards an investigation of *student engagement* with feedback. Price et al. (2011a)

noted that we can change the feedback to be more 'effective', but if students are not empowered to engage with it through structural processes, then the quality of the feedback becomes less impactful. This study focuses on student engagement with feedback, and importantly, the barriers to engagement highlighted in the literature. The study looks to conceptualise the problems with feedback engagement in higher education (HE) with a view to understanding and addressing the barriers that may prevent students from engaging with and using feedback.

The first stage of this work sought to understand the problematic nature of enabling student feedback engagement through a thematic literature review. The second stage gathers students' perceptions of their feedback engagement and feedback experiences (n182 from one university department). Finally, the third stage sees the development of a framework that provides institutions and staff with a roadmap to effective development of student engagement with feedback.

This research illuminates new aspects of understanding feedback engagement through the provision of the developed 'framework for enabling student development through feedback engagement'. It adds to the existing research in feedback engagement with the provisioning of a lens through which the problems with feedback engagement can be viewed holistically, demonstrating the importance of the interconnections between different barriers to feedback engagement and how they interlink and impact on each other. This framework will give institutions and their staff a wider appreciation of the issues with assessment and feedback, how these issues impact on each other, and how they are interlinked.

This chapter describes how the study emerged, and how my own experiences of trying to solve problems with assessment feedback for my students led to a shift in my thinking, from dealing with arising 'problems' with feedback engagement individually, to understanding how these problems link to and affect each other. The chapter identifies the problem to be solved through the thesis, giving my personal perspective on the development of the idea for the thesis, followed by an explanation as to why this is a gap

in the literature. I conclude the introduction with the specification of the aims and objectives of the study and the research questions to be addressed.

## **1.2 The Problem statement**

To ground the thesis, and the reasons why it was needed, it is important to give clarity to the 'problem' identified. The complexity of assessment feedback in higher education means it is difficult to pin down a single 'solution' to the issues faced when trying to drive student engagement with feedback.

Staff (teaching practitioners) in Higher Education are faced with ongoing issues with feedback engagement and student perceptions of feedback. Staff and researchers look to the literature to help solve issues they face in practice, such as how students engage with criteria (Beaumont et al., 2011) and the incorporation of dialogic feedback processes (Winstone & Carless, 2019). They will find solutions to particular feedback problems but no overall guidance on how problems are linked, and how solving one feedback issue may still leave gaps that may surface as other problems in future. Indeed, staff need to understand that, whilst enhancements in their own practices may affect some positive change, they are not the only change agents that are needed as part of the enhancement of the feedback process. They also need to understand that student feedback literacy is a 'sociomaterial practice' (Gravett, 2020), which can be 'complicated by factors that exist beyond human to human interaction' (Gravett, 2020). Staff at all levels of an institution need to understand the whole picture, including how institutional practices and policies impact on the development of effective feedback practices, and at the other end of the process, how students need to be actively engaged in assessment and feedback processes to make them effective (Winstone & Carless, 2019).

Ultimately, staff and institutions need a wider appreciation of the issues with assessment and feedback and how they are interlinked. There is a need for a framework of the process of feedback development that identifies where impacts on student engagement with feedback may occur. This framework should take in all these aspects (student, staff

and Institutional processes), allowing staff and institutions to have a complete picture of the factors that can impact on feedback engagement.

The following sections detail the gap in the research, firstly from a personal practice perspective, moving on to detail the gap in the literature.

### **1.2.1 The problem from a personal practice perspective**

I worked as a senior lecturer in Computing for fifteen years before moving to the role of senior and principal lecturer in teaching and learning development, then into a role as Associate Dean for Learning and Teaching quality. As a lecturer in computer science, I was constantly trying different methods to engage students with assessment, criteria, and feedback with a view to helping the students to develop their use of their feedback to inform future performance. I had several years of coming up against multiple issues around students' assessment literacy and engagement with feedback and I was dealing with each 'problem' as it arose. These problems with assessment and feedback engagement were things such as: students not understanding assessment criteria, students not wanting to engage with peer assessment, students having emotional reactions to feedback, students not reading feedback, students not understanding feedback, and so on. What I would do in these cases would be to research best practice, latest thinking in whatever 'problem' I had encountered at that current time. I would then try to fix that problem through interventions in the next semester.

Initially I felt that this was the life of a tutor, the process of trial and evaluation with the purpose of 'fixing' the problems I found along the way to get to the point where barriers were removed for students, enabling and empowering them to become effective learners. I enjoyed this process of understanding how my students were engaging with assessment and feedback, but my move to the role of senior lecturer in teaching and learning development shifted my mindset. I was no longer there to solve the problems I found in my own teaching, I was there to help other tutors to understand the problems and issues they may face and how to address them. Interactions with my colleagues highlighted the fact that they were also going through the same processes I had gone through, trial and error with feedback issues, solving one problem only to find another.

Indeed, many colleagues within my institution were researching and publishing on the individual problems they faced (Canning et al., 2010; Hunter-Barnet & Murrin-Bailey, 2011; Mehta et al., 2010; Murtagh & Baker, 2008; O'Doherty & Beaumont, 2007; Robinson et al., 2013). Whilst it was great to see that colleagues were engaged in trying to improve feedback through various mechanisms, it also felt alarming as I realised that these problems were not being considered holistically. For students to be empowered, staff also needed to be enabled and empowered to understand the full picture of the issues they may encounter with assessment and feedback (assessment is noted here as it ultimately impacts on feedback processes). I wanted to be able to empower my colleagues with the necessary knowledge and I felt I could not do this without understanding the wider picture of the problems with assessment and feedback and how they are interlinked.

The key moment for me came when I undertook a small research project to look at how many of our students were accessing their feedback on the VLE (Moscrop, 2015). This small-scale study (n=250) demonstrated a clear jump in feedback engagement from level 4 (1st year undergraduate) to level 6 (final year undergraduate). The study showed the variation between first, second, and third year students engaging with feedback was roughly 30% (1st year), 60% (2nd year) and 90% (3rd year). I wanted to understand this increasing engagement with feedback over time, and as I started my usual process of looking at the literature for the answers and solutions I realised that much of the literature I was reading was focussing on addressing individual aspects and issues with assessment feedback, even more comprehensive reviews were focussing on specific aspects. For example, Shute (2008) which focussed on formative feedback, Parboteeah and Anwar (2009) which focussed on student motivation, etc. I realised that this was not helping me to understand the myriad of problems that can arise with assessment feedback engagement over time or how these problems may be linked.

This was a turning point in my thinking, I realised I needed to understand the problems not as individual factors to be 'solved' but instead needed to gain a holistic understanding of the problem factors with assessment and feedback and how (and if) they linked to one another. If I wanted to enable students to get to the point of self-regulation and



empowerment, I needed to understand the process and the problems that can occur before they can get there. I also wanted to empower the colleagues I was supporting, giving them a clearer understanding of how each problem may link to others, and how changing or improving one element of their practice may impact on other areas of their practice and their students' learning.

As I started to look to understand what the problems were with assessment feedback, I realised that there was a gap in the literature related to this holistic view of problems and how they were linked. It was not just me and the colleagues I was supporting who would benefit from this conceptualisation of the problematic nature of assessment and feedback, it was the wider academic community. This gap in the literature was the starting point for this PhD study.

### **1.2.2 Defining the need for this study**

Stage one of the study is a full thematic literature review on the problems with feedback in higher education (Chapter 4.2). The aim of this section is to briefly define the gap in the literature and to provide the justification for this study. The literature review chapter defines the gap in more comprehensive terms.

Evans (2013), in her literature review on assessment feedback in HE, noted that there is clear dissatisfaction with the feedback process from both the student and tutor perspective. She noted that student complaints focussed on the content of feedback, organisation of assessment activities, timing of feedback, and lack of clarity about assessment requirements (Higgins, Hartley, & Skelton, 2001; Huxham, 2007; Mutch, 2003; Price et al., 2010). In contrast, tutor frustrations revolve around students not 'making use of' or acting on feedback (Mutch, 2003; Weaver, 2006). A study by Mulliner & Tucker (2017) demonstrated this ongoing discord in the perceptions of students and academics. Evans notes that this 'feedback gap' creates a system where the student is unable to benefit from, and capitalise upon, the feedback they are given.

The feedback gap is difficult to fill since there is no 'one size fits all' resolution to the issues that create the gap. Indeed, much of the literature focuses on ineffectiveness of

feedback rather than solutions to address the issues creating the feedback gap (Bloxham and Boyd 2007; Hepplestone et al., 2011; Hounsell et al. 2008; Rust, O'Donovan, and Price 2005). Price et al. (2010:287) assert that

“Accurate measurement of feedback effectiveness is difficult and perhaps impossible. Furthermore, the attempt to measure effectiveness using simple indicators – such as input measures or levels-of-service – runs the risk of producing information which is misleading or invalid and which may lead to inappropriate policy recommendations.”

This is why Price et al. (2010) suggested a shift to a focus on feedback engagement, rather than effectiveness.

The shift to feedback engagement does not, however, solve the issue of the fragmented and complex nature of the issues. Later work by Price, et al. (2011b), citing studies from Mory (1996) and Shute (2008), note that outcomes of experimental studies into feedback engagement are inconsistent and inconclusive, and that the atomistic examination of the variables affecting feedback use and engagement does not address the different ways that students interact with their feedback. Others agree with Price et al. (2011b) suggesting that the relationship between feedback form, timing and effectiveness is complex and variable, with ‘no magic formulas’ (Sadler, 2010), and that “there is little published evidence on ‘what works best’ in student feedback” (Ball, 2010:142). O'Donovan et al. (2021) note that consideration of all ‘key domains of influence’ in assessment feedback processes is needed to improve student engagement and satisfaction with feedback.

Henderson et al. (2019) also pick up on the atomistic nature of feedback research and note that institutional cultures need to be developed to support effective feedback. They state:

“Different approaches begin to reveal a layered approach to the 'problem' of feedback: feedback practices, learner (and educator) factors, and institutional or broader contextual influence. Although these layers are connected, most studies

focus on one or the other as the central point of concern.” Henderson, et al. (2019)

They also note that their research did not set out to explore how feedback problems interconnected, but that the nature of the interdependencies of feedback problems “remains a significant goal for future research” Henderson, et al. (2019). This clearly articulated the gap in the research this thesis is addressing.

In comparison to the vast body of literature on assessment feedback, there is comparatively little available research on the impacts of institutional structures and policies and their impacts on feedback delivery and engagement, with little appreciation of the interplay between tutor teaching practices, student feedback engagement and institutional policies (Bailey and Garner, 2010). There are, however, several published cases of institutional projects to improve feedback, which are explored in more detail in the ‘institutional practices and policies’ section of the literature review in chapter two. The problems with feedback identified in the literature are diverse, with many overlapping aspects and, as mentioned above, atomising ‘problems’ that are solved through small scale research does not always lead to effective solutions (Russell et al., 2013). This thesis aims to develop a clearer understanding of the broader landscape of ‘problems’ that can inform a more cohesive framework that helps to develop feedback engagement in future.

This thesis will address the gaps above by adding the following to the body of literature:

- 1) Bring together the factors affecting student feedback engagement, including institutional factors affecting engagement, staff, and module level factors and how these ultimately impact on student engagement with feedback.
- 2) A roadmap to improving student feedback engagement through addressing the linkages across the identified problems with feedback engagement.

### 1.3 Aim, Objectives, and Research Questions

Aim:

- Provide a framework that integrates the literature on the problems with student feedback engagement to provide an institutional roadmap to effective development of student engagement with feedback.

Objectives:

- Identify, from the literature, the problem factors\* that inhibit assessment feedback engagement in higher education.
- Identify the problem factors with feedback engagement from the student point of view.
- Identify linkages between each of the problem factors identified to develop an understanding of how barriers to feedback engagement and the development of student self-regulation might occur.

\*The themed problems with feedback engagement will be called 'problem factors' from this point forward to allow brevity in the writing.

Research questions:

**RQ1:** What factors make students more or less likely to engage with assessment feedback?

**RQ1.1:** According to the literature, what are the key factors affecting student engagement with feedback?

**RQ1.2:** In what ways do students describe their feedback experiences and particularly their engagement with feedback?

**RQ1.3:** What are the commonalities and differences between engagement with feedback factors identified from the literature and from student accounts?

**RQ2:** Can we develop a framework to give a lens through which the relationship between problems with feedback engagement can be viewed?

**RQ2.1:** How can we conceptualise the relationships between the problem factors to support the aim of developing learners who engage with feedback?

**RQ2.2:** How can this conceptualisation be translated into a framework which can be both practically implemented and provide a basis for future research and development?

#### **1.4 Outline Research Approach**

This thesis adopts a pragmatic mixed methods approach (PMM). Johnson and Onwuegbuzie (2004) note that a pragmatic mixed methods approach allows for a combination of quantitative and qualitative research techniques, methods, and concepts in a single study. Pragmatic mixed methods are appropriate where the focus is on the problem in its context, rather than the method (Evans et al., 2011). PMM was felt to be suitable for this study as I expected there to be a continuous cycle of abductive reasoning throughout the study, taking in various methods, with the ultimate aim of constructing a framework for the development of student engagement with feedback. This methodology is explored more in the later methodology section.

The stages of the study are as follows:

*Stage 1* - Thematic analysis of the literature using a scoping strategy - to identify the factors that prevent student feedback engagement. This stage involves the identification, analysis and theming of 'problem' factors that are found within the literature. NVIVO is used to surface the problems with feedback in higher education with a view to identifying the key high-level themes.

*Stage 2* - *Mixed methods data collection through a survey* – 400 computing students from one computing faculty at a UK university were given the survey, 182 students completed the survey. Students were asked to respond to qualitative and quantitative questions.

Survey questions were informed by stage 1 and qualitative questions were informed by the outcomes of stage 1 and the survey results.

*Stage 3 - Conceptual framework development* - taking the results from all previous stages into account a conceptual framework that embodies the problematic nature of assessment feedback in higher education is developed.

The methods chapter will cover each stage in detail.

### **1.5 Intended Audience and Potential Contributions**

Higher education teaching practitioners may find the outcomes of this research informative as it will give them a holistic view of the factors affecting their students' feedback engagement. This will develop their understanding of linkages between problems affecting student engagement with their feedback, enhancing their practice overall.

The wider research community will be interested in the framework and how it may be used to inform future research through the developed understanding of how one aspect of feedback improvement may impact on another, or indeed, what structural aspects need to be considered in when addressing particular feedback issues. It may also drive further research linked to underpinning each stage of the framework.

Institutions may use the results of the thesis to inform institutional developments around assessment and feedback, specifically strategies and policies that link to assessment feedback engagement. Understanding the full picture of how higher-level strategy and policy can affect student feedback engagement on the ground will be valuable.

Educational developers and those engaged with the creation of staff continuing professional development (CPD) courses will be able to use the results to engage staff in the understanding of how feedback engagement develops as a holistic process. This may feed into new staff induction and central assessment and feedback training courses.

Those on the front line of teaching in HE will be able to use the framework to inform their own personal practice as they will have a wider understanding of how factors outside of their immediate control may impact on their own students' engagement with their feedback.

## **1.6 Thesis structure**

This section gives a brief orientation for the reader as to the structure of the thesis from this point forward.

Chapter two presents an initial brief literature review introducing some of the theoretical perspectives that have influenced this work. Chapter three presents the research design and methodology, explaining the design of the three stages of the thesis, which are 1) the thematic literature review; 2) student survey data collection; and 3) the conceptualisation of the relationships between the problem factors identified.

Chapter four presents the results of stages one and two, with the results of stage one being presented as a number of 'problem factors' identified from the literature as preventing or limiting feedback engagement. The stage two student survey results are presented as a set of quantitative and qualitative results, with interesting insights from the students on their feedback experiences.

Chapter five pulls together these results into the third stage, where we conceptualise the relationships between the problems identified in stages one and two and develop the framework for enabling student engagement with feedback.

Chapter six presents the discussion of the framework, including institutional, staff, and student considerations when trying to drive engagement with feedback. The contribution to the literature and to institutional policies and practitioners is discussed along with suggested future research and the limitations of the study.

## **Chapter 2: Literature Review – Theoretical perspectives**

Stage one in the methods of this Doctoral study includes a full thematic literature review that identifies the problems affecting student feedback engagement (chapter 4). The initial gap in the literature noted in the introduction was that there was no ‘road-map’ to improving student feedback engagement through addressing the linkages across the identified problems with feedback engagement. To explore this gap a full understanding of the problems affecting feedback engagement was necessary, this necessitated the thematic literature review in chapter 4.

Despite the depth of literature engagement in the stage one thematic literature review, it was also necessary to have this initial review to explore other theoretical perspectives that may influence student engagement with feedback. This chapter will develop a theoretical framework, utilising Bronfenbrenner’s ecological systems theory (1979) to explore the theory on structural impacts on feedback engagement with a view to identifying higher level holistic views of impacts. It will also initially explore the idea of ‘feedback engagement’ to set the scene for what it means in the context of this study.

### **2.1 Theoretical Framework**

Ecological systems theory was a framework developed by Bronfenbrenner (1970) with a focus on child development. In this case, it will be utilised as a lens through which to view student engagement with feedback. The framework suggests that a person’s development is influenced not just by immediate impacts, but also by everything in their surrounding environment. This ‘environment’ is noted as different ‘systems’ that impact on an individual in a given setting, as shown in Fig 2.



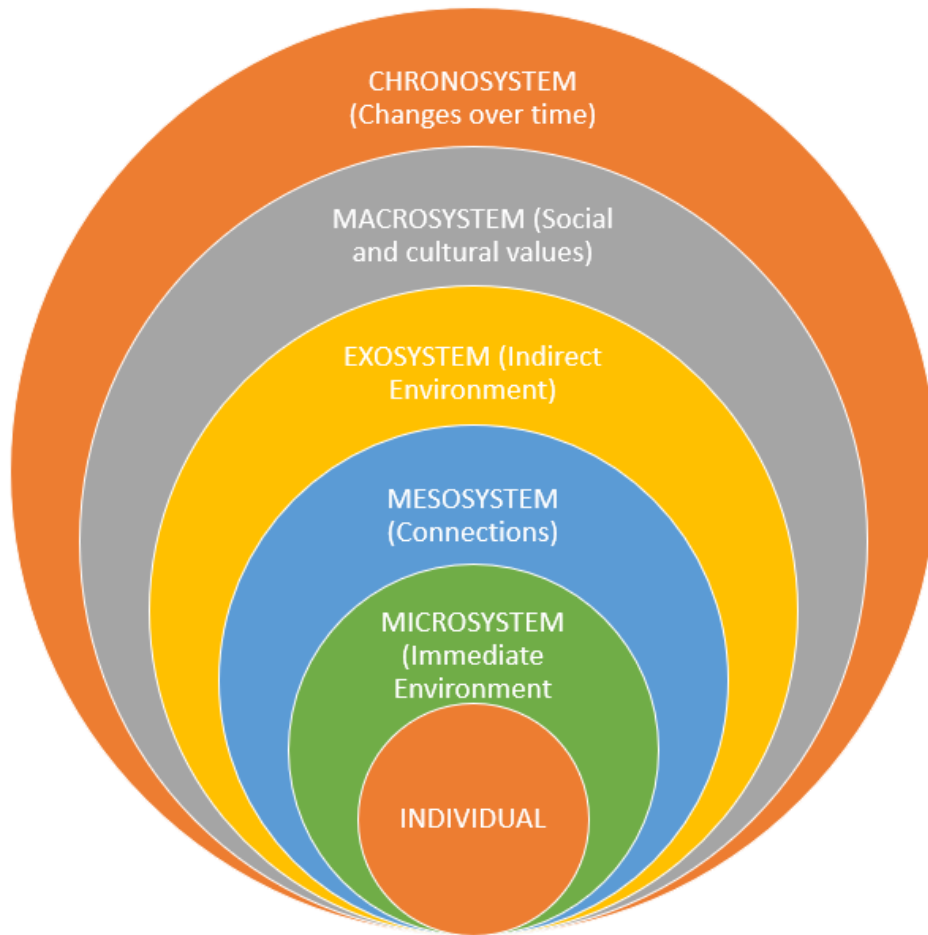


Fig 2: Adapted Bronfenbrenner's ecological systems theory diagram (1979)

Using this model as a theoretical framework for this study means the variety of impacts on student engagement with feedback are brought into focus. Also, the linkages across the identified problems with feedback engagement take into account impacts outside the immediate environment, which could otherwise limit the understanding of the wider impacts in student engagement with feedback.

Given this, what are the initial considerations at each point of this model for impacts on student engagement with feedback?

- Individual – The individual student will have many aspects that may impact on their ability to engage with feedback. Examples are: Personality, intelligence, emotional intelligence, prior educational experience, self-regulation, and so on.

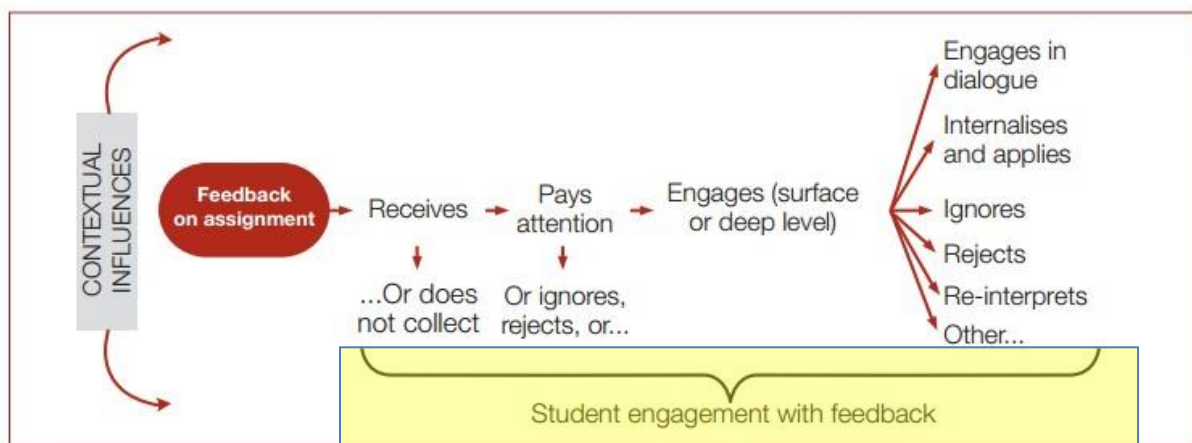
- Microsystem – The immediate environment may impact as follows: The quality of feedback, peer behaviour, tutor inputs, assessment quality, assessment guidance, feedback methods, etc.
- Mesosystem – The mesosystem relates to immediate connections in the student environment, in this context the sociocultural capital of the student can be affected by the experiences of those around them (e.g. they have a family member who has been to university and can explain the norms of assessment and feedback). They may also be affected by other external connections such as when they have to take employment alongside study, or are a carer for others outside of university, etc, all aspects that can affect students engagement.
- Exosystem – In this case the exosystem is the indirect impacts from university rules, structures, policies, strategies and values that can impact on assessment and feedback design and ultimate feedback engagement.
- Macrosystem – The macrosystem level impacts via the ‘norms’ related to assessment and feedback such as the national regulatory frameworks and cultural and social norms expected in universities.
- Chronosystem – This system impacts on changes over time. This can be the development of the student themselves, changes in university policies or strategies, developments in national regulatory frameworks, and so on. For example, when the national student survey started to focus on assessment and feedback there was a shift in institutional focus on this area.

This lens will be used to ensure the exploration of the factors affecting student engagement are not limited to immediate impacts, instead ensuring a holistic view of the impacts on student engagement with feedback. The next stage is to explore what feedback engagement is according to the literature and to identify the key theoretical perspectives.

## **2.2 Feedback engagement**

Price et al.’s (2011a) suggestion that the literature on feedback *effectiveness* requires a shift towards an investigation of student *engagement* with feedback was a key concept

that underpinned the initial research for this doctoral study. Ultimately, we can change the feedback to be more 'effective', but it became clear when engaging with the literature that if students are not empowered to engage through structural processes or through an understanding of their diversity then engagement with feedback is effectively blocked (Zepke, 2014). The idea of student engagement in the literature is complex, and for the purposes of this study it is important to specify what we mean by 'feedback engagement' when we use this term throughout the thesis. Handley, Price & Millar (2008) specified a process of student engagement with feedback and importantly noted (Fig. 2.1) what aspects are encompassed within 'student engagement with feedback'. This



is highlighted in yellow in Fig. 1 for the purposes of this discussion.

Figure 2.1 Process of student engagement (or disengagement) with feedback (Handley, Price and Millar, 2008)

It is felt that this model is appropriate as it gives a clear lens through which to view student feedback 'engagement' within the confines of this study. The diagram notes that engagement can include anything from paying attention to and reading feedback through to deep engagement, including dialogue and internalisation of feedback. For the purpose of this study, feedback engagement takes a similar stance and means *any* student engagement with feedback, from simply looking at the feedback through to internalisation and deep engagement. Obviously over time we wish to develop the depth of student feedback engagement, but it is important to note that the first stage of

engagement with feedback is simply getting the student to read and pay attention to it (Price et al., 2011a).

Evans (2013) undertook a comprehensive thematic review of the research evidence on assessment feedback in higher education, developing her 'twelve pragmatic actions for those wanting to address feedback engagement in practice. These are noted below:

#### **Evans (2013:79) 'Twelve Pragmatic Actions'**

1. ensuring an appropriate range and choice of assessment opportunities throughout a program of study.
2. ensuring guidance about assessment is integrated into all teaching sessions.
3. ensuring all resources are available to students via virtual learning environments and other sources from the start of a program to enable students to take responsibility for organizing their own learning.
4. clarifying with students how all elements of assessment fit together and why they are relevant and valuable.
5. providing explicit guidance to students on the requirements of assessment.
6. clarifying with students the different forms and sources of feedback available including e-learning opportunities.
7. ensuring early opportunities for students to undertake assessment and obtain feedback.
8. clarifying the role of the student in the feedback process as an active participant and not as purely receiver of feedback and with sufficient knowledge to engage in feedback.
9. providing opportunities for students to work with assessment criteria and to work with examples of good work.
10. giving clear and focused feedback on how students can improve their work including signposting the most important areas to address.
11. ensuring support is in place to help students develop self-assessment skills

- including training in peer feedback possibilities including peer support groups.
12. ensuring training opportunities for staff to enhance shared understanding of assessment requirements.

Figure 2.2 Twelve Pragmatic actions to improve feedback engagement (Evans, 2013:79)

This list is an excellent resource for anyone designing research interventions to improve feedback. Considering the list from a holistic point of view, we can see the considerations include curriculum and assessment design, taught session design, student guidance (which will come from staff, a department, or the institution), feedback quality, staff training, developing student understanding of assessment and feedback processes, and so on. Again, we have this complexity in the underpinning drivers that would enable these twelve pragmatic factors to be implemented.

Having established what was meant by ‘feedback engagement’ in the context of this thesis, and with some explanation of the practical aspects of engaging students with feedback, the next stage was to look at the literature with a view to identifying structural influences that may affect student engagement with feedback.

### **2.3 Structural influences**

Handley, Price & Millar’s (2008) work on feedback engagement is the key publication in the literature that talks to structural influences on feedback engagement, this study led to many other papers also referenced in this thesis (Handley, Price & Millar, 2011; Price, Handley & Millar, 2011a and 2011b). Their original study involved four different strands of research, from staff and student surveys and interviews through to specific interventions at five partner institutions. Their work noted that:

*‘Student engagement with assessment feedback is not a student responsibility alone. Student engagement is not simply a function of psychological factors such as self-motivation and time spent on extra-curricular activities. Instead, engagement is part of (and influenced by) a wider process involving others inside and/or outside a community of practice. The interactions between context, staff*

*and students produce student (and staff) engagement.'* (Handley, Price & Millar, 2008)

This important distinction that feedback engagement is impacted by wider factors outside of the students' control speaks to the gap that this study is trying to address. These factors are often structural but there are also ecological, sociocultural and sociomaterial factors that can affect students ability to develop their feedback literacy.

The structural factors are things such as institutional policies on assessment and feedback, staff (tutor) training on effective feedback practices, through to course structures that may impact on feedforward. The ecological, sociocultural and sociomaterial factors can include how the learning environment can impact on student feedback literacy (Chong, 2020), the importance students having of strong relationships with educators and peers (Pitt, et al., 2019) and that student feedback literacy can be 'complicated by factors that exist beyond human-to-human interaction' (Gravett, 2020).

The literature so far lacks a holistic view of the interrelations between the impacts on feedback engagement, ultimately, staff and institutions need a wider appreciation of the issues with assessment and feedback and how they are interlinked.

There are other publications that speak to the more holistic view of effective feedback. Work by Henderson et al. (2019) specified 12 conditions that enable effective feedback. This publication came out of an 18-month government funded project and had the goal to 'deliver an empirically based study of feedback designs and conditions to guide educators, academic developers and instructional designers, as well as institutional policy' (feedbackforlearning.org, 2019:1). This work notes clear distinctions between what the students can do and what conditions outside of their control may impact on successful feedback uptake. This includes aspects such as feedback design, which needs to be taught to tutors, alongside institutional cultural aspects

## Feedback is successful when...

### Capacity for feedback

1. Learners and educators understand and value feedback
2. Learners are active in the feedback process
3. Educators seek and use evidence to plan and judge effectiveness
4. Learners and educators have access to appropriate space and technology

### Designs for feedback

5. Information provided is usable and learners know how to use it
6. It is tailored to meet the different needs of learners
7. A variety of sources and modes are used as appropriate
8. Learning outcomes of multiple tasks are aligned

### Culture for feedback

9. It is a valued and visible enterprise at all levels
10. There are processes in place to ensure consistency and quality
11. Leaders and educators ensure continuity of vision and commitment
12. Educators have flexibility to deploy resources to best effect

Figure 2.3 The 12 conditions that enable effective feedback (Henderson et al., 2019).

This work is valuable as it emphasises the necessity to look to wider influences on feedback engagement such as institutional culture (points 9-11), but it still leaves a gap on how each of the conditions may impact on one another, this 'framework' for how feedback problems interrelate is what this doctoral thesis is seeking to address.

## 2.4 Institutional policies and processes

As mentioned in chapter 1, in comparison to the vast body of literature on assessment feedback, there is comparatively little available research on the impacts of institutional structures and policies and their impacts on feedback delivery and engagement. There are several publications that describe institutional change projects and their impacts on assessment feedback, which are discussed below.

Rust et al. (2013) described work from Oxford Brookes University, where they introduced an 'assessment compact' between the university and its students. They discuss changes in policy and how these were translated to practice to drive changes in the quality of assessment and feedback. One of their recommendations when concluding their work was that attempts to improve assessment and feedback institutionally should avoid simplistic piecemeal approaches. This also supports my previous assertions of the

importance of, and need for, a bigger interconnected view of impacts on feedback practice.

Holden and Glover's (2013) institutional change project focussed on presenting a campaign-based approach to feedback improvement. They note that the change process moved through several iterations (namely the 'FAST', 'TALI' and 'Feedback for learning' campaigns) where they targeted activities at different levels of the institution. These levels were: Student, module, programme, faculty, institution, and included external expertise. This project very clearly identified the importance of engaging at different levels of an institution to ensure improvements in feedback are driven in at all levels. Interestingly Holden and Glover noted that the partnerships between these levels was key to the success of the project.

Another institutional project at the University of Hertfordshire was described by Russell et al. (2013). Their initial explanation for the project (called the ESCAPE project) discussed the limited impacts of small stand-alone projects within the university. They noted that their university had offered innovation funding for small scale research projects related to teaching and assessment, and although there had been many interesting projects demonstrating benefits to staff and students, very few of these innovations made it outside of the school in which they occurred.

This again points to the importance of institutional involvement if feedback practice is to be improved wholesale. The ESCAPE project impacted on institutional processes at the university, from staff development through to programme development and review processes (Russell et al., 2013).

Draper & Nicol (2013) discussed what they had learned from a number of large-scale projects (REAP and PCR). Interestingly, they also point to the learner, teacher, course and institutional levels impacting on improvements in feedback. However, their insight noted that whilst each of these projects aimed to change institutional practice around feedback, the 'levers' to drive change can be applied at any of those levels. Again, there was no discussion as to how these aspects interconnect.



Reading these examples of institutional change projects, it is clear to see that projects with drive and funding at an institutional level can have a big impact on feedback quality. Indeed (Russell et al., 2013) note that the ESCAPE project had driven a year-on-year improvement in the NSS results on the questions related to assessment and feedback. However, Draper & Nicol's (2013) work makes it clear that the drivers, or 'levers' for improvement can come from any level, from learners, tutors, or programmes.

Understanding how these levers link to impact on engagement with feedback is the gap being addressed in this work and is the key driver for this study, which aims to develop a framework that will help universities and teaching practitioners to understand how the factors affecting feedback engagement interlink.

## Chapter 3: Research Design

The aim of this study is to provide a framework that uses the literature on the issues with student feedback engagement to provide a roadmap to effective development of feedback engagement through, tutor and institutional processes. This chapter details the mixed methods and multi-phased nature of this study (Creswell and Plano Clark, 2011) detailing the methodology. It then presents each stage of the study as separate subsections, describing method, data collection, data analysis, and other pertinent aspects relating to each stage of the study. Finally, ethical considerations for the study and the limitations of the methodology are discussed.

The research questions (RQ) are as follows:

**RQ1:** What factors make students more or less likely to engage with assessment feedback?

**RQ1.1:** According to the literature, what are the key factors affecting student engagement with feedback?

**RQ1.2:** In what ways do students describe their feedback experiences and particularly their engagement with feedback?

**RQ1.3:** What are the commonalities and differences between engagement with feedback factors identified from the literature and from student accounts?

**RQ2:** Can we develop a framework to give a lens through which the relationship between problems with feedback engagement can be viewed?

**RQ2.1:** How can we conceptualise the relationships between the problem factors to support the aim of developing learners who engage with feedback?

**RQ2.2:** How can this conceptualisation be translated into a framework which can be both practically implemented and provide a basis for future research and development?

### **3.1 Methodology and Philosophical Stance.**

This thesis adopts a pragmatic mixed methods approach (PMM). Johnson and Onwuegbuzie (2004) note that a pragmatic mixed methods approach allows for a combination of quantitative and qualitative research techniques, methods, and concepts in a single study. PMM was suitable for this study as I expected there to be a continuous cycle of abductive reasoning (Cresswell, 2014) throughout the study, with the ultimate aim of identifying a useful solution to the development of student feedback engagement in future. An abductive approach can be used to “further a process of inquiry that evaluates the results of prior inductions through their ability to predict the workability of future lines of behaviour” (Plano Clark & Creswell, 2008).

Feilzer (2010:6) suggests that “pragmatism as a research paradigm supports the use of a mix of different research methods as well as modes of analysis and a continuous cycle of abductive reasoning while being guided primarily by the researcher’s desire to produce socially useful knowledge”.

Pragmatist approaches developed from the work of Peirce, James, Mead and Dewey (Scheffler, 1974). The approach for this study is Deweyan Pragmatism (Dewey 1910, 1920, 1938), which is grounded in transactional realism, suggesting ‘that the mind and world are in constant interaction with each other through transactions (...). This constant change presents situations that require adaptive behaviors (sic) from individuals’ (Hall, 2013:17).

The mixing of philosophical paradigms through mixed methods research has been debated over many years (Ghiara, 2019; Green, 2007). However, Deweyan pragmatism ‘does not perceive any “mixing” at the level of philosophical assumptions, because pragmatism itself is a philosophical perspective, thus making the question of philosophical compatibility irrelevant’ (Hall, 2013). The pragmatic approach to this study

therefore allowed continuous cycles of abductive reasoning, taking in various methods, without the pressure of philosophical compatibility.

Within this study I have both constructivist (Bruner 1960 & 1961) and socio-constructivist (Vygotsky, 1978) perspectives. These perspectives drove the pragmatic mixed methods approach to this study as I was following the data and outcomes from each of these perspectives. Firstly, the stage one thematic analysis put me in the position of trying to solve a problem. To identify what the problems with feedback engagement were, I was required to draw on my past experiences, my existing knowledge and the knowledge from the vast array of literature to discover facts and relationships between the problems identified. This was indeed a large constructivist project, reading and theming many articles on assessment feedback engagement to ultimately construct a definitive list of 'problems' with assessment feedback engagement.

The socio-constructivist element is present in the form of the student interactions with me, through the data collection. This socio-constructivist perspective views assessment feedback as an integral part of the learning process (Rust et al., 2005; Winstone et al., 2021). Handley et al. (2011:11) note that "there is an assumption that feedback is interpreted against a contextual backdrop of structural influences. For example, students bring their socio-cultural heritage to a Higher Education environment which is organised by discipline, department or degree programme, and these contextual influences will interact to create a student experience". The socio-constructivist lens in this study relates to the student view of their own feedback experiences, accepting that students are not one homogenous body (McArthur, 2021), but individuals who will view their feedback experiences through their own world view.

The decision to go with a multiphase approach was taken after analysis of the possibility of a case study approach and a grounded theory approach. Grounded theory was ruled out as the approach ultimately aims to develop a *theory* offering explanations on the concerns of a given population (Scott, 2009). As the aim of this study does not include developing theories it was felt the pragmatic multiphased mixed methods approach was more appropriate.

Similarly, a case study approach, whilst allowing flexibility, did not allow the flexibility that a PMM multiphase approach did. In this study the defined case may have changed considerably based on the results from each stage. As a result, it would have been difficult to be confident from the outset that the case originally defined would not change considerably as I moved through the stages of the study. Whilst it would have been possible to frame the study within a case study approach, I felt that the PMM multiphase approach granted more flexibility to follow the results of each stage, which proved to hold true.

The study used a ‘multiphase’ or ‘multilevel’ mixed method design as described by Creswell and Plano Clark (2006; 2011, see Fig. 3.1). A multiphase design connects quantitative and qualitative studies sequentially, with each new stage building on the results from the previous stage (Creswell & Plano Clark, 2011; Ivankova et al., 2006).

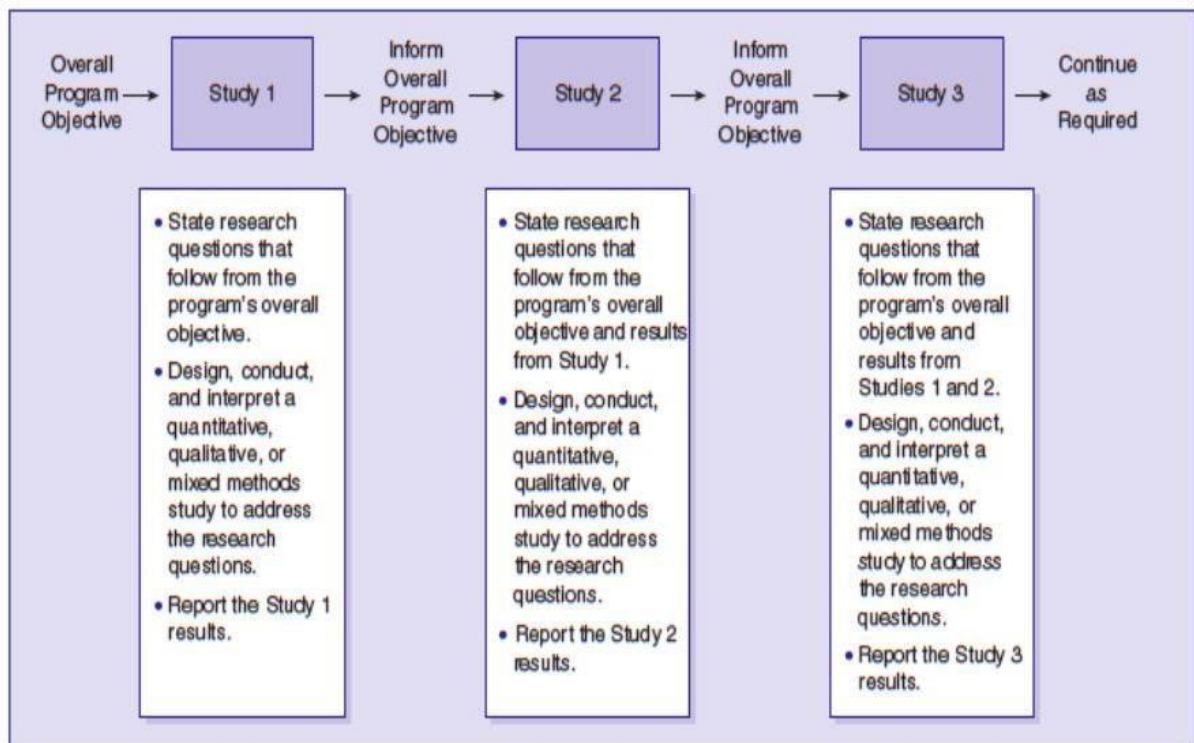


Figure 3.1 Flowchart of the basic procedures in implementing a multiphase design (Creswell & Plano Clark, 2011:102)

This pragmatic multiphase design fits with the intended approach to this study, with an initial ‘thematic review’ stage (RQ1 and 1.1) which in turn informs the questions and

approaches to the survey. The final stage sought to link the student data to the emergent problems from the Initial thematic literature review, leading to the development of a framework of factors affecting successful feedback engagement (RQ2). Feilzer (2010) notes that pragmatism is a commitment to uncertainty, and whilst I show below the stages that ultimately became part of my study, I was committed to the ‘pragmatic’ nature of the study, which meant that stages remained fluid until the end.

The results of the thematic analysis, which developed my appreciation and understanding of the problem sphere in assessment feedback also meant I changed initial plans to focus only on student development over time. Instead, my focus shifted to the development of the framework that would aid understanding of how students can get to the point of selfregulation through the process of assessment and feedback engagement, and where blockages to this process may occur.

### 3.3 Methods

#### 3.3.1 Research stages: Methods, Data Collection and Analysis

The process and stages of the research are described below describing how the mixed methods will be ordered noting the methods, participants, reasons for collection and data analysis methods (Table 3.1).

Method	Data collection/ Participants	Why is this data needed?	Data Analysis
<b>Stage 1: Thematic review of the literature</b>	No participants.  The identification, analysis and theming of ‘problem’ concepts that are found within the literature	The study relies on understanding/ identifying the problems with assessment feedback engagement.	NVIVO is used to code themes.

<p><b>Stage 2:</b></p> <p><b>Mixed data collection in surveys (quantitative and qualitative)</b></p>	<p>Full cohort Likert style survey with some open-ended questions issued to all three years (levels 4-6). Sent to approximately 500 students.</p> <p>Google Survey (anonymous)</p>	<p>To collect data on student perceptions of online feedback. E.g. what do they find most useful? If they do or don't engage with feedback, why? etc.</p>	<p>Google forms present spreadsheet results.</p> <p>Quantitative data will be analysed in excel.</p> <p>Qualitative data will be thematically coded.</p>
<p><b>Stage 3:</b></p> <p><b>Conceptual framework development</b></p>	<p>No participants or further data collection required</p>	<p>To make sense of the previous stages in order to present a final framework that represents the problematic nature of assessment feedback engagement</p>	<p>Linking identified themes to student data collection</p>

Table 3.1 Presentation of the Methods, Participants, Data Collection and Data Analysis (Based on Creswell and Plano Clark (2011) multiphase approach)

Given the mixed methods and multiphased nature of this study, this section presents each stage of the study as separate sections, describing method, data collection, data analysis, and other pertinent aspects, relating to each stage.

Before describing each stage, for the sake of clarity, it is worth explaining that, as well as the quantitative data collection, this study had two separate elements of thematic data analysis, as follows:

- A thematic review of the literature (Stage I)- Involving searching through papers identified as pertinent to the study. Each paper was read several times with themes then highlighted using NVIVO software.
- A thematic review of open question survey data (Stage II qualitative survey data) - As this data was already categorised under specific questions, a standard thematic analysis approach was to be used by question.

These analysis methods are detailed within each stage below.

### **3.4 Stage I Thematic Literature Review**

The first stage of this study was a thematic review of the literature. This links to the following research questions:

**RQ1:** What factors make students more or less likely to engage with assessment feedback?

**RQ1.1:** According to the literature, what are the key factors affecting student engagement with feedback?

The thematic review of the literature using a scoping strategy was undertaken to identify the key problems with assessment feedback engagement according to the literature (RQ1, RQ1.1). This was done with a view to theming the 'problem factors' identified to identify overall themes relevant to the study in question (Webster & Watson, 2002). Davis et al. (2009) defined a scoping strategy as involving 'the synthesis and analysis of a wide range of research and non-research material to provide greater conceptual clarity about a specific topic or field of evidence'.



### **3.4.1 Search strategy**

As stated by Jonsson (2012) the number of studies, articles and books published in relation to assessment feedback is vast, and as such a standard search for the key terms in academic databases resulted in an unmanageable list, even when key search terms and publication years were adjusted. For example, using the Lancaster University 'One Search' tool to search available academic databases for 'assessment feedback' brought back almost 500,000 results. Limiting these results to the past 10 years and excluding academic databases thought to be less relevant reduced this number to almost 230,000 results.

Given this initial challenge, a more structured search strategy was developed using guidance from an article by Brettle (2003):

- What am I searching for? - Identifying the question I want to answer, including key words and phrases.
- What are the constraints? - What inclusion and exclusion strategies do I wish to use?
- Where to search? - Identifying key databases and journals.
- Supplementary searching - Using techniques like snowballing.
- How comprehensive/When to stop? - Given the size of the body of literature on feedback I needed to understand when the literature review would stop.

#### **What am I searching for?**

The thematic literature review aim was to identify the problems associated with feedback engagement. As such, the many and varied studies related to efficacy of individual feedback methods were discounted. However, some papers synthesising some of these studies were included as they identify problems and enhancement practices.

#### **What are the constraints? - Inclusion and exclusion strategies**

The literature used focuses on higher education (HE) practice in terms of feedback engagement, not school level or further education practices. This was felt to be a suitable

approach given the focus of the study, but also in that feedback engagement by definition will change at HE level due to the expectations of student development, self-efficacy, and self-regulation. A focused search on “assessment feedback engagement” found only 1 result that was not directly relevant. Assessment feedback engagement without quotations was then searched and gleaned almost 88,000 results, even when limited to the last 10 years the results totalled over 77,000 results, and 55,000 for the last 5 years.

A focussed “Feedback engagement” search found 467 results, limiting this to articles from academic databases reduced this to 217. However, many of these were irrelevant and not on topic, so the search was limited to those relevant to education by removing searches from irrelevant academic databases (such as ProQuest Business Collection) and by editing the ‘subject’ search. This then gave 40 results. Of these results 7 papers were found to be directly relevant to this literature review.

Given these challenges with the searching strategies, key articles were identified (Beaumont et al., 2011; Carless, 2007; Carless and Boud, 2018; Evans, 2013; Handley et al., 2008; Price et al., 2011a; Price et al., 2011b) that focussed specifically on feedback engagement and a snowballing approach to finding other relevant articles was used. Given that this approach used ‘key articles’ with the most recent publication date of 2017 (when the initial literature review searches took place), a later further adjusted database search was undertaken to try to identify any newer work relevant to student feedback engagement in the following years (to 2022). Again, a general edited search (to exclude irrelevant databases) on assessment feedback garnered 35,359 results. However, given this large number again ‘engagement’ was added to the search, which gave 686 results. This again found several relevant resources, which were assessed manually to ensure they were relevant to HE, leading to 52 relevant articles which were screened.

### **Where to search?**

Key databases such as JSTOR, Scopus, Academic search ultimate and Sage Journals were utilised. In addition, key journals were also identified, through initial searches and also through the reading of other articles. These were:

- Assessment and Evaluation in Higher Education

- Journal of Further and Higher Education
- Studies in Higher Education
- Teaching in Higher Education
- International Journal for Academic Development
- Educational Psychology
- Cogent Education

### **Supplementary Searching**

Additional sources were highlighted through backwards Snowballing (Wohlin, 2014) of articles found through the above databases and journals. This included sources from the Higher Education Academy (Now 'AdvanceHE') and other non-journal academic sources.

### **When to stop?**

Once a set of suitable papers were found (relating directly to problems affecting student engagement with feedback and variants of this topic) the process of theming began (detailed in the next section), however, it is important to note that as the theming process happened, further backward snowballing of articles occurred, adding further sources to the stored library of suitable sources to be coded. This process continued until it was noted that the process was exhausted in that no additional themes (nodes) were being identified. The prisma chart below shows the exact search numbers and numbers of articles screened, checked for eligibility, and then included.

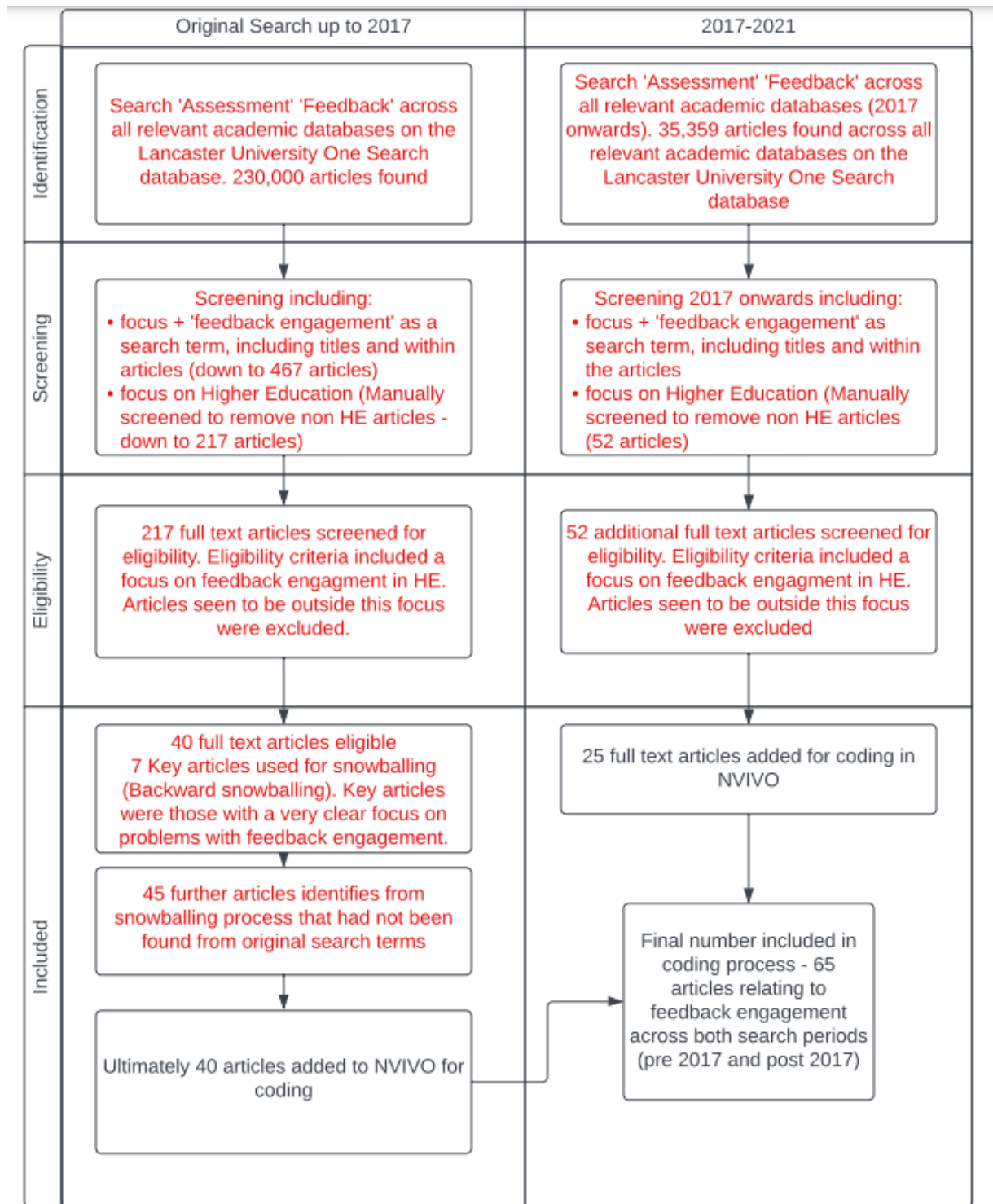


Figure 3.2 Prisma flowchart showing search literature search and selection process

### 3.4.2 Stage I Analysis

The resources found (papers, articles, etc) were loaded into NVIVO and themed as follows:

- Initial target nodes (codes) were identified as follows: 'problems with feedback' 'feedback engagement' and 'over time' (to consider the development of student self-regulation)
- The paper was given an initial read.
- The paper was read again, and themes were highlighted and tagged to specific nodes in NVIVO (Fig. 3.4).
- Additional nodes emerged as this process progressed, such as, 'assessment literacy', 'psychological factors', 'dialogue', 'feedforward', and so on (Fig. 3.5). This process continued until it was noted that the process was exhausted in that no additional nodes were being identified.
- A separate document for each node was then created with the highlighted excerpts for each node shown (NVIVO allows the collection of all highlighted sections related to one node to be viewed in one document).
- Each node was then manually reviewed and analysed for overarching emergent themes noted across all nodes (Williams, 2008) (Fig. 3.6). This identified 8 overarching themes.

Further detail on this process is shown below.

A screenshot selection of how these papers looked and were coded in NVIVO is shown below.

Name	Codes	References
Chong 2021 Reconsidering student feedback literacy from an e	1	2
De Klein 2021 student and teacher feedback literacy an instruct	2	2
Dicker et al 2018 What does quality in higher education mean	1	1
Evans 2013 -Making sense of assessment feedback in Higher E	29	152
Handley 2011 From copying to learning using exemplars to en	9	22
hattie and timperley 2007 the power of feedback - highlighted	10	32
Hepburn et al 2021 A strategic framework for delivering ongoi	1	4
Hepplestone et al 2011 Using technology to encourage studen	10	21
Heron et al (2021) Developing the relational in teacher feedbac	3	4
Jonsson 2012 Facilitating productive use of feedback in higher	15	42
Jorgensen 2019 Investigating non engagement with feedback i	2	5
Lim et al 2021 Students perceptions of and emotional respons	2	2
Lizzio 2008 Feedback on assessment students perceptions of q	7	7
Malecka et al 2020 Eliciting processing and enacting feedback	4	7
Malecka et al 2021 An empirical study of student action from i	3	4
Molloy Boud and Henderson 2020 Developing a learning centr	2	3
Murdoch-Eaton_et_al-2012 Maturation differences perceptions	7	18
Mutch et al 2018 A journey towards sustainable feedback	3	5
Nasri et al 2021 The unsung role of assessment and feedback i	6	10
Nicol 2010 From monologue to dialogue improving written fee	19	51
Nicol and Mcfarlane Dick. Formative assessment and self regul	14	33
Nicol et al 2014 Rethinking feedback practices in higher educat	5	6
Nieminen et al 2021 Stedent agency in feedback	1	1
ODonovan et al 2004 Know what I mean Enhancing student un	6	13
O'Donovan et al 2021 What makes good feedback good	3	3
Orsmond et al 2013 Moving feedback forward theory to practi	13	35
Oxford Brookes Engaging students in assessment feedback FD	18	61

Figure 3.3 Screenshot of a selection of papers in NVIVO showing number of codes

For this process the articles were read several times and themes were identified as each paper was coded (fig. 3.4), highlighting themes and sub-themes in all papers.

Although there is a large amount of evidence supporting the usefulness of feedback to promote student learning, it is also evident that feedback alone is not sufficient to improve outcomes (Lew, Alwis, & Schmidt, 2010). Enhancing the quality of feedback to students needs to be considered against the backdrop of the massification and consumerization of HE in the 21st century with increasing numbers and a more diverse student body than ever before (Hunt & Tierney, 2006).

In spite of claims about the power of feedback to produce positive learning effects (Black & Wiliam, 1998; Hattie & Timperley, 2007), within the HE context, there are concerns regarding the perceived lack of impact of feedback on practice (Perera, Lee, Win, Perera, & Wijesuriya, 2008). Evidence of progress in improving feedback practices is seen to be lacking (Orrell, 2006), conflicting, and inconsistent (Shute, 2008). However, others note significant progress in the field, with student feedback becoming an increasingly central aspect of HE's learning and teaching strategies (Maringe, 2010; S. Brown, 2010). A new culture of assessment within HE has been identified, with evidence of peer assessment being used to promote student self-regulatory practice (Cartney, 2010; Nicol, 2010; Rust, 2007).

At the same time, there are claims that higher education institutions have not been as mindful as they might of the emerging findings from schools in order to enhance assessment feedback (Kluger & DeNisi, 1996). Black and McCormick (2010) contended that in HE, a greater focus should be on oral as opposed to written feedback, that greater explication is needed on strategies to enhance independence in learning, and that greater harmony is needed between formative and summative assessment.

Figure 3.4 Example of highlighted themes in one paper in NVIVO

The initial themes identified for coding before the process started were 'problems with feedback' 'feedback engagement' and 'over time' (to consider the development of student self-regulation), however, there were many other emergent themes as the reading progressed (fig. 3.5). These related to specific problems noted with feedback engagement, which are detailed in the results section.

Name	Files	References
Aim of study	11	14
Assessment feedback design	11	24
Assessment literacy	13	23
Bad feedback	5	6
draft feedback	3	4
EAF	4	16
Engagement	10	25
Feedback dialogue	16	48
DAG	5	14
feedback themes	16	43
feedback training	19	71
Feedforward	6	9
Good Feedback	28	85
Other types of feedback	0	0
Over Time	21	92
Problems with feedback	30	113
psychology	5	7
questionnaire	1	1
quotes	18	52
relational dimensions	4	8
Results and findings	19	29
socio cultural	13	20
Student	10	17
student percep of fb	9	12

Figure 3.5 Example of emergent codes (themes) identified in thematic literature review

This process continued until it was noted that the process was exhausted in that no additional nodes were being identified. In total, 34 nodes were identified. This included the theming of 65 articles (which were selected from hundreds of articles assessed based on their content being related to feedback problems and feedback engagement). The final stage was to ‘theme’ the nodes relating to the problems with feedback engagement, this was done manually by printing the results from each of the nodes and highlighting overarching themes. A picture of how this was done is shown below:



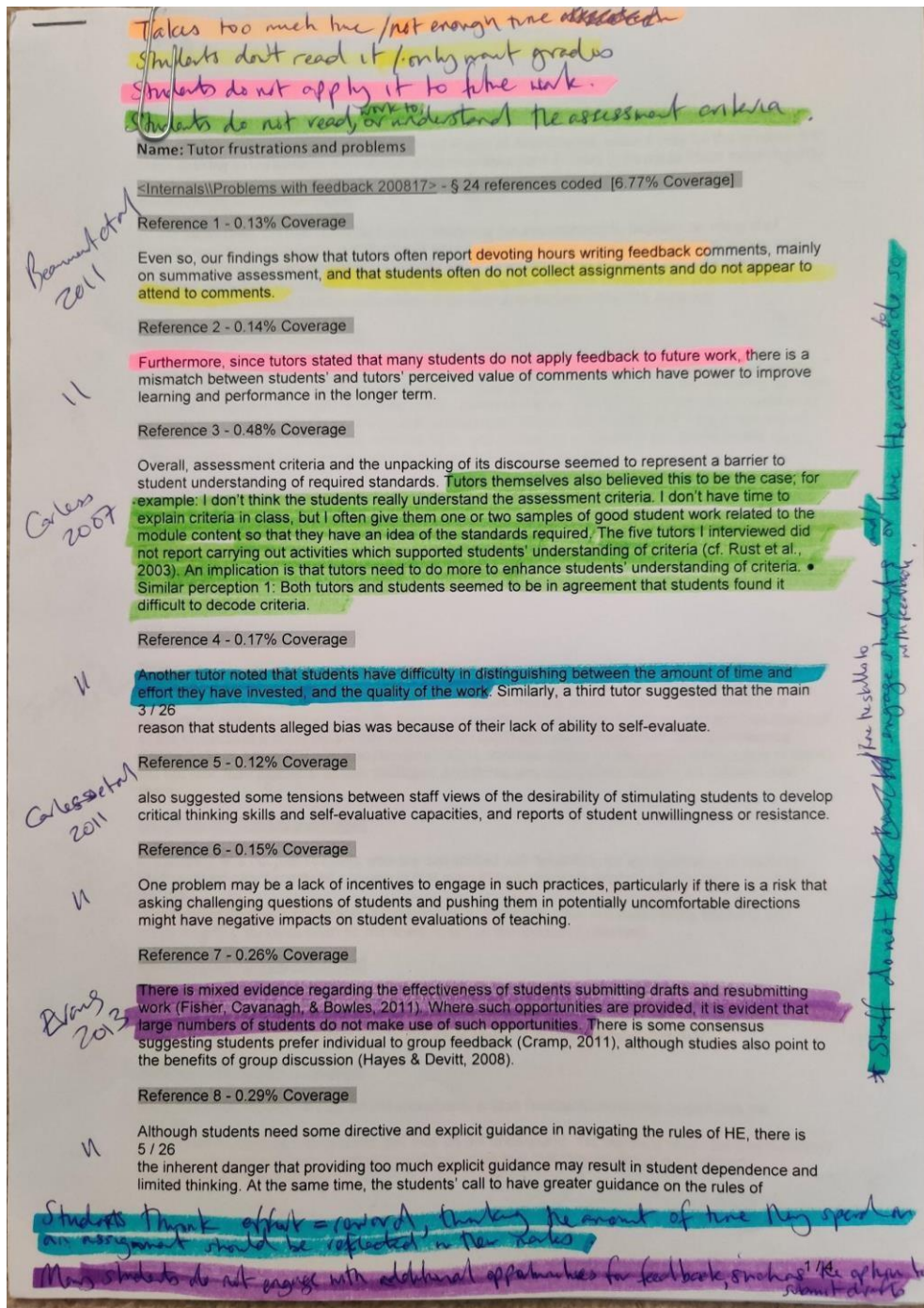


Figure 3.6 Manual theming of nodes printed from NVIVO

This resulted in 8 final themes. The results chapter details these themes and presents the resulting thematic analysis of the literature, presenting a clear list of 'problem factors' with student assessment feedback engagement that emerged from the thematic analysis of the literature. To attempt to make sense of this problem landscape in assessment feedback, I took these eight problem factors and undertook a mapping exercise in an

attempt to identify where each factor impacts, or is impacted by, other factors. This detail can be found later in chapter 5, section 5.3.

### **3.5 Stage II Survey Data Collection**

The goal of the survey was to address the specific research questions, namely, how the identified problems (from the literature) link to the student perspectives of their assessment feedback engagement. These are:

RQ1: What factors make students more or less likely to engage with assessment feedback?

RQ1.2: In what ways do students describe their feedback experiences and particularly their engagement with feedback?

RQ1.3: What are the commonalities and differences between engagement with feedback factors identified from the literature and from student accounts?

This stage was important to test findings from the thematic literature review against the realities of the student experience. Its purpose was also to try and surface any differences in student perspectives of problems with feedback engagement when compared to the problem factors identified from the literature.

#### **3.5.1 Survey Design - Validity and Reliability**

The survey sent to students (appendix 1) contained both quantitative and qualitative questions. This decision was made for several reasons. Firstly, my institution (at the time) had a limit on the number of surveys that could be sent to students each term, as such, I had one opportunity to collect data through this method. Secondly, the questions I was asking would naturally elicit a 'why?' after submission, which required follow up open questions. For example, the survey asked students if they read their feedback, what they do with their feedback and whether they use it to inform future work. I wanted and needed to know the variety of reasons as to why students may not engage with their feedback (for example), and as such, decided to place qualitative follow up open

questions at key points within the survey. Finally, the survey method is a relatively quick and easy way to collect data and required little time investment from the part of the student.

As I had already undertaken the thematic review of the literature, I sought to identify other key surveys that could be utilised to inform my survey design. Harrison (2007) notes that researchers should not seek to always 'reinvent the wheel' when designing surveys and should look to sources from already validated research. Hyman et al. (2006) suggest that the potential inclusion of existing questions is not often contemplated by researchers, partly due to the pressures of being 'original' in the academic and research worlds, but also because of a general lack of awareness of the value of this process and the validity it adds to survey design. I went through the process of checking surveys used in the studies I had coded as part of the thematic literature review. A paper from Carless (2006), was felt to have questions that may be useful to this study. The paper itself did not specify the survey questions in full, so I contacted David Carless directly who gladly provided the full survey instrument used in his 2006 study. The questionnaire was utilised for a survey entitled 'Learning Oriented Assessment Project' (LOAP), which was designed to gather baseline descriptive data on student experiences of assessment. The questions from the Carless survey (appendix 2) were not directly relevant to this study and they were not used verbatim, but were instead used to inform the language and questions in my own survey, specifically the questions around student interaction with criteria and feedback. The use of this previously validated survey to inform my questions strengthened the validity of my own survey design.

The next key decision in any survey is the types of questions to include. Survey data tends to use closed questions that can easily be analysed to present quantitative results. Closed questions are easy for survey participants to answer, but provide a limited set of data, which simplifies survey administration, but limits the richness of the data collected (Netigate, 2019). The full questionnaire can be found in appendix 1. The same questions were sent to all students across all years of study. The Closed questions used (informed by the Carless, 2007 questionnaire mentioned above and the stage 1 thematic review results) were as follows:

Section 2: Your feedback Experience ( <i>Section 1 was the consent section</i> )	
Question	Type
Year of study	Check box
I understand the terminology used by tutors in their written feedback (you understand what they mean)	5-point Likert scale
After reading feedback I can identify how to use it to improve my future performance	5-point Likert scale
I receive my feedback in a timely enough manner for it inform future assessments	5-point Likert scale
I feel I can approach my tutors to discuss my feedback to improve my understanding	5-point Likert scale
I always read my feedback	Yes/No

Table 3.2 Questionnaire section 2

Section 3: Developing Understanding	
Question	Type
Learning outcomes are given for each module (usually in module handbooks) and look like the example in the image below (image was included). Q: Do you read the learning outcomes for all assessments?	5-Point Likert scale
I am given opportunities to actively engage with these learning outcomes (e.g. tutors may ask you to read and discuss learning outcomes and ask you to highlight anything that is unclear, etc)	5-Point Likert scale
I understand learning outcomes and how they are used	Yes/No

Assessment criteria/marketing rubrics are given for each module (usually in assessment handbooks) and look like the example below (image was included). Do you look at assessment criteria when completing an assessment?	Yes/No/Other
Assessment criteria grids/marketing rubrics (like the one above) make it clear to me how to achieve a good mark (Skip this question if you answered 'No' to the previous question)	5-Point Likert scale
Assessment criteria grids/marketing rubrics help me to produce better work	5-Point Likert scale
I am given opportunities to actively engage with assessment criteria grids/marketing rubrics (e.g. tutors may ask you to use assessment criteria grids/marketing rubrics to mark example work, or to discuss the differences between a 40% and a 70% in an assessment based on the criteria, etc)	5-Point Likert scale
I understand how my tutors use the learning outcomes and assessment criteria/rubrics to mark my work	Yes/No/Other
My feedback explains how well I have met the assessment criteria, so I can identify where I went wrong	5-Point Likert scale
I am given opportunities to actively engage with my written feedback (e.g. tutors may offer to talk through feedback, may ask you to reflect on previous feedback before handing in a piece of work, etc). This is about whether you are given the opportunity to, regardless of whether you take up the option to.	5-Point Likert scale

Table 3.3 Questionnaire section 3

Section 4: Your own practice and development	
<b>Question</b>	<b>Type</b>
I find it easy to use feedback I receive in one module to improve similar assessments in future modules	5-Point Likert scale

I can see how assessment feedback I have received during my course has helped me to improve academically over time	5-Point Likert scale
Whether I read feedback is often related to my immediate feelings after seeing my mark	5-Point Likert scale
I feel I could engage more with learning outcomes and assessment criteria at the start of assessments	5-Point Likert scale
I use the assessment criteria I am given to self-assess my work before I submit	5-Point Likert scale
I engage with other students to peer review each other's work against the criteria before we submit	5-Point Likert scale
I actively try to identify points for improvement in my feedback so I can use it to improve in future assessments	5-Point Likert scale

Table 3.4 Questionnaire section 4

Open questions can add clarity to quantitative results, they can be added as follow ups to groups of quantitative questions, or as standalone open questions. However, some question the validity and reliability of open questions as they are subject to coding or thematic analysis by a person, which can add in an element of subjectivity (Adams & Cox, 2008). Cohen et al. (2011) also note that open questions may add an element of discrimination where respondents may be less articulate. For this study, the addition of open questions was felt to be necessary for several reasons. Firstly, the quantitative questions will not add clarity to the reasons why students have differing opinions of their experiences with feedback. In addition, the nuances of differences across years would be difficult to highlight. Only through giving the students a voice and a space to share their experiences would I have any insight into student thoughts and feelings, especially around the development of their feedback engagement. Examples of the open questions used in this survey are as follows:

<b>Question</b>
If you answered no to the last question ('I always read my feedback'), please explain what factors stop you from reading feedback

Look at your answers to the questions in this section, can you give an example of positive and/or negative experiences that influence these answers?

Table 3.5 Section 2 open questions

Question
Think about feedback you have received so far on your course. What are the most useful pieces of feedback you have received? Why were these the best?
Name one way in which you have used feedback to improve your learning.
If you were a tutor/lecturer, how would you structure your written feedback to ensure it was useful to your students?
Can you identify how you have developed over time to improve your academic performance? How has your approach changed since you started the course?
(Question for third and fourth years only) Did you perceive or notice any difference in written tutor feedback over the three years of your degree? For example, was feedback in first year different in any way to feedback, in second year, or the feedback you receive now?
Any other points you feel would be useful regarding your experiences of assessment feedback during your course? Have your say here!

Table 3.6 Section 5 open questions

A pre-test using a small sample of people from the survey population is an effective way to ensure respondents would interpret questions as intended (Ruel et al., 2015). A pretest was conducted using the same protocol and setting as the final survey and was sent to 10 students for completion (across years). Five students completed the pre-test. A discussion was then held with these students to discuss the pre-test. Very few issues were identified, however, two questions were edited to provide more clarity, which was based on the pre-test feedback. This drove the inclusion of images within the survey to give further clarity as to what learning outcomes and assessment criteria/rubrics looked like in their context. In addition, an expert-driven pre-test was conducted, Ruel et al. (2015) note that this is valuable as the questions are viewed through the lens of an expert in the field. In the case of this study I approached Dr Chris Beaumont, an expert in assessment feedback and the creator of the dialogic feedback cycle (Beaumont et al.,

2011). Through this process I was able to strengthen the structure within the survey, based on critical discussion after his expert pre-test. This resulted in clear 'sections' of the survey being added, rather than one long string of questions.

### **3.5.2 Stage II Survey Data Collection - Participants**

Teddlie and Yu's (2007) Taxonomy of sampling techniques was used to identify the specific sampling strategy. As this study has a pragmatic mixed methods approach the sampling strategy can involve more than one sampling method (Plano Clark & Creswell, 2008). In this case a random probability sampling approach was taken for the survey as all students across all years were given the survey and had a choice as to whether to complete it or not. The survey was sent to approximately 400 students covering all three years of study within the department of Computer Science at a North West University. Data were collected through visiting lectures and explaining the study to students and supplying them with the link to the survey. A reminder email was sent a few weeks later with the link included. In total, 191 students completed the survey, approximately 48% of the target group. This was deemed to be an appropriate sample size as it fell within the 5% margin of error and 95% confidence level (Ramshaw, n.d.). Consent and information forms were included within the survey.

There was much consideration of the context for the student survey, I considered surveys across departments and also across universities. It was decided (alongside advice from my supervisor) to limit the data collection to the students from one department in one university for a number of reasons. Firstly, my purpose for undertaking the study was initially to enhance my own students experience, so I wanted to know specifically what they thought of feedback practices within the department and how these linked to problems with feedback engagement generally (from the literature), with a view to developing an enhancement strategy for the department after the completion of the thesis, as such, it was important to include them in the research.

Despite this, I also wanted to open up the survey to help with the validity and generalisability of the findings. However, there were a number of potential issues that



arose in my attempts to specify an appropriate approach to a wider group of respondents. There was a realisation that if I opened up the survey to different schools and faculties that there would then be a reliability issue, as schools and departments had various approaches to giving feedback and I had no control or ability to influence the feedback given in those different contexts. As such, to ensure consistency and maximise reliability I chose to stick with the Computing students only.

In addition, I also considered the addition of more respondents from computing students from different universities as a possibility to explore computing students feedback experiences in general. This approach was also dismissed as being too large for this individual study, the additional complexities of ethical approval across the different universities was judged to be too time consuming and high risk, with the same consistency issues of sending the survey across departments within my university. Given the large number of students within the Computing department I worked in (400+) I was confident that I could gain a good return rate for the survey to ensure meaningful results. Also, as the purpose of the survey was to test and validate the results from stage one, rather than to drive the overall themes for the final framework, it was also felt to be valid.

It would be interesting for a future study to apply this survey instrument across several subject areas and universities to compare outcomes and to test the reliability of the results from the analysis of the student data.

### **3.5.3 Stage II Survey Data Analysis**

This section is split into two parts, quantitative data analysis and qualitative data analysis. The survey consisted of eight open questions, four 'yes/no' questions and eighteen fivepoint Likert scale questions. The survey was distributed as an online survey link to all Computer Science students across all years. The same questions were sent to all students across all years of study.

### ***Stage II Survey Quantitative data analysis***

The quantitative survey data was in the form of four 'yes/no' questions and eighteen five-point Likert scale questions. The literature on statistical analysis of Likert scale questions has lots of disagreement on whether Likert scales are ordinal or Interval data. Likert scales are said to be ordinal by some as the response categories have a rank order, but the intervals between cannot be presumed equal (Blaikie, 2003; Jamieson, 2004). As a result, those arguing that the data is ordinal state that the use of mean and standard deviation when analysing Likert data is inappropriate. However, it is standard in some fields to use mean and standard deviation from Likert scale data. The binary 'yes/no' questions were simply calculated as percentages.

### **3.5.4 Stage II Survey Qualitative data analysis**

The survey gave students eight opportunities to expand on answers or answer open questions. The data from each question underwent a thematic analysis. The following steps were taken to analyse and theme the qualitative data (Braun & Clarke, 2006):

1. Familiarising with data: transcribing data, reading and re-reading the data, noting down initial ideas.
2. Generating initial codes: coding interesting features of the data in a systematic fashion across the entire data set.
3. Collating data relevant to each code.
4. Searching for themes: collating codes into potential themes, gathering all data relevant to each potential theme.
5. Reviewing themes: checking if the themes work in relation to the coded extracts
6. Defining and naming themes: ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme (Braun & Clarke, 2006).

Themes were then listed under questions, identifying example student comments by theme. The structure of the data tables used is shown below:

<b>Question stated here</b>		
<b>Themes</b>	<b>Number of instances</b>	<b>Example open comments</b>
<i>Theme identified stated here</i>	<i>stating number of instances of this theme</i>	<i>Example open comments to give clarity to the theme and to surface the student voice</i>

This structure was used to add clarity to the student data, particularly to give space for the surfacing of the student voice. The table below shows how many themes were identified for each question. The results chapter presents these themes in more detail, along with the examples of student voice. The full thematic analysis can be found in appendix 3.

<b>Question</b>	<b>No. of Themes identified</b>
Think about feedback you have received so far on your course. What are the most useful pieces of feedback you have received? Why were these the best?	6
Name one way in which you have used feedback to improve your learning.	7
If you answered no to the last question (do you always read feedback?), please explain what factors stop you from reading feedback.	4
If you were a tutor/lecturer, how would you structure your written feedback to ensure it was useful to your students?	6

Can you identify how you have developed over time to improve your academic performance? How has your approach changed since you started the course?	7
(Question for third and fourth years only) Did you perceive or notice any difference in written tutor feedback over the three years of your degree? For example, was feedback in first year different in any way to feedback, in second year, or the feedback you receive now?	4
Can you give an example of positive and/or negative experiences of feedback?	7
Any other points you feel would be useful regarding your experiences of assessment feedback during your course?	9

Table 3.7 Number of themes identified across each open question

### **3.6 Conceptualising the relationships between problem factors identified - towards the development of a framework**

The final stage of the process was to develop the framework through the mapping of the key themes from each of the previous stages. This would address RQ2 (and RQ2.1 and 2.2). This involved several iterations of concept mapping to ensure the development of a robust framework that could be both practically implemented and provide a basis for future research and development. This conceptual development is shown in detail in chapter 5.

### **3.7 Ethical Considerations**

BERA (2018) outline the key aspects to consider when considering responsibilities to participants of research. These are: consent, transparency, right to withdraw, incentives, harm arising from participation in research, privacy and data storage and finally, disclosure. These aspects are discussed below in relation to this study.

Participants were given voluntary informed consent as part of the study. The survey allowed to students to consent to participation (see appendix 4 for consent forms used).

To ensure maximum transparency participants of all stages were given a participant information sheet. This was included as the first page of the online survey. (See appendix 5 for participant information sheets). The information sheets and consent forms noted the student right to withdraw from the study. The chance of participant harm within this study was minimal. All participants were aged 18+ and survey submissions were anonymous.

Data privacy was taken seriously, and survey data (although anonymous) were stored in encrypted files with password access. The final aspect to consider was disclosure. No aspects shared with the researcher were considered to be worthy of disclosure to other parties.

Ethical approval for the study was sought through Lancaster and also simultaneously through my institution. Both received institutional ethics clearance.

### **3.7.1 Insider Research**

Coghlan & Brannick (2005) define insider research as research conducted by people who are already members of the organisation or community they are seeking to investigate. When this study was first conceived of, I was a Lecturer in the Computer Science department in question. Humphrey (2012) noted that researching education from a position of an insider educator-researcher may be particularly sensitive given that the audiences for such research can include current students and colleagues. The students completing the survey would have been my own students who I taught or may have taught in future. However, before the survey stage of the research I moved into a new job as a full time Senior Lecturer in learning and teaching. I was no longer the 'insider' I expected to be in the research, my position had shifted. This shift in job role still saw me stay within the same University, as such, my position could still be argued to be as an insider in some respects. From an ethics point of view, my considerations as an 'insider' now shifted from my students to my colleagues. In collecting the data about feedback practices, I would be hearing about students' perceptions of my colleagues' feedback practice, both positive and negative. To ensure an ethical approach to this data, I

immediately redacted comments within open survey data where staff were named. This ensured these staff were protected.

### **3.8 Methodology limitations and summary**

As with any study, the limitations of the methodology needs to be explored. As a pragmatic mixed methods multiphase design, the researcher followed a continuous cycle of abductive reasoning (Creswell, 2014) throughout the study. The limitations of pragmatism, mixed methods and multiphase designs have been discussed in various publications, these are discussed below.

Al Hasni et al. (n.d) note the limitations of a pragmatic research design, and when looking at the limitations of mixed-methods studies, there were many overlaps in the perceived limitations of each. This is expected as pragmatic research approaches often lead to mixed methods. Some of these limitations are as follows:

- Al Hasni et al. (n.d) noted that the time required to prepare and conduct pragmatic studies may be longer. This was also noted by Creswell (2014) and Hashim (2019) for mixed methods studies.
- Al Hasni et al. (n.d) noted that pragmatic studies can lead to possible discrepancies between different types of data that are hard to interpret and consolidate. Hashim (2019) stated that mixed methods studies can also lead to conflicts in the interpretation of findings from different stages of a study.
- Al Hasni et al. (n.d), Creswell (2014) and Hashim (2019) all noted that it can be difficult to decide how to order different types of data collection and when to proceed in sequential designs.

The limitations of multiphase designs, noted by Almeida (2018) also included the time required for such studies and the complexity of how to mix and interpret the data that emerges from each stage.

Given the experience of designing and implementing this doctoral study, I would agree with the limitations noted by these other researchers. This study did take a long time,

driven initially by the thematic literature review, which informed the following stages, followed by the quantitative and qualitative survey data analysis. All of this had to be completed before the next stage of conceptual mapping could begin. However, I felt I was staying true to my own pragmatic stance to 'follow the data' by taking this approach.

The second point about the difficulties in interpreting and consolidating the findings from different study stages did not play out between stage 1 and stage 2 of this study. Indeed, the design of the survey (informed by the thematic literature review) meant that the data were often complimentary, with the survey data offering further depth and understanding to the problems identified in the thematic literature review. There were, however, challenges in consolidating all the data for stage 3 of the study when considering how to show that the outcomes from each stage supported the feedback 'problem factors' that had been identified.

Given the size of the body of literature on feedback, there are also limitations regarding the amount of literature reviewed for stage 1 thematic literature review. To ensure these limitations could be minimised, the theming continued in NVIVO until I was sure no more nodes were appearing. In addition, to ensure that the latest literature relevant to feedback engagement was included, I continued to read and check new literature to ensure no new themes were apparent.

The limitations of the survey instrument are rooted in the fact that it was only sent to one body of students from one department. I discussed earlier why this was felt to be appropriate, e.g., the student body was large enough (400+), I could ensure consistency in the experience the students were reflecting on and consistency in the feedback they received. It would be interesting for a future study to apply this survey instrument across several subject areas to compare outcomes.

This chapter described the research design and the pragmatic mixed methodology used. I described the research methods used during each stage of the research, including the data collection and data analysis techniques. I outlined my rationale for the data collected at each stage and concluded with the ethical considerations of this study.

## **Chapter 4: Results**

### **4.1 Introduction**

This chapter presents the results from each of the stages of the research. The results of the thematic literature review are presented and whilst there will be some initial 'making sense' of results of stage 2, the full discussion of the findings from all stages as a coherent whole will be presented in the following chapters.

The results are presented as follows:

Chapter four presents the results of stages one and two, with the results of the stage one thematic literature review being presented as a number of 'problem factors' identified from the literature as preventing or limiting feedback engagement. The stage two student survey results are presented as a set of quantitative and qualitative results, with interesting insights from the students on their feedback experiences.

Chapter five pulls together these results into the third stage where we conceptualise the relationships between the problems identified in stages one and two and develop the framework for enabling student engagement with feedback.

### **4.2 Stage I Results - A Thematic Review of the Literature**

The problems with assessment feedback identified in the literature are diverse, with many overlapping aspects and, as mentioned, atomising 'problems' does not always lead to effective solutions. For this first stage of the study, I undertook a thematic analysis of the literature (in NVIVO) with a view to coding identified problems, issues, solutions and recommendations in each paper. The aim of this approach was to understand the breadth and depth of the problems with feedback engagement, with a view to developing a clearer understanding of the broader landscape of 'problems' that can inform more cohesive models of feedback engagement.



The objective specifically related to this stage of the study was to 'Identify, from the literature, the problem factors that inhibit assessment feedback engagement in higher education'. The research questions specifically related to this stage are:

RQ1: What factors make students more or less likely to engage with assessment feedback?

RQ1.1: According to the literature, what are the key factors affecting student engagement with feedback?

It should be noted that, as stated in the methodology chapter, the process was to review and code the literature to the point of exhaustion, meaning the point at which no more themes were emerging. To ensure validity, I kept up with the latest literature since undertaking this process to ensure no further themes were emerging. No new themes emerged from literature post the initial thematic literature review, however, this ongoing review of the literature has added additional sources to each of the themed areas (as explained in the methodology chapter).

A full list of the original nodes identified in NVIVO that were themed can be found in appendix 6. These nodes were not 'clean' in that many overlapped.

The list below is a synthesis of the problems and issues with assessment feedback identified in the stage one literature review thematic analysis, the eight key themes identified through the thematic review are:

1. Students being unable to make sense of or apply feedback
2. The problems with feedforward
3. The problems with assessment criteria and feedback
4. The lack of training for students and tutors
5. The lack of dialogue around feedback
6. The impacts of modularisation and course design
7. Psychological factors affecting feedback engagement
8. The lack of student self-assessment and self-regulation

This list is not exhaustive, and while some subtopics are identified within each factor (below), other issues may be buried within, or cut across several problem areas (for example, timeliness of feedback). The list simply speaks to the complexity. The author will attempt to cover the key factors below.

The issues above are pervasive throughout the literature and, as Handley (2011) suggests, these problems are closely related, overlap, and affect each other. This view is supported by Price, et al. (2011a) who said that separating them into individual 'problems' and 'solutions' is not effective. The following sections present the themed problem areas noted above, with a view to understanding the complete picture of the challenges with assessment feedback engagement so a more holistic plan or framework for feedback engagement can be developed.

#### **4.2.1 Factor 1 - Students being unable to make sense of or apply feedback**

Students often report that they struggle to make sense of and/or make use of the feedback they receive. Feedback is 'a process in which learners make sense of information about their performance and use it to enhance the quality of their work or learning strategies' (Henderson et al., 2019b:1402), with the 'making sense' aspect a crucial factor. The sub-factors from the literature identify that this applies to:

- Students understanding what was written or 'sense making' (Beaumont, et al., 2011; Bloxham & Boyd, 2007; De Kleijn, 2021; Higgins et al., 2002; Van Heerden, 2020; Vattoy et al., 2021; Winstone & Carless, 2020; Zimbardi et al., 2017).
- Students not appreciating how the feedback could help them improve on the work and/or how feedback comments relate to the work (Beaumont et al., 2011; Sadler, 2010; Zimbardi et al., 2017).
- Students not understanding how they may use their feedback to improve future performance (Carless et al., 2011; Gibbs, 2006).
- Students understanding their own role in the active engagement with the feedback (Bloxham & Campbell, 2010; Fisher et al., 2011; Nieminen et al., 2021).

- Timing of feedback affecting student understanding of feedback and how they may link it to future work (Beaumont et al., 2011; Carless et al., 2011; Evans, 2013; Nasri et al., 2021; Parkin et al., 2011; TESTA, 2013; Williams & Kane, 2009; Zimbardi et al., 2017)

Students' understanding of feedback comments and how they link to criteria appears to be the key issue - if they do not understand it then they cannot appreciate its value or apply it to future work. Understanding feedback comments is multi-dimensional.

Students may not be able to interpret or translate feedback comments correctly (or at all) (Carless, 2007; Carless et al., 2011, Higgins, 2000; Handley, 2011; Nicol, 2010), may not understand which elements of the assessment comments relate to (Nicol, 2010; Sadler, 2010) and may be excluded by the academic discourse or 'implicit criteria' used by tutors (Jonsson, 2012; Handley, 2011; Hepplestone et al., 2011; Higgins et al., 2001; Sadler, 2010).

This issue of lack of understanding is not simply a student issue. An interesting study from Duncan (2007) noted how when he tried to offer forward looking feedback to students based on feedback from eight of their previous assignments to create a feedforward plan, he found that tutor comments focussed on mechanical aspects such as spelling and grammar; were vague, using terms such as 'use a more academic style', focussed on praise and encouraging remarks without any focus on how students could improve in future work; and were very different/inconsistent across tutors.

These findings from Duncan are consistent with other studies that have analysed student perceptions of teacher comments (Beaumont et al., 2011; Carless, 2007; Lizzio & Wilson, 2008; Orsmond et al., 2005; Paulos & Mahony, 2008). All of the above issues identified by Duncan (2007) may help to explain why students also find it difficult to appreciate how feedback can help them in future assignments (as discussed in the next section).

#### **4.2.2 Factor 2 - The problems with feedforward**

If, as noted above, students are struggling to understand feedback, they are unlikely to be able to apply it constructively to improve future performance. However, the literature

also notes other key barriers to students using feedback to inform future performance (to 'feedforward'). These issues are:

- Students have difficulty translating/appreciating how feedback may help them improve in future assignments (Beaumont et al., 2011; Carless, 2007; Boud and Falchikov, 2007; Scott et al. 2011; Winstone et al., 2017) and student perceptions that feedback is irrelevant to future assignments (Burke, 2009; Handley, 2011).
- Feedback that is not timely or relevant enough to allow students to apply it to future work (Beaumont et al., 2011; Jonsson, 2012).
- Feedback is assignment specific and lacking comments to help students identify how they can improve in future assessments (Carless, 2007; Carless et al., 2011; Jonsson, 2012; Price et al. 2011b).
- Lack of formal pedagogic procedures that promote active engagement and/or structural course issues that create barriers to feedforward and the development of the skills of self-regulation and self-assessment (Evans, 2013; Handley, 2011; Jonsson, 2012; Orsmond et al., 2013; Handley et al., 2008; Taras, 2006).
- Lack of dialogue with tutors to enable feedback understanding and engagement (Ivanic et al., 2001; Nicol and McFarlane Dick, 2006; Orsmond et al., 2013; Price et al., 2011a; Price et al., 2011b).

Students may experience one or more of these barriers to using feedback in future. Each issue may compound the other, and whilst the impact is squarely on student development, the solution can be related mainly to tutor actions with students on feedback design and engagement (see factor 4 on training staff). The above issues may be solved through student and tutor dialogue around assessment criteria and feedback as well as careful pedagogic and feedback design by the tutor. This will be revisited in the later section on methods of promoting effective and positive feedback engagement.

### 4.2.3 Factor 3 - The problems with assessment criteria and feedback

The problems with assessment criteria and feedback overlap in many ways with the first two factors identified above. For example, students need to understand feedback in order to relate it to the assessment criteria (Nicol, 2008) before they can appreciate and 'decode' it so they can use it to feedforward into following assessments. The following issues were identified from the literature in this category:

- Students want/need to understand assessment criteria and how to use them to self-assess and build skills of self-regulation (Beaumont et al., 2011; Carless, 2007; Evans, 2013; Jonsson, 2012; Nicol, 2010; Nicol and McFarlane-Dick, 2006; O'Donovan et al. 2004; Sadler, 2010). This issue, whilst related to assessment criteria also links to factor 4, in that students need training on how to utilise assessment criteria.
- Assessment criteria are often not actively discussed with students. This lack of dialogue causes issues and barriers in student development (Beaumont et al., 2011; Carless, 2007; Nicol, 2010; Nicol and McFarlane-Dick, 2006; Nicol et al., 2014; Sadler, 2010).
- There are inconsistencies across courses/programmes on preparatory guidance for students on assessment (Beaumont et al., 2011).
- Tutors need to understand how to write effective assessment criteria and actively engage with students to develop an agreed understanding of them, thus ensuring criteria are explicit and not tacit (Beaumont et al., 2011; Nicol, 2010; Nicol and McFarlane-Dick, 2006; O'Donovan et al., 2004; O'Donovan et al., 2008; Sadler, 2010). This again links through to factor 4 and the training of tutors.
- Assessment criteria are often unclear or in language students do not understand. Students are therefore unable to decode feedback as they are unable to link it to the initial criteria (Carless, 2007; Handley, 2011; Nicol, 2010; Nicol et al., 2014; Parkin et al., 2011; Vattoy et al., 2021; Weaver, 2006).

- Staff do not build in opportunities for students to create, assess, and test criteria on their own or other's work. These tasks would promote understanding and self-regulation (Handley et al. 2008; Nicol and McFarlaneDick, 2006; Nicol et al., 2014; Orsmond et al., 2013; Sadler 2010).
- Individuals will internalise and understand criteria differently (O'Donovan et al., 2004).

The development of a method of transferring assessment requirements and criteria from staff to students is almost impossible, as the creation and understanding of assessment criteria have both tacit and explicit dimensions (O'Donovan et al., 2004) and depend on how the students are developed to understand the more tacit elements. Staff must build in time in their teaching practice in order to develop students' understanding of assessment criteria. This may be done through socialisation activities that allow students to develop their own understanding and a shared understanding of assessment criteria (Orsmond et al., 2013; Rust et al., 2003).

#### ***4.2.4 Factor 4 - The lack of training for students and tutors***

This fourth theme was less explicit in the literature in that the need for training was often implicitly stated around the other issues with feedback engagement, as noted in some of the categories in factor three results above. For example, Beaumont et al. (2011), in their paper on the dialogic feedback cycle, included comments from students noting that they had not been 'prepared' by the tutors for the transition to HE and that tutors 'just expect them to know' how to approach assessment. One comment from a student suggested that they need to be 'shown how': "*I know it's uni so we can't be spoon fed...but at least give us the spoon*" (Beaumont et al., 2011:685). Boud et al. (2010) also noted the need for training and development of the skills required by students in their 'Assessment 2020' paper on assessment reform, "for students to become independent and self-managing learners, they need to be supported in the development and acquisition of the skills they need for learning, including those of assessment" (Boud et al., 2010:2).

Whilst lots of the need for training was implicit, there are also authors who have explicitly stated the need to train students and staff to enhance assessment and feedback processes (Evans, 2013; Rust et al., 2005; Sadler, 1989; Weaver, 2006). Nicol (2008) suggests that students need to be 'empowered' to engage with assessment and feedback so they can develop the skills of self-regulation.

The development of feedback literacy for both students and teachers is crucial (Tai et al., 2021) and is also a key aspect of this theme as training would develop this skill. Boud & Dawson (2021) note that whilst lots of attention has been given to student feedback literacy, the requirement to develop teacher feedback literacy is less present in the literature.

Teacher feedback literacy is defined by Carless & Winstone (2020:4) as the '*knowledge, expertise and dispositions to design feedback processes in ways which enable student uptake of feedback*'. Teacher feedback literacy is crucial as the development of student feedback literacy is dependent on teacher feedback literacy (Winstone et al., 2020). Work by Wei Wei & Xie Yanmei (2021) noted that as teachers gain more experience their feedback literacy does naturally develop, however, they also note that early-stage academics tend towards a one way model of feedback, which suggests that early training would be beneficial.

Student feedback literacy is defined by Carless & Boud (2018:1316) as an "understanding of what feedback is and how it can be managed effectively; capacities and dispositions to make productive use of feedback; and appreciation of the roles of teachers and themselves in these processes". Chong (2021) further conceptualises student feedback literacy as having three interrelated characteristics: 1) the ability to appreciate feedback, 2) ability to make judgments and 3) the ability to manage emotions – which Chong states can lead to successful student uptake of feedback information if developed correctly.

The following issues were identified in this category:

- Students want and need guidance/training/development on assessment and feedback processes to allow them to develop their assessment literacy

(Beaumont et al., 2011; Carless & Winstone, 2020; Evans, 2013; Handley et al., 2008; Jonsson, 2012; Krapp, 2005; Price et al., 2011a; Sadler, 2010; Weaver, 2006).

- Feedback, and dialogue around it, should be used to induct students into learning in HE (Carless, 2007; Beaumont et al., 2011; Boud et al., 2010; Carless et al., 2011; Evans, 2013; Poulos et al., 2008; Price et al., 2011a; Sadler, 2010).
- There is a general lack of consistency in preparing/training students to develop assessment literacy across and in programmes (Beaumont et al., 2011).
- Tutors need/want training in how to write and deliver feedback, and how to embed feedback throughout the assessment process to develop student self-efficacy and self-regulation (Boud & Dawson, 2021; Evans, 2013; Handley et al., 2008; Hattie & Timperley, 2007; Jonsson, 2012; Orsmond et al., 2013).
- Students should be engaged and trained in peer review and self-assessment to develop self-regulation and their ability to make informed judgements on work and using assessment criteria (Beaumont et al., 2011; Boud et al., 2010; Evans, 2013; Hattie and Timperley, 2007; Murdoch-Eaton et al., 2012; Nicol & McFarlane-Dick, 2006; Orsmond et al., 2013; Price et al., 2010; Sadler, 2010; Scott et al., 2011).

Many studies have noted students' apparent inability to capitalise on feedback (Bloxham and Campbell, 2010; Evans; 2013; Fisher et al., 2011; Handley & Cox, 2007). Training staff to develop a pedagogic approach that enables students to close the feedback gap is clearly a major consideration in feedback engagement and needs further study.

#### **4.2.5 Factor 5 - Lack of dialogue around feedback**

Dialogue to improve assessment and feedback engagement is one of the key suggestions from the literature, David Carless, one of the key authors calling for more dialogue in feedback practice, states:



Dialogic feedback suggests an interactive exchange in which interpretations are shared, meanings negotiated, and expectations clarified. Dialogic approaches to assessment can guide students on what is good performance by facilitating discussions of quality in relation to specific assignment tasks, and also support them in developing enhanced ownership of assessment processes (Carless et al., 2011:397)

The overlaps with the previous factors affecting feedback engagement are clear from this statement, students need dialogue to understand assessment criteria and feedback (Factors 1 and 3 above). Yet despite this clear argument and need for dialogue that permeates the literature, there is still a clear need for this to be driven forward into standard assessment practices if the problems are to be solved. This is shown by the issues with dialogue in assessment feedback below:

- Students want/need dialogue with tutors around assessment and feedback to develop their skills of self-regulation and their own internal dialogue (Ajjawi et al., 2015; Carless, 2007; Carless et al., 2011; Evans, 2013; Jonsson, 2012; Nicol, 2010; Williams & Kane, 2009).
- There is a lack of dialogue around assessment and feedback which compounds the gap between tutor requirements and student understanding (Carless, 2007; Handley, 2011; Price et al., 2011a; Vattoy et al., 2021).
- Feedback in HE consists of too much one-way written feedback devoid of dialogue (Carless, 2007, Carless et al., 2011; Evans, 2013).
- Assessment design should have relational dimensions and encourage dialogue between students and tutors, making feedback a more inclusive and social practice (Carless et al., 2011; Evans, 2013; Handley et al., 2008; Handley, 2011; Heron et al., 2021; Mutch et al., 2018; Nicol, 2010; Orsmond et al., 2013; Price et al., 2011a).

- Socio-cultural aspects need to be developed. Students need to be encouraged and supported to engage with dialogue with peers and tutors to develop their skills of peer and self-assessment, and also to help them to develop a shared understanding of assessments (Evans, 2013; Nicol, 2010; Orsmond et al., 2013; Price et al., 2011a).

Whilst the need for dialogue is more obvious in the literature in the last ten years, it is not new. Laurillard (2002) called her theory of teaching and learning ‘a conversational framework’ and defined four factors that underpin effective dialogue; it should be ‘adaptive’, ‘discursive’, ‘Interactive’ and ‘reflective. However, as noted in the issues above around dialogue, this is not yet standard practice in assessment and feedback in higher education. Indeed, many studies pointed to the massification of HE and time constraints squeezing out dialogue (Evans, 2013; Jonsson, 2012; Nicol, 2010; Orsmond et al., 2013).

#### **4.2.6 Factor 6 - The impacts of modularisation and course design**

As mentioned earlier, feedback engagement is not a list of issues and problems, however, these problems do come together to impact engagement overall. Modularisation and course or curriculum design have issues that impact across a number of the other problem factors identified. For instance, if students cannot apply feedback to current and future modules then they are less likely to engage with feedback (Carless, 2018). Also, modularisation and course design impact on the development of student tutor relationships, which can impact on the development of dialogue between the two (Factor 5) (Dicker et al., 2018; Hepburn et al., 2021). It should be noted that modularisation itself does not cause the problem, it is the lack of programme wide approaches to feedback engagement (Carless, 2019).

The literature repeatedly highlights the impacts of modularisation and course design. These issues have been presented below:

- Students see no link between modules and how they may use feedback in future. This is due to modularisation of courses, having many different tutors with different approaches and diversity in assessment types making it difficult

for students to link feedback to future work (Bevan et al., 2008; Gibbs, 2006; Handley et al., 2011; Handley et al. 2008; Hepburn et al., 2021; Hepplestone et al., 2011; Jonsson, 2012; Price et al., 2011a; Scott et al., 2011; Williams & Kane, 2009).

- Modularisation and bunching of assessments at the end of modules means feedback is often written under great time pressures, and tutors have less time to consider feedback and engage in dialogue (Hepplestone et al., 2011; Price et al., 2011a).
- Modularisation makes holistic assessment strategies more difficult, and feedback often concentrates on proficiency in a module without any consideration of student development over time (Handley et al., 2008; Hattie & Timperley, 2007).
- Modularisation and large teaching teams means it is difficult for students to build relationships, impacting on dialogue and psychological factors that affect feedback engagement (Handley et al., 2008; Hepburn et al., 2021; Price et al., 2011a).
- Assessment feedback design and feedback literacy development should be an integral part of curriculum planning, within modules, and holistically across programmes (Boud, 2010; Carless, 2019; Malecka et al., 2020; Malecka et al., 2021).

This factor in the literature makes the need for a holistic view of assessment and feedback clear. This means an assessment strategy that not only looks at assessment mixes, but also at assessment design, feedback design, and how these develop over time to actively develop student engagement with feedback. This is difficult given the 'pigeonholed' nature of assessment and feedback within modules (Handley et al., 2008). Carless and Boud (2018:1321) agree with this point, noting "Enabling activities are only likely to be successful in developing student feedback literacy if teachers create suitable curriculum environments for active learner participation".

#### 4.2.7 Factor 7 - Psychological factors affecting feedback engagement

Psychological factors such as power, bias and emotion also cut across the themes already identified. However, these are often stated as stand-alone issues, so it was deemed that these need to be stated as key factors affecting student engagement with feedback. In fact, Higgins (2001) included power, bias and emotion in his list of 'most salient features' in the feedback process, and Yorke (2003, cited in Carless, 2007:219) argues that "as well as the content of feedback, an awareness of the psychology of giving and receiving feedback is vitally important to student learning". The key issues highlighted in the literature around power, bias and emotion are outlined below:

- Academic discourse means tutors exert power (often unwittingly) over students, which can affect their understanding of feedback and/or their willingness to engage with it in future (Carless, 2007). This was highlighted by Higgins et al. (2001:273) who states that "giving and receiving feedback occurs within (...) complex contexts, and so is mediated by power relationships and the nature of the predominant discourse". This links back to other factors above. For example, where students are unable to understand the requirements due to academic language used in class or in assessment criteria, they could be argued to be having their power or agency to engage and thrive removed. In addition, assessment

designs which do not allow discourse or interim feedback may reduce feedback to a 'transmission of judgement' and 'discontinuous scrutiny' (Price, et al., 2011a). This, alongside difficult academic discourse, will ultimately impact student engagement with feedback in future. As Boud (1995:43) states "We judge too much and too powerfully, not realising the extent to which students experience our power over them".

- Bias is an additional psychological factor that may affect engagement, whether that is unintentional tutor bias or a student's perception that a tutor is biased. Work by Fleming (1999) identified unintentional bias in tutors who would award higher marks to students who had a track record of higher marks and

who they perceived to be approaching a task in a similar way to how they would themselves. Carless (2007) also noted perceived bias from students who felt that a tutor's perception of whether a student is hardworking or lazy would influence the mark they awarded.

- The effect of emotion on feedback engagement is another complex area, with differences in how tutors and students feel about it (Zhao et al., 2021). The previous two paragraphs on power and bias are indicators of how student emotion can be a complex and pervasive subject. For example, students may react to situations where they feel disempowered, or perceive there to be bias, by feeling frustration, anger, or self-doubt (Carless et al., 2011; Ryan & Henderson, 2018). The feeling of being judged or disrespected can also elicit strong negative emotional reactions (Lim et al., 2021; Zhou et al., 2021). Attainment levels can also affect student emotional reactions to feedback and their subsequent willingness to engage with feedback (Adams et al., 2020; Ajjawi et al., 2021; Nasri et al., 2021).

Carless' (2007) comprehensive study on differing perceptions in the feedback process presented many student comments that reveal the different emotional impacts of assessment and feedback. These included students stating they:

- can be 'depressed' when they receive feedback they perceive as not good.
- can feel 'pressurised' when checking grades and feedback and also when submitting work after previous failures.
- can feel 'sad and scared' when they fail.
- want to check feedback alone so they do not have to deal with their emotions when with others, or indeed, deal with the emotions of other students who may not have done well. (Carless, 2007)

'Affect' of feedback is another area to consider, with Cazzell & Rodriguez (2011) arguing that the affective domain is the most neglected domain in learning in higher education. Varlander (2008) highlighted the importance of *affect* on how feedback is internalised

and used by students. To reduce the impact of the affective domain De Nisi & Kluger (2000) suggested that feedback should focus on task performance only, not on personal aspects or aspects of 'the self', a suggestion which Hattie & Timperley (2007) and Evans (2013) agree with. Indeed, Carless (2007:230) suggests that the "ability to provide pertinent feedback that does not impact negatively on student egos seems to be a useful skill for tutors to develop". This links us back to the previous suggestion of a need for training tutors (factor 4). However, Bloom (1956) cited in Trowler's (2010) literature review on student engagement notes 'emotional engagement' as one of the three factors of positive student engagement (behavioural and cognitive being the other two factors). Trowler suggests that *positive* emotional engagement can also occur as they may "experience affective reactions such as interest, enjoyment, or a sense of belonging" (Trowler, 2010:5). Molloy et al. (2020) also point to the importance of students acknowledging and working with emotions, they also point to the difficulties and note "students did not seem to have enough language to convey their discomfort in trying to wrestle with information about their work which dismayed them" (Molloy et al., 2020:535). This again speaks to the complexity of emotional engagement in the assessment and feedback process.

The difficulties for tutors around managing student emotion is highlighted in this quote from a tutor in Carless et al.'s (2011:401) study:

*The students sometimes feel awful during the presentation and videotaping... I am sorry that they sometimes feel bad but it is better that we discover their poor performance in class rather than in their working environment. Mostly I think they appreciate the feedback. The intimidation they go through is actually good for them. It makes them more competitive.*

This suggestion that intimidation and emotional distress may be just part of the process is a difficult one to accept, how a student interprets and deals with feedback is critical to their success (Poulos and Mahony, 2008). It is true that emotions are inherent in assessment and feedback, however, preparing students emotionally for receiving

feedback may allow them to engage with a lesser emotional impact, and training tutors to manage the process may reduce the impacts noted by the tutor in the above quote.

#### **4.2.8 Factor 8 - The lack of student self-assessment and self-regulation**

Development of students' skills of self-regulation and self-assessment appear to be key to their ongoing success. Zimmerman (2002:66) states that "self-regulation of learning involves more than detailed knowledge of a skill; it involves the self-awareness, self-motivation, and behavioural skill to implement that knowledge appropriately". The impact of the lack of these abilities of self-assessment and self-regulation and their impact on student engagement with assessment and feedback also cuts across the literature (Carless & Boud, 2018; Yan & Carless, 2021). Boud et al (2010) suggest that developing these skills should be part of the overall aims of higher education. This section considers both self-assessment and self-regulation. These terms are often used interchangeably, but as Evans (2013) notes, self-assessment is actually a component of self-regulation.

The following are the key issues regarding both self-assessment and self-regulation:

- Student self-regulation is fundamental to their engagement with assessment and feedback (Carless et al., 2011; Hattie & Timperley, 2007; Hepplestone et al., 2011; Nicol & McFarlane-Dick, 2006; Orsmond et al., 2013).
- Student self-regulation should be actively developed as part of the assessment and feedback process (Carless et al., 2011; Evans, 2013; Jonsson & Panadero, 2018; Nicol & McFarlane-Dick, 2006; Orsmond et al., 2013; Price et al., 2011a).
- Self-regulation should be discussed with students, so they understand the value of actively developing these skills (Carless et al., 2011; Orsmond et al., 2013).
- Students' skills of self-regulation and self-assessment are extremely varied (Carless et al., 2011; Evans, 2013; Hattie & Timperley, 2007).

- There is the need to know more about how students self-regulate if we are to develop this skill (Evans, 2013; Nicol and McFarlane-Dick, 2006), we also need to understand how this self-regulation helps to develop their feedback literacy over time (Wei Wei et al., 2021).

Student self-regulation is clearly a key factor in the creation and development of student engagement with assessment and feedback. It is also clear to see from this list where there are overlaps with other factors identified earlier. For example, for students to internalise assessment feedback (a step in the process of self-regulation) they need to understand it (factor 1). Also, much of the literature that discusses self-regulation and self-assessment notes the crucial role that dialogue with tutors and peers plays (factor 5). Finally, training students and staff to understand the importance of the development of skills of self-regulation is valuable (factor 4).

The results of this thematic analysis will later be merged with the results from stage two of the study and used to develop a framework for feedback engagement in chapter 5.

#### **4.3 Promoting effective and positive feedback engagement.**

As mentioned earlier, the aim of this thematic literature review was to identify barriers to student feedback engagement. However, to get a balanced view of the literature it is also important to identify what the literature tells us is good practice when attempting to engage students in the feedback process and solve the problems identified above.

The literature on what 'good feedback' is often concentrates on content of feedback, however, the shift to feedback engagement has created a more comprehensive discussion on the development of feedback engagement. For example, the work on the TESTA project (2013) developed many useful resources on feedback, including practical feedback guides for students and staff, and guidelines on curriculum development to enhance assessment and feedback processes.

Given the issues highlighted in the eight factors affecting feedback engagement in the previous section, I found that the most comprehensive and practical guidelines to address



the issues are those proposed by Evans (2013) in her ‘twelve pragmatic actions’ for those wanting to address feedback engagement in practice, and Hattie & Gan’s (2011) ‘effective feedback principles’. These are shown in the table below (Fig. 4.1) mapped to the eight factors that have been identified to affect student engagement with feedback identified in this study, the factors are shown as ‘F1’ for factor 1 (of the eight problem factors) and so on. This shows that if the eight factors identified in this study are addressed it would cover all the key good practice aspects from this key literature, no gaps were identified. This is a demonstration of the robustness of the eight factors. In addition, it also demonstrates that if universities and tutors follow the already published guidelines, they can address many of the problems of assessment feedback engagement. However, as mentioned earlier, the intertwined nature of the problems means they must be addressed holistically and not in isolation, which is why this study is important to address this gap, so staff are aware of how one problem with feedback engagement may affect another.

‘Twelve Pragmatic Actions’ for those wanting to address feedback engagement in practice. Evans (2013:79)	‘Effective feedback principles’ Hattie and Gan (2011, in Hattie 2014:70)
<ol style="list-style-type: none"> <li>1. Ensuring an appropriate range and choice of assessment opportunities throughout a program of study. <b>F6</b></li> <li>2. Ensuring guidance about assessment is integrated into all teaching sessions. <b>F3, F5</b></li> <li>3. Ensuring all resources are available to students via virtual learning environments and other sources from the start of a program to enable students to take responsibility for organizing their own learning. <b>F6, F7, F8</b></li> <li>4. Clarifying with students how all elements of assessment fit together and why they are</li> </ol>	<ol style="list-style-type: none"> <li>1. It is important to focus on how feedback is received rather than how it is given. <b>F7</b></li> <li>2. Feedback becomes powerful when it renders criteria for success in achieving learning goals transparent to the learner. <b>F3, F7</b></li> <li>3. Feedback becomes powerful when it cues a learner’s attention into the task and effective task related strategies, but away from</li> </ol>

<p>relevant and valuable. <b>F2, F5, F6, F8</b></p> <ol style="list-style-type: none"> <li>5. Providing explicit guidance to students on the requirements of assessment. <b>F3, F5, F7, F8</b></li> <li>6. Clarifying with students the different forms and sources of feedback available including e-learning opportunities. <b>F1, F5</b></li> <li>7. Ensuring early opportunities for students to undertake assessment and obtain feedback. <b>F1, F6, F7, F8</b></li> <li>8. Clarifying the role of the student in the feedback process as an active participant and not as purely receiver of feedback and with sufficient knowledge to engage in feedback. <b>F7, F8</b></li> <li>9. Providing opportunities for students to work with assessment criteria and to work with examples of good work. <b>F3, F5, F7</b></li> <li>10. Giving clear and focused feedback on how students can improve their work including signposting the most important areas to address. <b>F1, F5</b></li> <li>11. Ensuring support is in place to help students develop self-assessment skills including training in peer feedback possibilities including peer support groups. <b>F3, F4, F6, F7, F8</b></li> <li>12. Ensuring training opportunities for staff to enhance shared understanding of assessment requirements. <b>F2, F3, F4, F6</b></li> </ol>	<p>self-focus. <b>F1</b></p> <ol style="list-style-type: none"> <li>4. Feedback needs to engage learners at, or just above, their current level of functioning. <b>F1, F7, F8</b></li> <li>5. Feedback should challenge the learner to invest effort in setting challenging goals. <b>F1, F2, F8</b></li> <li>6. The learning environment must be open to errors and to disconfirmation. <b>F7, F8</b></li> <li>7. Peer feedback provides a valuable platform for elaborate discourse. Given opportunities, students readily learn appropriate methods and rules by which respectful peer feedback can be harnessed. <b>F4, F5</b></li> <li>8. Feedback cues teachers to deficiencies within their instructional management and can lead to efforts to improve teaching practices. <b>F6</b></li> </ol>
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Figure 4.1 The eight problem factors (F1-F8) mapped to effective feedback practices from the literature (Evans, 2013; Hattie & Gan, 2011).

In her work Evans provides comprehensive links to other studies to support her suggested six key principles of effective feedback practice that her twelve pragmatic actions were linked to (Evans, 2013:80-83). It may be noted here that Evans' list is looking at assessment as well as feedback, but as Evans (2013) notes, feedback is ongoing and an integral part of assessment, meaning it is not practical or desirable to consider one without the other.

There are many other useful resources available to those wanting to address feedback engagement. For example, Nottingham Trent University's Centre for Academic Development and Quality (CADQ) developed a guide on engaging students in the use of feedback (Nottingham Trent CADQ, 2013) which was informed by the literature on best practice. They presented key strategies for feedback engagement around developing an approach that involved students with assessment criteria and in self and peer assessment. The key elements were dialogue and actively building-in opportunities for students to act on their feedback. They suggested asking students to reflect on emotion, evaluation of the feedback received and actions they can take to improve as a good way to engage students with feedback, to consider their emotional reaction to feedback to try to prevent demoralisation, and to promote a look to the future (Nottingham Trent CADQ, 2013).

Looking at the literature on good practice in feedback engagement, including in these examples above, there is one factor that is clearly key to its success - dialogue. This dialogue should start from the beginning of the assessment process through the discussion of assessment criteria, should continue through ongoing discussion and feedback from tutors and/or peers, and should extend to discussion of final feedback and action planning, as suggested by Beaumont et al. (2011) in their dialogic feedback cycle and also by Carless (2007).

#### **4.4 Thematic review conclusion**

The aim of this thematic literature review was to identify the key factors affecting student feedback engagement, with a view to developing a holistic understanding of those factors to move towards a more integrated framework

to develop feedback engagement across a student's experience in higher education.

Eight problem 'factors' were identified after a thematic analysis of the literature on student feedback engagement. These were discussed above and were:

1. Students being unable to make sense of or apply feedback
2. The problems with feedforward
3. The problems with assessment criteria and feedback
4. The lack of training for students and tutors
5. The lack of dialogue around feedback
6. The impacts of modularisation and course design
7. Psychological factors affecting feedback engagement
8. The lack of student self-assessment and self-regulation

Given the complex nature of assessment feedback, I did not expect to find the 'magic bullet' to the issue of feedback use and engagement. Instead, the aim is to build a feedback framework that links the eight problem factors identified in this thematic literature review.

#### **4.5 Stage 2 Results - Survey data**

The purpose of this stage was to gain the student perspective on their own experiences with feedback engagement. This would identify areas that link to the 8 problem factors

identified within stage 1 of the study and would also identify any other key themes that may be missing from that initial stage. Importantly, it would add the student perspective through the inclusion of the student voice (via quotes) to each themed area.

The objective addressed in this section was to 'identify the problems factors with feedback engagement from the student point of view'. The specific research questions related to this stage were

**RQ1:** What factors make students more or less likely to engage with assessment feedback?

**RQ1.2:** In what ways do students describe their feedback experiences and particularly their engagement with feedback?

The survey data consisted of both open and closed questions. The survey was sent to approximately 600 students, 182 students completed the survey (47 first year, 78 second years, and 57 third years). Data were collected through visiting lectures and explaining the study to students and supplying them with the link to the survey. A reminder email was sent a few weeks later with the link included.

#### **4.5.1 Quantitative survey data results**

The survey contained 18 Likert style questions and 4 yes/no questions to collect descriptive data. This data is shown below by question.

QUESTIONS	LIKERT SCALE Strongly disagree > Strongly agree	1	2	3	4	5	Std. Dev.	Mean (Likert 1 -5)
I understand the terminology used by tutors in their written feedback (you understand what they mean)	Strongly disagree> Strongly agree	1.11%	3.89%	12.22%	<b>*48.33%</b>	34.44%	0.18	4.11
After reading feedback I can identify how to use it to improve my future performance	Strongly disagree> Strongly agree	1.11%	8.33%	23.89%	<b>51.11%</b>	15.56%	0.17	3.72
I receive my feedback in a timely enough manner for it inform future assessments	Strongly disagree> Strongly agree	3.33%	13.89%	33.33%	<b>37.22%</b>	12.22%	0.13	3.41
I feel I can approach my tutors to discuss my feedback to improve my understanding	Strongly disagree> Strongly agree	0.56%	7.78%	19.44%	<b>38.33%</b>	33.89%	0.14	3.97
Do you read the learning outcomes for all assessments?	Strongly disagree> Strongly agree	2.22%	10.56%	26.11%	28.33%	<b>32.78%</b>	0.11	3.79

Assessment criteria grids/marketing rubrics make it clear to me how to achieve a good mark	Strongly disagree> Strongly agree	0.00%	6.06%	18.79%	<b>51.52%</b>	23.64%	0.17	3.93
Assessment criteria grids/marketing rubrics help me to produce better work	Strongly disagree> Strongly agree	2.22%	5.00%	24.44%	<b>40.00%</b>	28.33%	0.14	3.87

I am given opportunities to actively engage with these learning outcomes (e.g. tutors may ask you to read and discuss learning outcomes and ask you to highlight anything that is unclear, etc)	Strongly disagree> Strongly agree	10.56%	15.00%	30.00%	<b>32.78%</b>	11.67%	0.09	3.20
I am given opportunities to actively engage with assessment criteria grids/marketing rubrics (e.g. tutors may ask you to use assessment criteria grids/marketing rubrics to mark example work, or to discuss the differences between a 40% and a 70% in an assessment based on the criteria, etc)	Strongly disagree> Strongly agree	12.22%	17.22%	<b>34.44%</b>	22.78%	13.33%	0.08	3.08
I am given opportunities to actively engage with my written feedback	Strongly disagree> Strongly agree	7.22%	8.89%	<b>38.33%</b>	29.44%	16.11%	0.12	3.38

My feedback explains how well I have met the assessment criteria, so I can identify where I went wrong	Strongly disagree> Strongly agree	1.11%	11.67%	22.78%	<b>48.89%</b>	15.56%	0.16	3.66
I find it easy to use feedback I receive in one module to improve similar assessments in future modules	Strongly disagree> Strongly agree	1.67%	7.78%	27.78%	<b>47.22%</b>	15.56%	0.16	3.67
I can see how assessment feedback I have received during my course has helped me to improve academically over time	Strongly disagree> Strongly agree	1.67%	8.89%	24.44%	<b>41.11%</b>	23.89%	0.13	3.77
Whether I read feedback is often related to my immediate feelings after seeing my mark	Strongly disagree> Strongly agree	20.00%	14.44%	17.78%	<b>27.78%</b>	20.00%	0.04	3.13
I feel I could engage more with learning outcomes and assessment criteria at the start of assessments	Strongly disagree> Strongly agree	3.33%	7.78%	31.11%	<b>38.89%</b>	18.89%	0.13	3.62
I use the assessment criteria I am given to self-assess my work before I submit	Strongly disagree> Strongly agree	5.56%	13.89%	23.89%	<b>33.33%</b>	23.33%	0.09	3.55



I engage with other students to peer review each other's work against the criteria before we submit	Strongly disagree> Strongly agree	18.89%	18.33%	21.11%	<b>27.22%</b>	14.44%	0.04	3
I actively try to identify points for improvement in my feedback so I can use it to improve in future assessments	Strongly disagree> Strongly agree	1.11%	7.22%	23.89%	<b>48.33%</b>	19.44%	0.16	3.78
		<b>*Bold</b> denotes highest percentage for each Q						

Table 4.1 Quantitative Likert survey results by question

Question	Yes (n186)	No (n186)
I always read my feedback	92.22%	7.78%
I understand learning outcomes and how they are used	92.13%	7.87%
Do you look at assessment criteria when completing an assessment?	91.06%	8.94%

I understand how my tutors use the learning outcomes and assessment criteria/rubrics to mark my work	84.48%	15.52%
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Table 4.2 Quantitative Yes/No question results

These results are simply presented here and will be discussed at the end of this chapter where all results from the survey are brought together.

## 4.5.2 Qualitative survey data results

The survey gave students seven opportunities to expand on answers or answer open questions. This method was initially planned to simply give some additional insight into the quantitative data results. However, through those open questions, the 182 students made 689 individual open comments between them. The volume and depth of comments came as a surprise, and this data actually served as a greater and more enlightening dataset than the quantitative data. The data was themed by printing the open comments pages from each question. These were highlighted manually to identify the key themes. Tables 4.3-4.10 below show the results of the thematic analysis of the qualitative data by question. The table shows the themes and the total instances of comments within each theme. It also includes some example student comments to give the reader a feel of the student voice behind these emergent themes (the table with *all* related student comments within each theme can be found in appendix 3). Whilst the number of tables here, and the selection of student voice data may seem on the surface to be too much, I feel that reading these student comments adds an additional dimension to the results as it brings the themes alive when seeing the student thoughts, feelings, and experiences against each theme.

**Thematic analysis results (with example student comments/student voice)**

<p><b>Q: Think about feedback you have received so far on your course. What are the most useful pieces of feedback you have received? Why were these the best?</b></p> <p>Response total comments - 1<sup>st</sup> year: 34, 2<sup>nd</sup> year: 48, 3<sup>rd</sup> year:31, TOTAL: 113 (% below are of total and by year totals)</p>		
Theme	Number of instances	Example open comment quotes from students (Note: comments are presented as students had written them, some comments may be repeated where they are relevant to a number of themes)
Feedback that was clear and explained how students could have got higher marks/where they lost marks against criteria (inc constructive criticism)	57 (64%)	<ul style="list-style-type: none"> <li>● <i>Feedback that relates to the marking criteria and learning outcomes and is explained what points were not covered and why.</i></li> <li>● <i>Specific and well defined examples of how my work has not met an assessment criteria, for example "you attempted to do this, but here are the exact reasons why what you wrote/submitted did not fulfil this criteria"</i></li> </ul>
Feedback related to structuring work/writing/referencing	24 (21%)	<ul style="list-style-type: none"> <li>● <i>I used to have trouble with referencing and finding enough appropriate sources, some feedback on a piece of coursework in first year helped lead me on the right way to reference and find useful sources.</i></li> </ul>
Transferable to future assignments/specifically stated how to improve in future	13 (12%)	<ul style="list-style-type: none"> <li>● <i>The best feedback I have received is detailing what things didn't go well within the assignment and what is needed to be done the next time around. This feedback is the best as it allows me to improve in other modules.</i></li> </ul>
Asking for and/or getting 1 to 1 help from tutor	7 (6%)	<ul style="list-style-type: none"> <li>● <i>The feedback was best given to me in a verbal manner. The teach will sit down and discuss what is needed in my work to get a specific grade I'm trying to work for</i></li> </ul>
Feedback on drafts	4 (4%)	<ul style="list-style-type: none"> <li>● <i>The only module when a draft was allowed, got me to see how I was going wrong and I could evaluate and change up my ideas.</i></li> </ul>
Feedback that explained the value of wider reading and critical thinking	4 (4%)	<ul style="list-style-type: none"> <li>● <i>Those which tell me ways I can be more critical. These are the best because I sometimes find it hard to be critical in my work.</i></li> </ul>

Table 4.3 Open question 1 results

**Q: Name one way in which you have used feedback to improve your learning.**

Response total comments – 1<sup>st</sup> year: 34, 2<sup>nd</sup> year: 47, 3<sup>rd</sup> year: 29, TOTAL: 110

Theme	Number of instances	Example open comment quotes from students in answer to this question
Using previous feedback to improve/reflection	40 (36%)	<ul style="list-style-type: none"> <li>● <i>Compared new assignments to feedback and using it as a check list to ensure I have followed the advice given from previous assignments.</i></li> <li>● <i>Some feedback has changed my way of thinking/seeing a task/problem.</i></li> </ul>
Improved use of literature/academic writing/referencing	24 (22%)	<ul style="list-style-type: none"> <li>● <i>My feedback would usually state the need for more references, so I sought out papers and books I could reference for assignments before attempting them.</i></li> <li>● <i>Improved writing and referencing styles determined by previous feedback.</i></li> </ul>
Improved ability to structure work	15 (14%)	<ul style="list-style-type: none"> <li>● <i>I used feedback from one assignment to improve the structure of my reports to make them more professional</i></li> </ul>
Increased proofreading and checking work	5 (5%)	<ul style="list-style-type: none"> <li>● <i>proof read my work multiple times.</i></li> <li>● <i>proof read the next assignment to ensure ive implemented what feedback was given me</i></li> <li>● <i>double checking work</i></li> </ul>
Now understand the value of/use assessment criteria	5 (5%)	<ul style="list-style-type: none"> <li>● <i>Read the criteria multiple times until I can remember it without having to look</i></li> <li>● <i>reading the guidelines of my tutor in the last few weeks regarding the tasks</i></li> <li>● <i>Looked more closely at assessment criteria</i></li> </ul>
Verbal feedback/discussion to develop understanding of work	3 (3%)	<ul style="list-style-type: none"> <li>● <i>Talk to the student one to one after a couple of weeks</i></li> <li>● <i>When talking to lecturers about the feedback to clarify any points i had misinterpreted</i></li> <li>● <i>verbal feedback not written</i></li> </ul>

Value of draft work	4 (4%)	<ul style="list-style-type: none"> <li>• <i>I have used feedback on drafts to edit my work</i></li> <li>• <i>I have used feedback to improve any drafts that have been submitted</i></li> </ul>
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Table 4.4 Open question 2 results

<b>Q: If you answered no to the last question (do you always read feedback?), please explain what factors stop you from reading feedback.</b> Response total comments – All 15		
Theme	Total instances	Example open comments from students
Forget/lazy/do not know when feedback is released	5	<ul style="list-style-type: none"> <li>• I will either forget about the feedback (or i will just look at my result mark instead of the Feedback)</li> <li>• Laziness</li> <li>• I don't know when the feedback is released most of the time</li> </ul>
Feedback not useful/not understood	4	<ul style="list-style-type: none"> <li>• Even though i answered yes, some of the feedback was just numbers.</li> <li>• Copy and pasting the same feedback doesn't count as proper feedback.</li> </ul>
If happy with mark they do not look at feedback	4	<ul style="list-style-type: none"> <li>• This generally depends on the grade. If it is one i am happy with I don't always bother.</li> <li>• I usually look at feedback if I wasn't happy with my mark and wanted to find out what I could have done better.</li> </ul>
Final Assessment	3	<ul style="list-style-type: none"> <li>• if it is a final submission and i cannot change the more then i feel it is not needed to learn how to improve my marks when i will not be submitting more work</li> <li>• No other work was due after feedback was given so did not feel the need to read the given feedback</li> </ul>

Table 4.5 Open question 3 results

**Q: If you were a tutor/lecturer, how would you structure your written feedback to ensure it was useful to your students?**

Response total comments –TOTAL: 164

Theme	Number of instances	Example open comment quotes from students
With positives, negatives (actionable), and how to improve (inc. against criteria)	86 (42%)	<ul style="list-style-type: none"> <li>● I would justify the mark given using the marking criteria, explaining which objectives the student had met completely, which they had partially met, and which there was no evidence of attempting. I would comment on the best feature of their work and also explain where the biggest improvement could be made and briefly explain how this could be achieved.</li> </ul>
Feedback on sections/detailed/annotated	24 (15%)	<ul style="list-style-type: none"> <li>● Go over each part of the assignment compared to how they wanted it to be laid out and say how I could have improved.</li> </ul>
Concise/bullet points	24 (15%)	<ul style="list-style-type: none"> <li>● I would use bullet points to outline each area of improvement rather than writing a overview paragraph.</li> <li>● Keep it simple, to the point, what was good what wasn't. ways to improve. not too wordy either</li> </ul>
Personal feedback/not automated or generic	9 (5%)	<ul style="list-style-type: none"> <li>● I would make it a bit more personal to make it feel more like it was aimed at the person</li> <li>● tailor feedback to each student</li> </ul>
Easy to understand/clear	13 (8%)	<ul style="list-style-type: none"> <li>● Simple English, no vagueness</li> <li>● Keep it simple enough for everyone to understand</li> </ul>
Verbal feedback	6 (4%)	<ul style="list-style-type: none"> <li>● I'd have verbal and written feedback</li> <li>● Propose meetings for the students if they do not understand, or explain my viewpoints of their work in different ways.</li> </ul>

Table 4.6 Open question 4 results

**Q: Can you identify how you have developed over time to improve your academic performance? How has your approach changed since you started the course?**

Response total comments - TOTAL: 109 comments

Theme	Number of instances	Example open comment quotes from students
Engaging with more academic sources/research for assignments	21 (19%)	<ul style="list-style-type: none"> <li>● <i>Looking up more academic references has improved the quality of the information that I research, giving me a better understanding of certain topics.</i></li> </ul>
Understanding how to structure work	9 (8%)	<ul style="list-style-type: none"> <li>● <i>It was mainly becoming used to the University standards of structuring work and making sure I included small details in which I had not previously considered</i></li> <li>● <i>I've gained a greater understanding of academic writing styles and how to structure an assignment</i></li> </ul>
More planning and time management	24 (22%)	<ul style="list-style-type: none"> <li>● <i>I plan more what I will include in my work</i></li> <li>● <i>I read the objectives for the task before I start so I have an idea of what to do as well as planning out my work before I start it in order to not miss anything out.</i></li> </ul>
Learn from previous work/feedback	12 (11%)	<ul style="list-style-type: none"> <li>● <i>When starting a piece of work, I like to go back and review old work to remind myself about the positive and negatives of that piece and how I can incorporate these positives into the next piece.</i></li> </ul>
More engagement with assessment criteria	18 (17%)	<ul style="list-style-type: none"> <li>● <i>I read the marking criteria more thoroughly, identifying where I can improve my answers.</i></li> <li>● <i>From first year, I don't think I looked at the marking criteria at all but as I progressed, I began to use it more and more. This has allowed me to identify which areas within a coursework are worth more and therefore need more time spending on than other sections</i></li> </ul>



Understanding/improving academic writing and referencing	23 (21%)	<ul style="list-style-type: none"> <li>• <i>How I write has changed to become more concise but also more academically correct, to ensure the highest grades possible</i></li> <li>• <i>I believe I am now better at academic writing and referencing due to feedback</i></li> </ul>
Talking to tutors and peers about work	2 (2%)	<ul style="list-style-type: none"> <li>• <i>Communicated more with my teachers</i></li> </ul>
		<ul style="list-style-type: none"> <li>• <i>I try to communicate more within seminars and get help if required. I have tried to communicate with other people in the class to get a better overall perspective of the work and I make sure that I try my best and understand the work to the best of my ability.</i></li> </ul>

Table 4.7 Open question 5 results

<p><b>Q: (Question for third and fourth years only) Did you perceive or notice any difference in written tutor feedback over the three years of your degree? For example, was feedback in first year different in any way to feedback, in second year, or the feedback you receive now?</b></p> <p>Response total comments – All 52 comments</p>		
<b>Theme</b>	<b>Total instances</b>	<b>Open comments from students</b>
Varies by tutor	10	<ul style="list-style-type: none"> <li>• <i>Feedback has varied through the years but also on a tutor by tutor basis, with some tutors providing more, structured feedback than other.</i></li> <li>• <i>had different tutors for each year and each had their own style of feedback.</i></li> <li>• <i>some tutors provide better feedback than others</i></li> </ul>

2 <sup>nd</sup> and 3 <sup>rd</sup> year more detailed	22	<ul style="list-style-type: none"> <li>• <i>Feedback through 2nd and 3rd year has been a lot more detailed than what was given in first year, as it has gone from usually being one small sentence that lacks detail, to at least a paragraph explaining what grade you got and why, as well as how you can improve.</i></li> <li>• <i>The feedback has become more technical and focuses more on ways to improve rather than highlighting what was good or bad in the assessments</i></li> <li>• <i>Feedback seems to have gotten more in depth as the years progressed.</i></li> </ul>
No difference	20	<ul style="list-style-type: none"> <li>• 20 variations on 'No'</li> </ul>
Other points (various)	4	<ul style="list-style-type: none"> <li>• <i>For more word-heavy courses I received more feedback than those that were more mathematically based</i></li> <li>• <i>I feel there should be a set feedback structure that every tutor must follow such as the one described above.</i></li> <li>• <i>Longer feedback intervals were present in the third year.</i></li> <li>• <i>Feedback has become more general over the years as the quality of work improves so there is less to point out</i></li> </ul>

Table 4.8 Open question 6 results

**Q: Can you give an example of positive and/or negative experiences of feedback?**

Response total comments – 1<sup>st</sup> year: 30 , 2<sup>nd</sup> year: 49 , 3<sup>rd</sup> year: 23 , TOTAL: 102. Positive comments in green, negative in grey

Theme	Pos+ or Neg-	Number of instances	Example open comment quotes from students
Opportunities to discuss feedback with tutors/helpful tutors (pos) VS Not enough opportunities to discuss feedback (neg)	Positive	12 (12%)	<ul style="list-style-type: none"> <li>tutor is approachable and welcoming to any queries and tries upmost to provide feedback/answer/solution/further ideas</li> <li>Many of the tutors have sessions dedicated to feedback after work has been marked and will go around individually and discuss the work to iron out any of the flaws</li> </ul>
	Negative	7 (7%)	<ul style="list-style-type: none"> <li>often times I feel that tutors can be somewhat stand-offish in terms of inviting students to talk 1 to 1 about their feedback. I would like to discuss my feedback where possible in person regularly.</li> <li>Sometimes I feel uncomfortable asking certain tutors for help, due to previous experiences with them.</li> </ul>
Feedback explained positives/where I went wrong/how to improve VS Did not explain where I went wrong/did well	Positive	18 (18%)	<ul style="list-style-type: none"> <li>Feedback, for myself, is always written in a concise manner and including key details on what was good and bad with the piece of work which I completed.</li> <li>When I have been given feedback it has mostly been clear explaining what could be improved.</li> </ul>
	Negative	5 (5%)	<ul style="list-style-type: none"> <li>Some feedback will state, for example “Outstanding effort, great piece of work” yet the grade might be say, 90% so I ask myself what did I need to do for that extra 10%</li> <li>some feedback was generic, as in it stated what was done incorrectly, but no recommendation for improvement were given</li> </ul>

Clear and easy to understand feedback  VS	Positive	5 (5%)	<ul style="list-style-type: none"> <li>● most of the feedback i have received have been thorough enough for me to understand</li> <li>● Feedback, for myself, is always written in a concise manner</li> <li>● Feedback given is concise and clear</li> </ul>
	Negative	12 (12%)	<ul style="list-style-type: none"> <li>● Sometimes receive ambiguous feedback.</li> </ul>
Ambiguous/not easy to understand			<ul style="list-style-type: none"> <li>● Negatives - Some of the feedback provided to me are very vague</li> </ul>
Helpful formative/draft opportunities  VS No formative/draft opportunities	Positive	7 (7%)	<ul style="list-style-type: none"> <li>● i was reading the feedback on my draft and i did many mistakes but thankfully i had time to change before the deadline date.</li> <li>● So when it comes to drafts and feedbacks around them its fantastic as it is always insightful</li> </ul>
	Negative	5 (5%)	<ul style="list-style-type: none"> <li>● We also do not get any submissions or drafts before final hand in of lump sum of work. some modules do not incorporate a draft submission.</li> <li>●</li> </ul>
Feedback in time/on time  VS Feedback not in time/takes too long	Positive	7 (7%)	<ul style="list-style-type: none"> <li>● Feedback has always been given by the specified due date Feedback for assignments is usually given in good time</li> </ul>
	Negative	31 (30%)	<ul style="list-style-type: none"> <li>● Do the same mistakes in some assignments because feedback is given after submission. Don't always get feedback in time to improve next assignment</li> <li>●</li> <li>● Feedback takes 4 weeks to be received, by which point it is often too late to act upon it</li> </ul>
Generic /copy and paste feedback	Negative	11 (11%)	<ul style="list-style-type: none"> <li>● For one module, the feedback given was essentially the same content as the marking criteria for that grade boundary, with effectively no specific feedback to my coursework</li> <li>● Lots of feedback are just copy and pasted, it's not personalized and isn't helpful</li> <li>● some feedback was generic</li> </ul>

Varied quality depending on tutor	Total	4 (4%)	<ul style="list-style-type: none"> <li>• I find my ability to understand and the quality of feedback greatly varies from tutor to tutor, more so than I would like.</li> <li>• It's hard to judge as all lecturers are different, some will give low marks and only positive comments back and no feedback to why I lost marks and others are brilliant in finding all of the areas in which you can improve.</li> </ul>
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Table 4.9 Open question 7 results

<b>Q: Any other points you feel would be useful regarding your experiences of assessment feedback during your course?</b>		
Response total comments – All 24		
<b>Theme</b>	<b>Total instances</b>	<b>Comments</b>
Students understand staff time pressures	2	<ul style="list-style-type: none"> <li>• <i>More developed answers on how to improve. This can be hard though due to the amount of work tutors have to assess.</i></li> <li>• <i>The wait time for feedback can be long, but it is an understandable thing.</i></li> </ul>
Drafts	3	<ul style="list-style-type: none"> <li>• <i>More prompt and thorough feedback on draft submissions in particular would be extremely helpful, since that gives us actions we can take before the deadline rather than after the main assignment is submitted.</i></li> </ul>
Exemplars	1	<ul style="list-style-type: none"> <li>• <i>showing examples of a 60, 70, 80 percent piece of work would be useful, because it is often difficult to know what distinguishes a very good piece of work from an average piece of work.</i></li> </ul>
Don't copy and paste or give generic feedback	6	<ul style="list-style-type: none"> <li>• <i>Don't copy and paste the same feedback to multiple students. Each one should be unique to the student, otherwise it is pointless.</i></li> </ul>
More 1 to 1/Dialogue/Verbal feedback	7	<ul style="list-style-type: none"> <li>• <i>I would like a chance to speak to my tutor about my feedback within lecture/seminar time</i></li> </ul>

Wait too long for feedback	4	<ul style="list-style-type: none"> <li>• <i>The time delay in receiving feedback is the single most frustrating issue. The content and structure is generally good, but receiving the information quickly is more important to most students than the structure and content.</i></li> </ul>
Feedback needs to be person specific detailed and clear how to improve	7	<ul style="list-style-type: none"> <li>• <i>The feedback hasn't been as useful or involved as I would like, I think it needs to be more relevant.</i></li> </ul>
Consistent marking practices	2	<ul style="list-style-type: none"> <li>• <i>Different lecturers want different things when it comes to assignments; meaning that what one person says is good another will not. This has proven to be a</i></li> </ul>
		<p><i>disadvantage to myself in the event of my dissertation being marked, as work being done as suggested by one lecturer was marked down by another.</i></p>
Feedback on non-written assessments (e.g code)	1	<ul style="list-style-type: none"> <li>• <i>In some coursework, specifically programming courseworks comments on how your code was would be nice. Improvements, styles, and so on.</i></li> </ul>

Table 4.10 Open question 8 results

### 4.5.3 Survey results discussion

These quantitative results were generally positive in terms of the student experience. We can see these positive outcomes clearly in the yes/no questions table (Table 4.2). It is extremely positive that over 90% of students state that they always read feedback, that they understand how learning outcomes are used, and that they look at assessment criteria when completing an assignment. It is important to note here that simply *reading* the feedback would not always demonstrate true engagement with it. Reading the feedback once may not lead to application to future assessments, learning from mistakes and so on, however, this question was a tool by which to measure those who do at least enable engagement by reading the feedback given, as demonstrated by Handley et al. (2008) in their process of student engagement with feedback diagram (Fig 2.1).

The qualitative results helped to identify why some students do not always read their feedback, some pertinent comments from the students were: *'I will either forget about the feedback, or I will just look at my result mark instead of the Feedback'*, this links to the next comment, where the student notes that looking at feedback depends on the assessment outcome: *'This generally depends on the grade. If it is one I am happy with I don't always bother'*. In addition, a number of students (n=3) noted that they do not read feedback on final submissions: *'No other work was due after feedback was given so did not feel the need to read the given feedback'*. It is possible that educators could learn from these outcomes, especially on terminal end of course assessments where feedback may be better rolled back to draft submissions where it remains useful.

There were some questions across the Likert scale questions that gained more notable results. For example:

- Q- 'I feel I could engage more with learning outcomes and assessment criteria at the start of assessments' – with 57% of students agreeing or strongly agreeing with the statement it felt somewhat in contrast to the 91% of students who stated that they *look* at assessment criteria when completing

their assessments. The difference here maybe between the language used of 'look' at criteria and 'engage' with it. Meaning students almost always look at the criteria but maybe do not continue to engage with it to assess their work as they go along. This is also impacted by the fact that only 36.11% of students stated that they are given opportunities to actively engage with assessment criteria grids. Actively engaging the student with the criteria can lead to students understanding how to use it and the value of engaging with it through the assessment process (Beaumont et al., 2014). Indeed, the qualitative results showed that when students were asked ways in which they have used feedback to improve their learning, five students noted that it had helped them to see the value of engaging with assessment criteria.

- Q- *'I receive my feedback in a timely enough manner for it to inform future assessments'* – Whilst this question only just fell under 50% positive responses (49.44%), that is only half the students reacting positively to whether they feel they get feedback in time for it to inform future work. The qualitative results shone a light on the issues with timeliness of feedback. There were twelve specific comments relating to feedback taking too much time, with many noting that feedback arrives after the point at which it would have remained useful, e.g. *'I Don't always get feedback in time to improve (sic) next assignment'* and *'Sometimes feedback takes weeks which leads into the middle or near the end of the next assignment which gives me little time to use the feedback towards the task'*. Timeliness of feedback is also noted as an issue in the literature (Beaumont et al., 2011; Jonsson, 2012).
- Q- *'I am given opportunities to actively engage with these learning outcomes'* – The results from this question gained 44.45% positive responses, in addition the question *'I am given opportunities to actively engage with assessment criteria grids/marketing rubrics'* which gained just 36.11% positive responses. Finally, the question *'I am given opportunities to actively engage with my*



written feedback' gained 45.55% positive responses. These three questions are discussed together as they have a key link, they are the only three questions that specify *active* engagement (namely with learning outcomes, assessment criteria and feedback) and all fell below the 50% positive response level and had lower mean results. The literature continuously points to the need for active engagement with assessment. Sadler (2010) noted that students need to appreciate how the feedback could help them improve on the work. Carless et al. (2011) and Gibbs (2006) noted that students need to understand how they may use their feedback to improve future performance. The literature also points to the students understanding their own role in the active engagement with their feedback (Bloxham & Campbell, 2010; Fisher et al., 2011). Given that the importance of active engagement is so prevalent in the literature it is disappointing that so few students feel they were given opportunities to actively engage with the learning outcomes, assessment criteria and feedback. Some qualitative comments (n=18) highlighted how students may develop this engagement over time themselves through appreciation of the value of it. For example, when asked how they had developed over time, students noted:

*'I read the marking criteria more thoroughly, identifying where I can improve my answers' (2nd year student)*

*'I have actively started reading the grading criteria in order to ensure I got my grading targets before submission. I did not do this in first year.'*  
*(2nd year student)*

*'From first year, I don't think I looked at the marking criteria at all but as I progressed, I began to use it more and more. This has allowed me to identify which areas within a coursework are worth more and therefore need more time spending on than other sections' (Third year student)*

It is important to note, however, that whilst it is pleasing to see this student self-regulation developing over time, actively engaging students with

criteria, etc. from first year can hasten their development and understanding of the importance of criteria and assessment engagement (Beaumont et al., 2014, Moscrop et al., 2019)

- Q- *'Whether I read feedback is often related to my immediate feelings after seeing my mark'* – Strongly disagree > Strongly agree: 20.00%, 14.44% , 17.78%, 27.78%, 20.00%. I have shown all results across the scale here as it is interesting as it shows a pretty even distribution across the responses, with the mean being very close to the median at 3.13. This supports my original assertion that it is important to see students as individuals, not one homogenous group. Individual personalities, where they are within their studies, their emotional intelligence, mental health issues, and so on, may all impact on how a student may react to feedback. As noted in factor 7 (psychological impacts of feedback) taking active steps to prepare students emotionally for receiving feedback may allow them to engage with a lesser emotional impact, and training tutors to manage the process may reduce the impacts noted by Carless (2007) who noted impacts as feelings of depression, pressurisation and students even feeling sad and scared when receiving feedback.
- The final notable result was from the question *'I engage with other students to peer review each other's work against the criteria before we submit'* with 41.66% noting that they do. Doing this demonstrates a level of self-assessment and self-regulation (factor 6). Interestingly, the differences across years showed an increase in this type of peer review, with 53.57% of third years saying that they undertake this kind of peer review as opposed to just 39.13% of first years (year of study data shown in appendix 3), which would be expected as they develop the skills of self-regulation over time. A study by Moscrop et al. (2019) noted that students who are actively engaged with criteria and feedback are then more likely to go ahead and self-assess their work in future, effectively developing their appreciation of

the process and their self-regulation. It is clear that self-regulation should be discussed with students, so they understand the value of actively developing these skills early in their degree study (Carless et al., 2011; Orsmond et al., 2013).

These quantitative results have highlighted key issues for the students within this study:

- Timeliness of feedback
- Lack of opportunities for active engagement with learning outcomes, criteria, and feedback.
- The differing psychological impacts of feedback
- The development of student self-regulation through/impacted by active engagement with peers.

Given the detail in the results above, the next stage of the analysis is taking all the themes identified above (from each of the questions), and cross-mapping those to find overarching conceptual themes from the student data, noting what is important to them. This process is shown in the table below with the identified key conceptual themes that cut across all the data in the top row, the open survey questions in column one, with the question themes mapped in the body of the table.

Identified key themes from student data >>	Clear feedback against criteria with personalised positives and negatives of work	Structuring work and academic writing improving through feedback	Dialogue	Feedback that is transferable to future	Drafts/ Formative opportunities	Increased individual responsibility
Q: Think about feedback you have received so far on your course. What are the most useful pieces of feedback you have received? Why were these the best?	Feedback that was clear and explained how students could have got higher marks/where they lost marks against criteria (inc constructive criticism)	Feedback related to structuring work/writing/ referencing  Feedback that explained the value of wider reading and critical thinking	Asking for and/or getting 1 to 1 help from tutor	Transferable to future assignments/ specifically stated how to improve in future	Feedback on drafts	

<p>Q: Name one way in which you have used feedback to improve your learning</p>		<p>Improved ability to structure work.</p> <p>Improved use of literature/ academic writing/ referencing</p>	<p>Verbal feedback/ discussion to develop understanding of work</p>	<p>Using previous feedback to improve/reflection</p>	<p>Value of draft work</p>	<p>Increased proofreading and checking work.</p> <p>Using previous feedback to improve/reflection</p>
<p>Q: If you were a tutor/lecturer, how would you structure your written feedback to ensure it was useful to your students?</p>	<p>With positives, negatives (actionable), and how to improve (inc. against criteria)</p> <p>Feedback on sections/</p>	<p>Engaging with more academic sources/ research for assignments</p>	<p>Verbal feedback</p>			

	<p>detailed /annotated</p> <p>Concise/bullet points</p> <p>Easy to understand/clear</p> <p>Personal feedback/not automated or generic</p>					
Q: Can you identify how you have developed over time to improve your academic performance? How has your approach changed since you started the course?	More engagement with assessment criteria	<p>Understanding how to structure work</p> <p>Understanding/ improving academic writing and referencing</p>	Talking to tutors and peers about work	Learn from previous work/feedback		<p>More planning and time management</p> <p>More engagement with assessment criteria</p>
Q: Can you give an example of positive	Feedback explained positives/where I went		Opportunities to discuss		Helpful formative/dra	

and/or negative experiences of feedback?	wrong/how to improve VS Did not explain where I went wrong/did well  Clear and easy to understand feedback VS Ambiguous/not easy to understand		feedback with tutors/helpful tutors VS Not enough opportunities to discuss feedback		ft opportunities VS No formative/draft opportunities	
Q: Any other points you feel would be useful regarding your experiences of assessment feedback during your course?	Varied quality depending on tutor  (Negatives) Generic /copy and paste feedback		Varied quality depending on tutor	Feedback in time/on time VS Feedback not in time/takes too long	Varied quality depending on tutor	
Q: If you answered no to the last	Feedback not useful/not			Final Assessment (so not		Forget/lazy/ do not know when

question (do you always read feedback?), please explain what factors stop you from reading feedback.	understood			transferable)		feedback is released
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Table 4.11 Cross mapping emergent themes from survey questions to identify key overarching themes from the student data



#### 4.6 Stage I and II Results conclusion

The purpose of stage I thematic literature review was to identify the key factors affecting student feedback engagement, with a view to developing a holistic understanding of the problems in order to move towards a more integrated framework to develop feedback engagement across a student's experience in higher education. The outcome was the identification of eight problem 'factors' with feedback engagement. The objective specifically related to this stage of the study was to 'Identify, from the literature, the problem factors that inhibit assessment feedback engagement in higher education'. The research questions specifically related to this stage were:

RQ1: What factors make students more or less likely to engage with assessment feedback?

RQ1.1: According to the literature, what are the key factors affecting student engagement with feedback?

The identifies factors affecting feedback engagement were:

1. Students being unable to make sense of or apply feedback
2. The problems with feedforward
3. The problems with assessment criteria and feedback
4. The lack of training for students and tutors
5. The lack of dialogue around feedback
6. The impacts of modularisation and course design
7. Psychological factors affecting feedback engagement
8. The lack of student self-assessment and self-regulation

Additional limitations of this stage are covered in the later limitations section (6.6.1).

The purpose of stage II was to identify the problems factors with feedback engagement from the student point of view. The specific research questions related to this stage were

RQ1: What factors make students more or less likely to engage with assessment feedback?

RQ1.2: In what ways do students describe their feedback experiences and particularly their engagement with feedback?

The analysis of the student data identified the key overarching conceptual themes by further analysing the original emergent themes from the question level data. They include the benefits students identified with feedback and aspects they were positive about in terms of their feedback experiences. These were as follows:

- Clear feedback against criteria with personalised positives and negatives of work
- Structuring work and academic writing improving through feedback
- Dialogue
- Feedback that is transferable to future
- Drafts/ Formative opportunities
- Increased individual responsibility

Additional limitations of stage II are covered in the later limitations section (6.6.2).

The purpose of stage III to follow in the next chapter is to cross check how the student perspectives of the experience with feedback may link to the eight problem factors identified in stage one. To do this, the emergent themes from the qualitative survey data and the notable issues from the quantitative data are mapped against the eight problem factors identified in the thematic literature review.

## **Chapter 5: Conceptualisation of the relationships between the problem factors: Framework development (Stage III)**

This chapter will take the results from the previous chapters and work towards the conceptualisation of the relationships between the problem factors (RQ2) and the creation of a framework which can be both practically implemented and provide a basis for future research and development (RQ2.1 and RQ2.2)

The chapter is stage three of the study and will walk the reader through the process of development of concept maps that lead to the final framework.

### **5.1 Mapping stage 1 results (8 problem factors) to stage 2 results (themes from student survey)**

The purpose of stage II of the method was to cross check how the student perspectives of the experience with feedback may link to the eight problem factors identified in stage one. To do this, the emergent themes from the qualitative survey data and the notable issues from the quantitative data were mapped against the eight problem factors from stage 1 (Table 5.1 below)

8 problem factors identified in the stage 1 thematic literature review >>>	1.Students not being unable to make sense of feedback or to apply it	2.The problems with feedforward	3.The problems with assessment criteria and feedback	4.Tutors (4a) and students (4b) not being explicitly trained to develop and use criteria and apply feedback	5.Lack of dialogue around feedback	6.Impacts of modularisation and course design on feedback engagement	7.Psychological factors affecting feedback engagement	8. The lack of student selfassessment and self-regulation and its effect of feedback use and engagement
<b>Notable issues identified from the quantitative survey data (mapped against 8 factors, some relevant to more than one problem factor)</b>	Timeliness of feedback lack of opportunities for active engagement with learning outcomes criteria and feedback	Timeliness of feedback	lack of opportunities for active engagement with learning outcomes criteria and feedback	lack of opportunities for active engagement with learning outcomes criteria and feedback	lack of opportunities for active engagement with learning outcomes criteria and feedback	Timeliness of feedback	the differing psychological impacts of feedback	The development of student selfregulation through/impacted by active engagement with peers
<b>Key themes from stage 2 qualitative data (mapped against 8 factors)</b>	Structuring work and academic writing improving through feedback	Feedback that is transferable to future	Clear feedback against criteria with personalised positives and negatives of work		Dialogue	Drafts/ Formative opportunities		Increased individual responsibility

Table 5.1 Mapping key themes and issues from the quantitative data and qualitative data to the 8 key factors affecting feedback engagement

It is clear from this table that the outcomes from the qualitative and quantitative data analysis clearly maps to the problem factors identified in the thematic literature review. No additional 'issues' or 'problems' were identified from the student survey data suggesting that the themes identified in the thematic literature review in stage one are robust. However, the student survey data has added a level of richness and detail regarding how students experience the eight problem factors identified in stage 1 of the study.

The following chapter will take the 8 problem factors and the student data to conceptualise how the problem factors link to and impact upon each other.

### **5.3 Taking a holistic view of the factors affecting student feedback engagement**

As mentioned earlier, the problem landscape in assessment feedback engagement is complex. This is demonstrated in the many areas of overlap mentioned within the problem factors that were identified in the first stage of this study. To attempt to make sense of this problem landscape in assessment feedback, I took the problem factors (from stage 1 of the research) and undertook a mapping exercise in an attempt to identify where each factor impacts, or is impacted by, other factors (Fig.5.1 below). This was done to see if any problem factors with feedback engagement were more impactful than others.

The arrows on the diagram note where one problem factor can impact on another, as highlighted in the thematic review. For example, factor 1 (students not being able to understand feedback) impacts factor 2 (the problems with feedforward) (Carless et al., 2011; Gibbs, 2006) as if students cannot understand feedback, then they cannot use it in future. Factor 1 also impacts F8 (the lack of student self-assessment and self-regulation) (Bloxham & Campbell, 2010; Fisher et al., 2011; Nieminen et al., 2021) as not understanding the feedback does not enable student development, and so on.

Where arrows are two-way each problem factor can impact on the other. It is important to note that the lines are not weighted by the number of times they linked in the literature or the strength of the impact, they were simply to

demonstrate a first stage overview of how the problem factors may link. It was hoped that this process would add some insights into the data as an initial first stage analysis to try to ‘make sense’ of how problems with feedback engagement affected one another, particularly with the hope of noting which factors were impacting on others more.

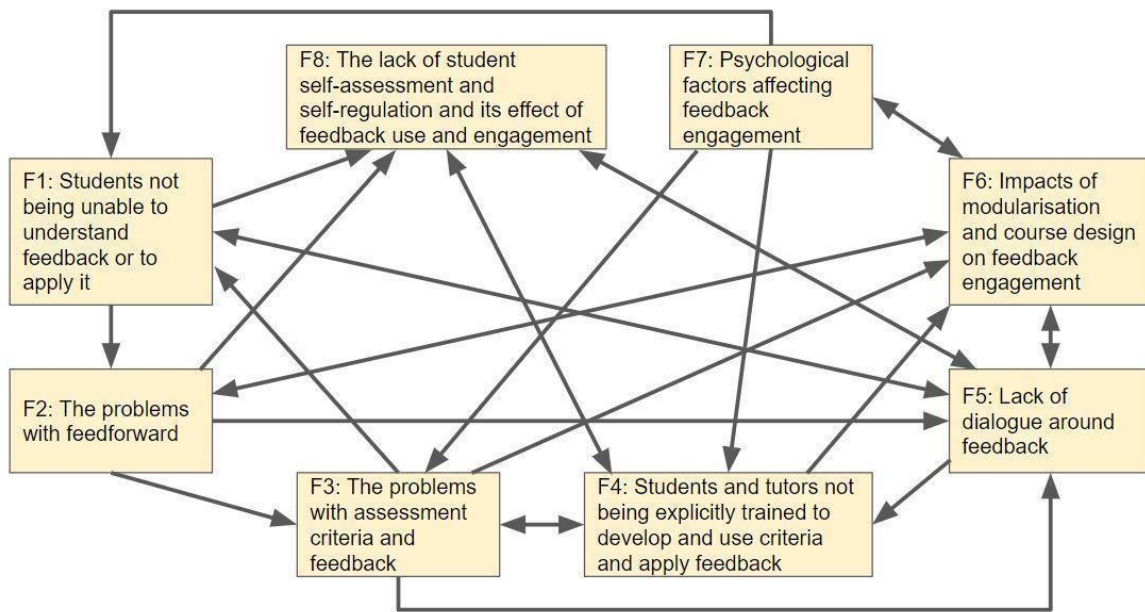


Figure 5.1 The ‘Problem Landscape’ in assessment feedback engagement - visual linkages between areas for concern.

This first exercise to visualise the problem landscape did not provide any definitive answers and created a difficult diagram! Initially it was difficult to see the value of this exercise. All factors linked 4-6 times to other factors which did not provide any extra clarity regarding any ‘key’ factors. However, the process did solidify initial assertions that the problems with feedback engagement are so interwoven that just ‘fixing’ one problem will not solve the inherent issue of student feedback engagement. A different approach was needed, and concept mapping was the next stage.

#### **5.4 Concept maps – Visualising the linkages between the problems with feedback engagement**

Concept maps are a useful tool for representing knowledge in a visual way (Bradley, n.d). Given the initial challenges above of trying to ‘see’ how each problem factor links to another (Fig.5.1). Novak (1998) suggests that using a concept map can help researchers to ‘build and organise ideas, layer details, and find connections and relationships that might never have occurred to you before’. Daly (2004) noted that concept maps are a strategy that can be used alongside of research methods in the same study and that ‘Concept maps are an important strategy in qualitative inquiry because they help the researcher focus on meaning’. Given this, I decided to switch to developing some concept maps to see if they could better represent how the problems with feedback engagement interlinked.

This process started fluidly with pen and paper, starting to concept map was not a natural process for me, it initially felt unnatural, and I struggled to develop anything useful. Fortunately, Professor Peter Hartley, a visiting professor at my university, was scheduled to present at the University on the use of concept maps. I attended his session, and it was a transformative experience. Professor Hartley helped me to see the benefits of the process, trained me how to use the CMap software to create concept maps and by the end of that first week I had the first version of the concept map that started to show real linkages and benefits to understanding how the problem factors impacted upon one another.

The diagrams and descriptions below explain the step-by-step development of the final framework through concept mapping.

### 5.4.1 Concept map V1

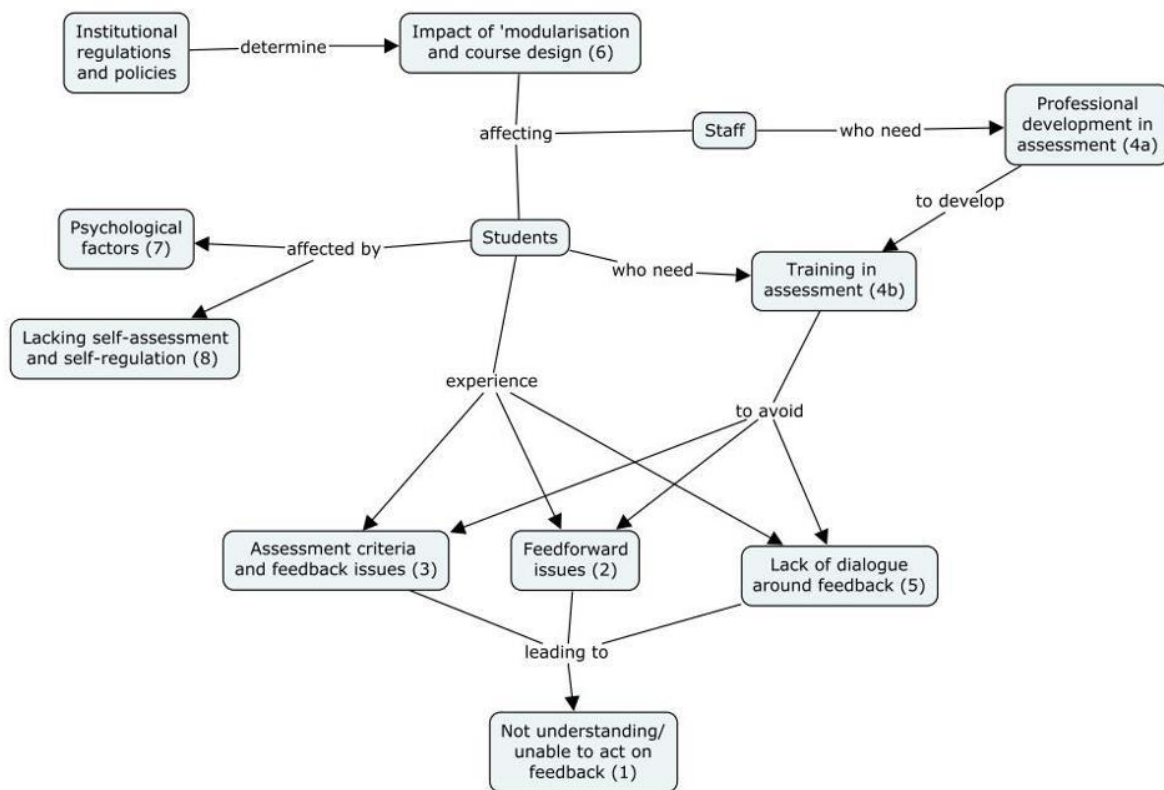


Figure 5.2 Concept map version 1 – developing initial linkages

This first concept map started with a focus on students and what was affecting their engagement. The titles and numbers in brackets within the boxes (or ‘nodes’) on the concept map represent the problem factors identified in stage one of this doctoral study. This version started to show how those problem factors affect one another, and how the process of assessment is affected from the very beginning through modularisation and course design, which ultimately, following through the process, impact on students’ ability to make sense of or use feedback when they get it. However, I was dissatisfied with this first concept map as it left the question as to where the greatest impacts were coming from, and it also left the two outliers from the first stage mapping diagram (F7 and F8) psychological factors and student selfassessment and self-regulation with no links to the factors that would clearly impact upon them (F2, F3, F5).



## 5.4.2 Concept map V2

For the second concept map I shifted the focus on to how each problem factor *impacts* on others in an attempt to develop the linkages.

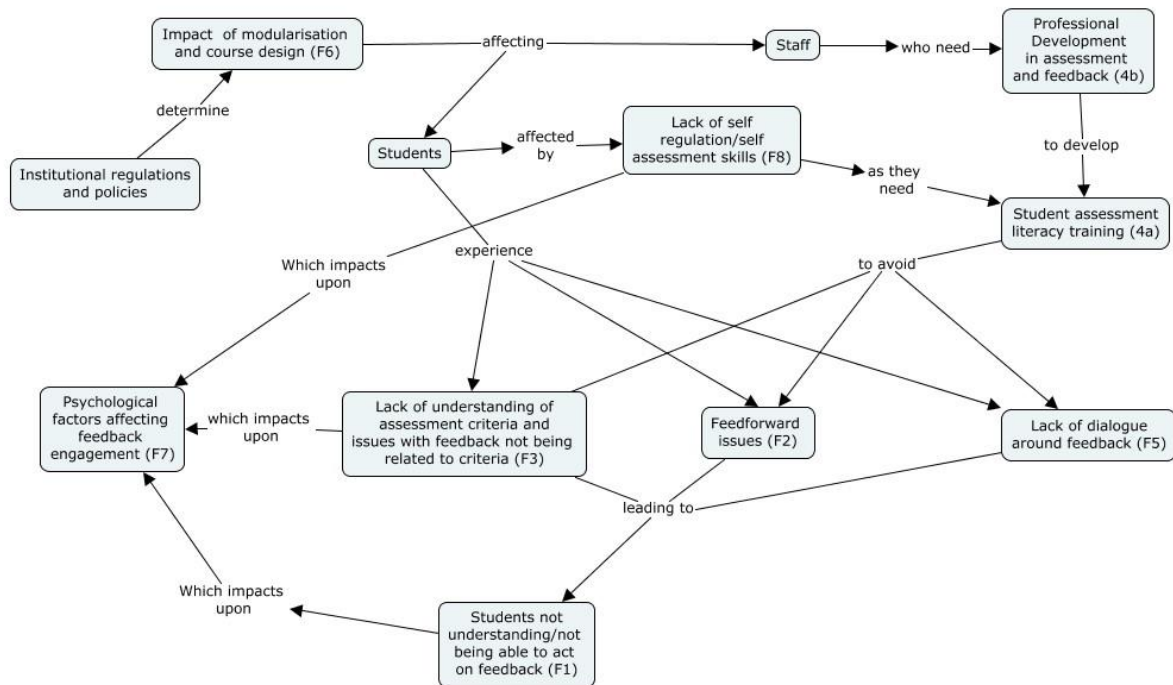


Figure 5.3 Concept Map version 2 – Developing the visualisation of ‘impact’ on student engagement

This second concept map developed my understanding of the linkages between the factors. Concentrating on impact we can see that all the problems lead to psychological impacts on students. It was also clear that a lack of student selfregulation and self-assessment impacted upon the other student related factors, namely F1, F2, F3 etc.

This idea of the notion of factors that relate specifically to students then shifted my perspective. I noticed that there were three nodes that were not related to the eight problem factors, these were the human elements of the process, namely ‘students’, ‘Staff’ and ‘Institutional regulations and policies’. I decided to see if the problem factors linked more closely to any of these three human elements. I

started with students to see if I could develop a framework that more clearly identified who was impacting on student engagement, which may more clearly identify points at which processes can fail, ultimately leading to the reduction in the chances of students engaging with feedback and becoming self-regulated.

I also noted that factor eight, the lack of student self-assessment and self-regulation was a clear ‘end goal’ of any possible framework. We ultimately want students who can self-assess and self-regulate, but it was clear that all other problem factors were impacting on their ability to get to that point.

### 5.4.3 Concept map V3

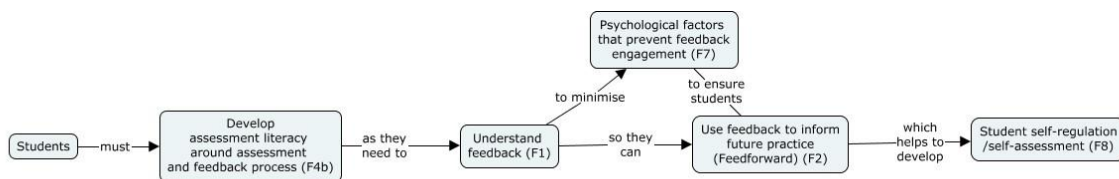


Figure 5.4 Concept map version 3 – stage 1 (students)

This initial look at the factors relating to students within the process of feedback engagement started to add real clarity as to how each of the identified problem factors may add blockages in the process of student engagement and the ultimate development of their self-regulation and abilities of self-assessment. To talk though this diagram: students must develop their assessment literacy so they can fully understand and then use feedback to inform their future practice. All of these will then ultimately impact on the student’s ability to develop the skill of self-assessment and the ability to self-regulate. In addition, students being able to understand and use feedback can minimise the psychological impacts of feedback.

This was meaningful as it is echoed in the literature, which does not see the lack of self-regulation as the student problem. Rather, the lack of the *development* of students to be able to self-regulate through pedagogic processes is the main issue in this factor as they need to be actively engaged in the development of their

understanding of the key assessment elements such as understanding criteria and using feedback to inform future performance (Carless et al., 2011; Evans, 2013; Nicol & McFarlane-Dick, 2006; Orsmond et al., 2013; Price et al., 2011a). This was also supported in stage two survey data. Students clearly identified a lack of active engagement with learning outcomes, criteria, and feedback. The results from those questions in the survey data showed that these questions have the lowest positive responses:

- 'I am given opportunities to actively engage with these learning outcomes' – 44.45% positive responses.
- 'I am given opportunities to actively engage with assessment criteria grids/marking rubrics' -36.11% positive responses.
- 'I am given opportunities to actively engage with my written feedback' - 45.55% positive responses.

These three questions are discussed together as they have a key link, they are the only three questions that specify **active** engagement (namely with learning outcomes, assessment criteria and feedback) and all fell below the 50% positive response level. The importance of active engagement was again one that was prevalent in the thematic literature review in stage 1.

Bloxham & Campbell (2010) and Fisher et al. (2011) noted the importance of student role in active engagement with the feedback and many other papers themed in stage one highlighted a lack of formal pedagogic procedures that promote active engagement (Evans, 2013; Handley, 2011; Jonsson, 2012; Orsmond et al., 2013; Taras, 2006). If the students are not being given the opportunities to actively engage by tutors (as suggested in the results of stage 2) they are unlikely to see its value and are then unlikely to start actively engaging with criteria, feedback, etc, themselves. Students need tutors to engage them actively so they can see the value in doing so (Moscrop, 2018).

There were six the problem factors from the thematic analysis that identified the lack of student self-regulation as being impacted by a lack of active engagement with assessment criteria, feedback, etc (Factors 1 to 6):

- Factor 1 (difficulty making sense and being able to apply feedback) Bloxham & Campbell (2010) and Fisher et al. (2011) noted the importance of student role in active engagement with the feedback. If, as suggested in the results of stage 2 of this thesis, the students are not being given the opportunities to actively engage by tutors, they are unlikely to see its value and are then unlikely to start actively engaging with criteria, feedback, etc, themselves. Students need tutors to engage them actively so they can see the value in doing so (Moscrop, 2018).
- Factor 2 (the problems with feedforward) highlighted a lack of formal pedagogic procedures that promote active engagement with assessment and feedback processes (Evans, 2013; Handley, 2011; Handley et al., 2008; Jonsson, 2012; Orsmond et al., 2013; Taras, 2006), which, as mentioned above, was repeated in the stage 2 data from this doctoral study.
- Factor 3 (the problems with assessment criteria) noted that, as suggested with the quantitative results here, assessment criteria are often not actively discussed with students and that this lack of dialogue causes issues and barriers in student development (Beaumont et al., 2011; Carless, 2007; Nicol, 2010; Nicol & McFarlane-Dick, 2006; Nicol et al., 2014; Sadler, 2010).
- Factor 4 highlights the need for tutors to be trained on how to write assessment criteria and actively engage with students to develop an agreed understanding of them (Beaumont et al., 2011; Nicol, 2010; Nicol & McFarlane-Dick, 2006; O'Donovan et al., 2004; Sadler, 2010).
- In factor 5 (the importance of dialogue), Carless (2011:397) noted that 'Dialogic feedback suggests an interactive exchange in which interpretations are shared, meanings negotiated, and expectations clarified'.
- In factor 6 (impacts of modularisation and course design) it was noted that assessment strategies should not only look at assessment mixes, but also at

assessment design, feedback design, and how these develop over time to actively develop student engagement with feedback (Handley et al., 2008).

Active engagement of students within the assessment and feedback processes is obviously a key issue in the literature, creating impacts on student self-regulation. Student self-regulation should be actively developed as part of the assessment and feedback process (Carless et al., 2011; Evans, 2013; Nicol & McFarlane-Dick, 2006; Orsmond et al., 2013; Price et al., 2011a), something which appears to be lacking in the experiences of the students within this study.

The next stage of the process was to identify and add the factors that related specifically to the staff teaching the students and/or managing the assessment process.

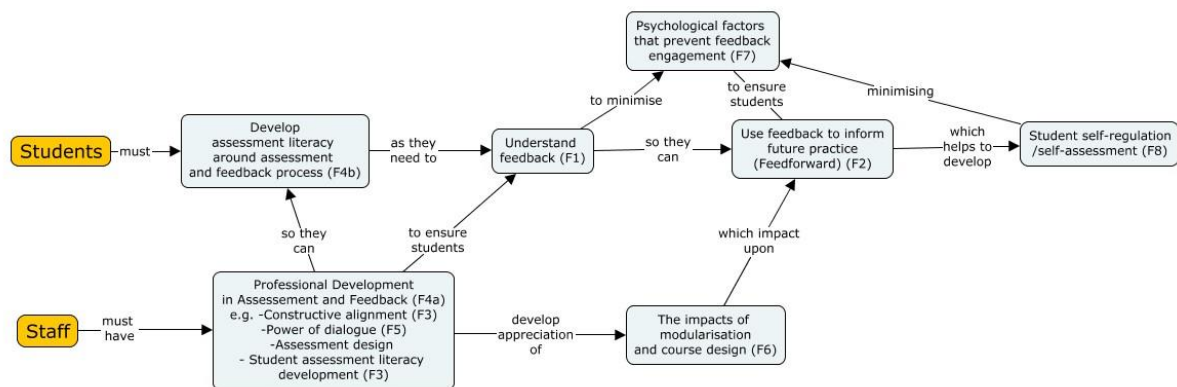


Figure 5.5 Concept map version 3 – stage 2 (staff and students)

The addition of the staff factors that impact on student feedback engagement again added a level of clarity and understanding of the points at which student feedback with engagement can be diminished or prevented by what staff (tutors) do. It was clear that for students to develop their assessment literacy they needed staff who would support them to do so. My own previous research on assessment literacy (Moscrop, 2018) noted that students saw the value of developing

assessment literacy through active engagement with criteria, etc. However, it also noted that students would not go through this process themselves until staff took the step to engage them. Once staff had engaged students in the development of their assessment literacy then the students were significantly more likely to then self-assess in future as they had seen the value of doing so via those previous staff interventions (Moscrop, 2018).

Indeed, in the data from stage 2, the students noted that their active engagement with feedback, criteria, etc. increased once they had been introduced to the value of engaging with it, e.g. *'I have actively started reading the grading criteria in order to ensure I got my grading targets before submission. I did not do this in first year.'*

In order for staff to be able to develop students' assessment literacy they themselves need staff development so they understand the key concepts of assessment delivery and assessment literacy, including constructive alignment, the power of dialogue and how they can develop their student's assessment literacy.

In addition, this stage of the framework development shows that staff also need to understand the impacts of modularisation and course design on how students then use feedback to inform future practice.

The final element to add to the diagram was the work of the institution and how that impacted on student engagement with feedback. This is shown below:

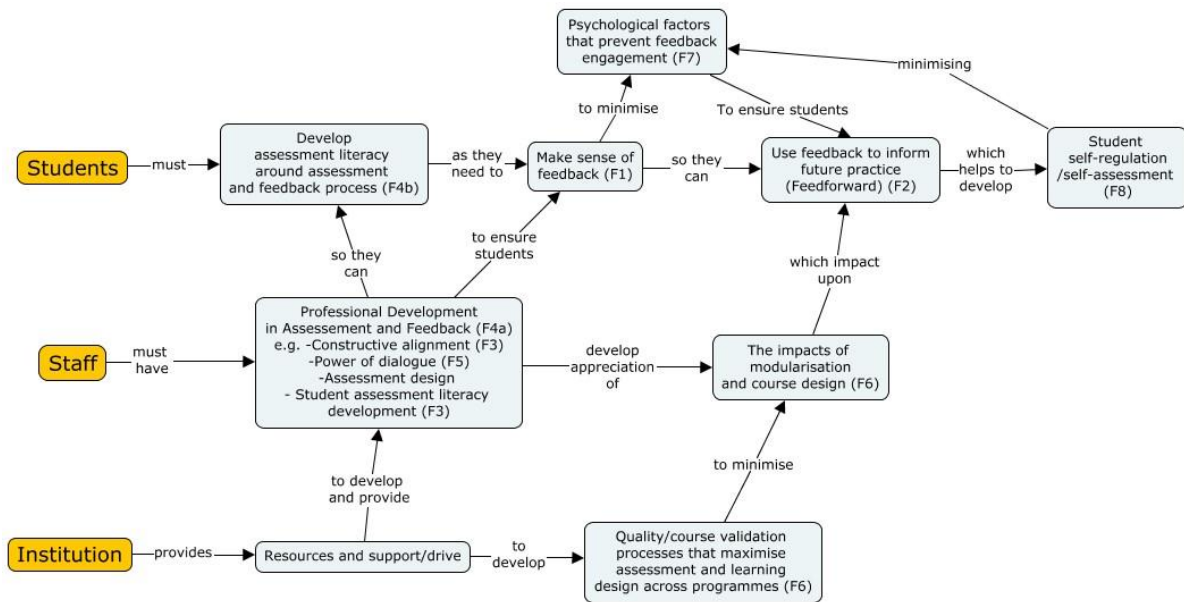


Figure 5.6 Concept map version 3 – stage 2 (students, staff and institutional impacts)

The institutional points that impact on feedback engagement are shown in this full version 3 of the concept map. Institutions often look to individual departments and its staff to improve assessment and feedback satisfaction, even though there may be natural differences across subjects and institutions (Buckley, 2021). However, this concept map suggests that institutions are just as crucial to successful feedback engagement as the staff who must enable it. Institutions must provide the resources to develop and train staff, so they understand how crucial assessment literacy is to student assessment and feedback engagement and have the skills to develop it. Institutions must also develop academic quality and course validation processes that maximise the consideration of assessment and learning design across programmes. This means that validation processes must not only consider learning outcomes and mapping exercises but must also ask course designers to consider how assessment looks across a programme, and importantly, how each module is designed to ensure the development of assessment literacy across a programme.

### 5.5 Framework review

Given the incremental development of the framework, I paused to assess where it was at that point in time and to try to identify any gaps. One aspect identified was

whether there was value in adding elements of how students and staff interact, and I considered different ways of adding this interaction to the diagram, settling on the addition of two-way dialogue noted between staff and students on the diagram. This was assessed to be the most appropriate addition as it addressed the issue identified whilst keeping the framework true to mapping the problem factors (dialogue being problem factor 5).

The next question was considering the order of the framework. I questioned why the students were at the top of the framework, as the development of students as self-regulated individuals who will engage with feedback is the end goal. As was stated in the original framework development (fig. 5.2), it started with the factors related directly to students and built the framework out from the point of view of what impacted on student engagement with feedback. However, looking critically at the framework it was realised that the student self-regulation and self-assessment was the end point, where we want to get to when all the other problems and barriers to feedback engagement along the way are mitigated. The institutional aspects are the first stages that can impact on feedback uptake, and as such the decision was made to flip the framework, starting with the institutional factors at the top and ending with the student factors.

The final consideration was that students could be directly introduced to the psychological factors that may affect their engagement with feedback, so I added it to the framework. The updated framework after this critique is shown below in fig.5.7 (and process flipped to start with the institution).



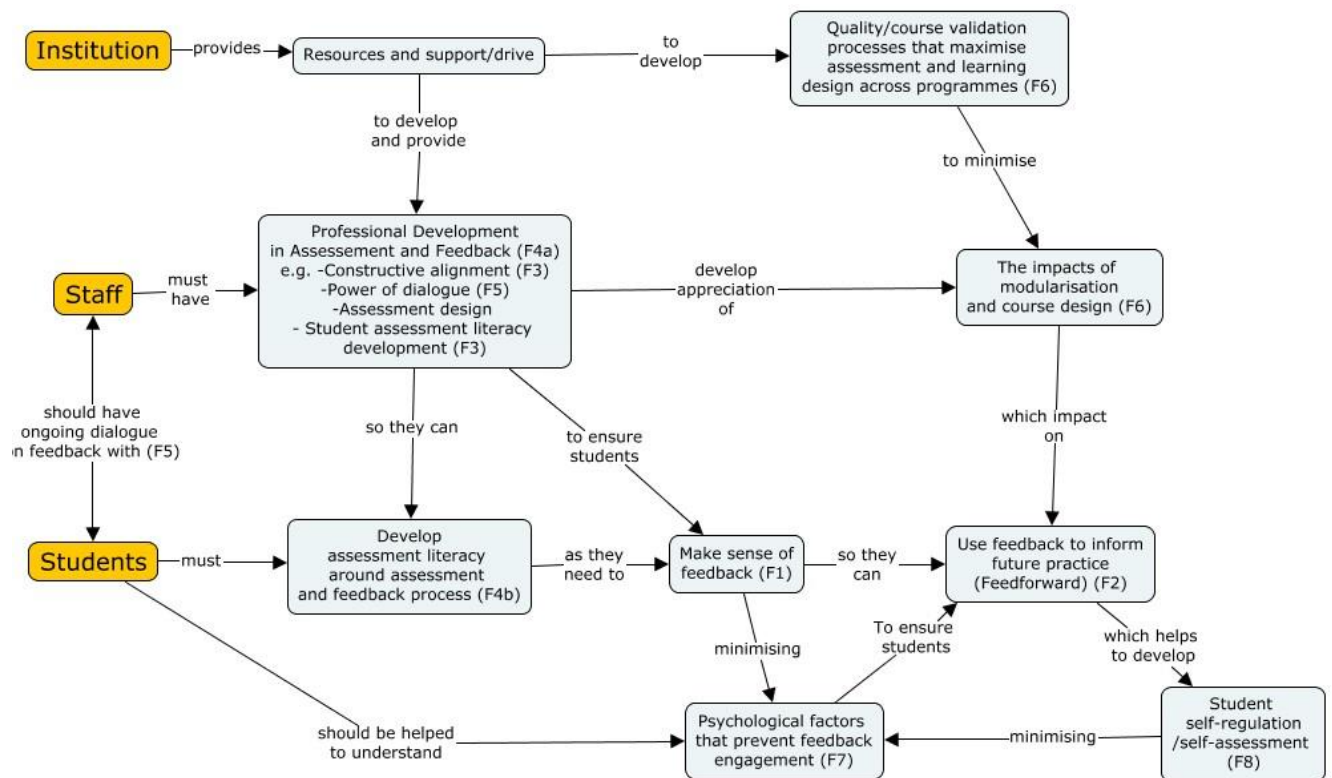


Figure 5.7 Concept map version 4 (after expert audience feedback)

## 5.6 Assessing the framework against stage 2 results

The initial framework in fig 5.6 above was developed solely using the 8 problem factors from stage one (the thematic literature review). The next step was to assess the frameworks' completeness by applying the themes from stage 2, the student survey, to ensure there were no gaps. Those emergent themes and notable issues are listed below with discussion as to whether they are covered on the framework.

Quantitative survey data, notable issues, and coverage on the initial full Framework (version 3, fig.5.6):

- **Timeliness of feedback** – Not covered, this can be added to the next version of the framework.

- **Lack of opportunities for active engagement with learning outcomes, criteria, and feedback** – covered by the ‘development of assessment literacy’ student node and staff development node. Tutors actively engaging students with criteria, feedback etc is part of assessment literacy development
- **The differing psychological impacts of feedback** – Covered by psychological factors node
- **The development of student self-regulation through/impacted by active engagement with peers** – self-regulation in the final student node. Peer interaction is not explicitly covered but assessed as more of a ‘method’ for solving the issue, so no need to cover that explicitly in the framework.

Qualitative survey data themes and coverage on the initial full framework (version 3, fig 5.6):

- **Clear feedback against criteria with personalised positives and negatives of work** - covered by staff development (explanation of why this is important to staff) and student node of being able to use feedback to improve future practice.
- **Structuring work and academic writing improving through feedback** – covered in the student node of being able to use feedback to improve future practice.
- **Dialogue** – covered is staff training and ongoing dialogue between staff and students that was added in previous iteration after expert audience feedback.
- **Feedback that is transferable to future work** – covered in the student node of using feedback to inform future practice.
- **Drafts/ Formative opportunities** – This is also a method for solving a problem but may also be covered in the development of student assessment literacy node as engagement with drafts and exemplars can be part of that process.

- **Increased individual responsibility** – covered in the self- regulation development node.

It is good to see that the outcomes from the student survey (stage 2 of the study) support the content of the framework, only the element of ‘timeliness’ needs to be added after this assessment. The addition of ‘Provision of timely feedback’ can be found as an addition to the framework in Fig.5.8 below.

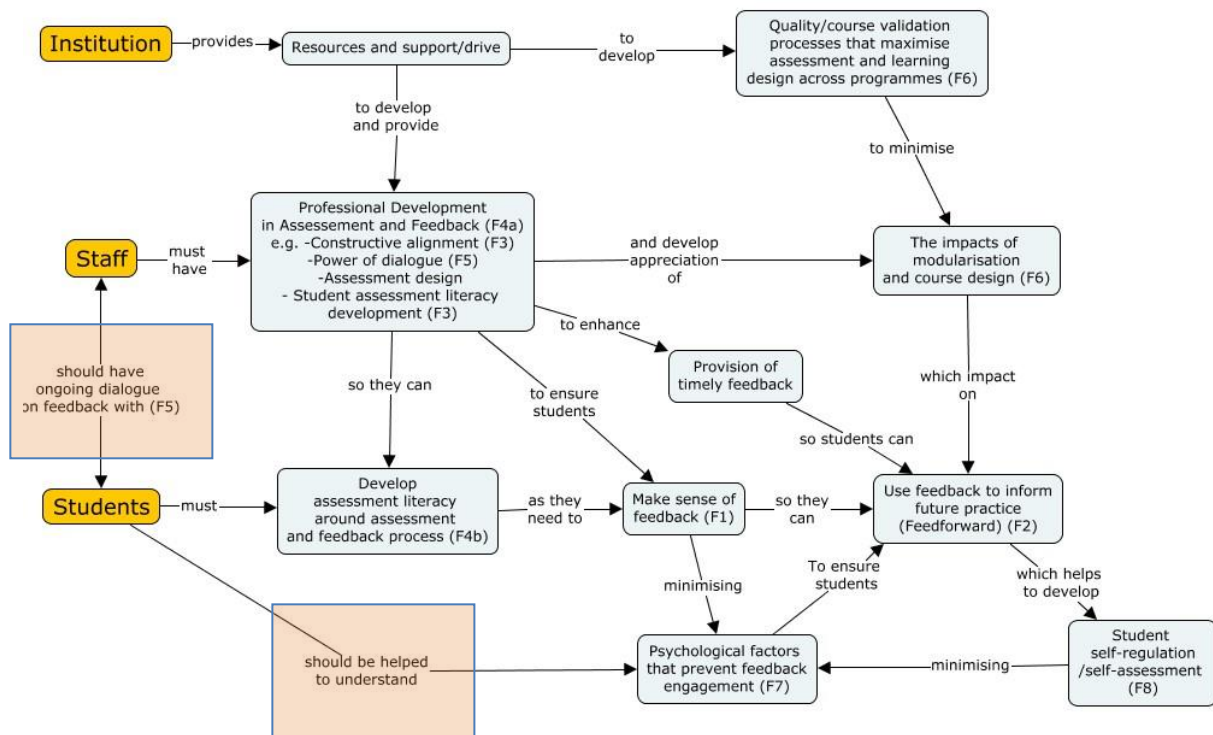


Figure 5.8 Edited framework to take in gap from survey outcomes

## 5.7 Final framework development

For the final stage of the process the concept map needed to be edited to ensure it can be both practically implemented and provide a basis for future research and development (RQ2.2). This stage assessed what would need to be there to make the framework usable, and final consideration of any possible gaps in the framework.

This assessment of the final framework for gaps resulted in the addition of a linkage between staff and the institution as it was felt that clear articulation of an institutions’ strategy around assessment and feedback was important. In addition,



Problem factors with student feedback engagement (themed from the literature):

Factor 1 (F1): Students being unable to make sense of or apply feedback

Factor 2 (F2): The problems with feedforward

Factor 3 (F3): The problems with assessment criteria and feedback

Factor 4 (F4): The lack of training for students and tutors

Factor 5 (F5): The lack of dialogue around feedback

Factor 6 (F6): The impacts of modularisation and course design

Factor 7 (F7): Psychological factors affecting feedback engagement

Factor 8 (F8): The lack of student self-assessment and self-regulation

Figure 5.9 Framework for enabling student development through feedback engagement -  
Understanding the problems and impacts.

## Chapter 6 Discussion and Conclusions

### 6.1 Introduction

The previous two chapters presented the results for all three stages of the study, through a thematic analysis of the literature (stage one), qualitative and quantitative survey data analysis (stage two) and finally, the conceptualisation of the framework for enabling student engagement with feedback (stage three). The findings from the first two stages offered valuable insights into the problems that impede student engagement with feedback, both through the perspective of the literature, and directly from the students themselves through stage two. These findings were merged to ensure the development of the framework took on both perspectives.

This chapter considers how the original research questions have been addressed and shines a critical lens on the research and findings . It then discusses the implications of the framework for enabling student engagement with feedback, looking at institutional, staff, and student considerations, finishing with a look at how the framework may add to the literature and inform future research.

### 6.2 Answering the research questions

The research questions for this study were as follows:

**RQ1:** What factors make students more or less likely to engage with assessment feedback?

**RQ1.1:** According to the literature, what are the key factors affecting student engagement with feedback?

**RQ1.2:** In what ways do students describe their feedback experiences and particularly their engagement with feedback?

**RQ1.3:** What are the commonalities and differences between engagement with feedback factors identified from the literature and from student accounts?

**RQ2:** Can we develop a framework to give a lens through which the relationship between problems with feedback engagement can be viewed?

**RQ2.1:** How can we conceptualise the relationships between the problem factors to support the aim of developing learners who engage with feedback?

**RQ2.2:** How can this conceptualisation be translated into a framework which can be both practically implemented and provide a basis for future research and development?

The following sections explain how these research questions have been answered and through which sections and outcomes of the study.

### **6.2.1 Research question 1**

RQ1 was the initial push in terms of personal interest for this study. It was the key driver of the pragmatic mixed methods approach used as I understood from the start that I would follow these initial outcomes to steer the later methods. RQ1 ‘What factors make students more or less likely to engage with assessment feedback?’ was answered in stage I and stage II of the study, through the thematic analysis of the literature and the survey instrument with students.

The outcomes of RQ1.1 ‘According to the literature, what are the key factors affecting student engagement with feedback?’ were:

- Students being unable to make sense of or apply feedback
- The problems with feedforward
- The problems with assessment criteria and feedback
- The lack of training for students and tutors
- The lack of dialogue around feedback
- The impacts of modularisation and course design
- Psychological factors affecting feedback engagement
- The lack of student self-assessment and self-regulation

The aim of RQ1.1 was to build a robust picture of the factors affecting feedback engagement, which could then be used in stage II of the study to inform the open and closed questions given to students through the survey instrument. This research question was successfully addressed.

Addressing RQ1.2 'In what ways do students describe their feedback experiences and particularly their engagement with feedback' involved a survey instrument that identified student perceptions of their feedback experiences (chapter 4). This was followed by addressing RQ1.3 by mapping of the stage I 'key factors' to the stage II student perceptions data (table 5.1).

It was clear from this mapping process that the outcomes from the qualitative and quantitative data analysis clearly mapped to the problem factors identified in the thematic literature review. No additional 'issues' or 'problems' were identified from the student survey data. The process also allowed an overlaying of the student voice with these problem factors, allowing a richer picture of the issues faced. This process allowed this research question to be addressed.

Whilst this overview of the addressing of RQ1 is succinct, the reader should also note the limitations of the study in the methodology limitations section (3.8) and the additional limitations section (6.6.1).

## **6.2.2 Research question 2**

Research question two asked 'How can higher educators effectively conceptualise the relationships between the problem factors to support the aim of developing self regulated learners who engage with feedback?', with the sub question (2.1) being 'How can this conceptualisation be translated into a framework which can be both practically implemented and provide a basis for future research and development?'. This conceptualisation and framework building formed stage III of the study, which can be found in chapter 5.

The results from stages I and II informed the conceptualisation of the linkages between the factors affecting feedback engagement, and how these may be



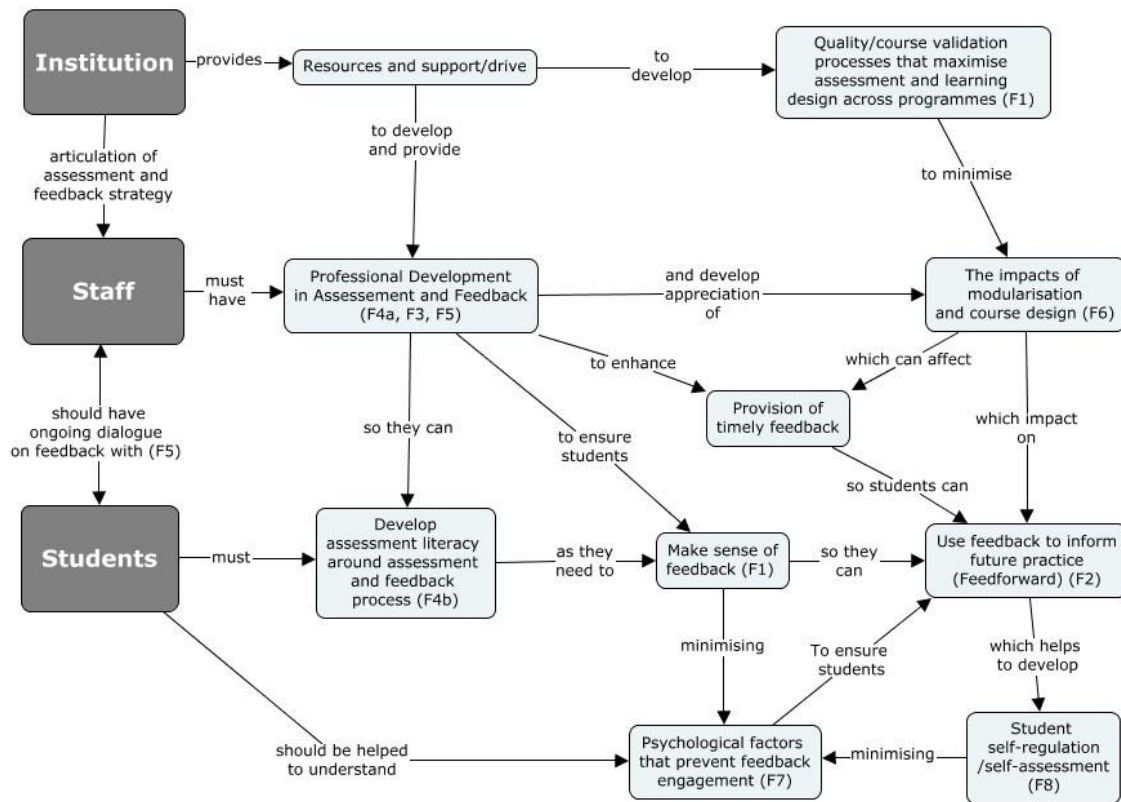
viewed holistically as a framework, which may help to inform future practice, policy, and research. Chapter 5 shows how stage III systematically developed the framework into its final form. The outcome of stage III, and the answering of this research question came with the development of the final framework (fig.5.9). This meant that research question 2 and 2.1 were successfully addressed.

### **6.3 The framework for enabling student engagement with feedback**

In chapter one it was stated that staff and institutions need a wider appreciation of the problems with enabling student engagement with feedback and how they are interlinked. It was also stated that this thesis will address the gaps in the literature by adding the following to the body of literature:

1. A Roadmap to improving student feedback engagement through addressing the linkages between problems with feedback engagement
2. Bringing together the factors affecting student feedback engagement, including institutional, staff, and module level factors affecting engagement and how these ultimately impact on student engagement with feedback.

This has now been achieved through the development of the final framework, shown again below. The following sections will discuss the institutional, staff and student considerations derived from the framework.



Problem factors with student feedback engagement (themed from the literature):

- Factor 1 (F1): Students being unable to make sense of or apply feedback
- Factor 2 (F2): The problems with feedforward
- Factor 3 (F3): The problems with assessment criteria and feedback
- Factor 4 (F4): The lack of training for students and tutors
- Factor 5 (F5): The lack of dialogue around feedback
- Factor 6 (F6): The impacts of modularisation and course design
- Factor 7 (F7): Psychological factors affecting feedback engagement
- Factor 8 (F8): The lack of student self-assessment and self-regulation

Figure 6.1 Framework for enabling student development through feedback engagement - Understanding the problems and impacts.

In discussing the outcomes of the framework development it is important to address the implications of the framework for institutions, their staff (meaning those teaching students and delivering feedback), and their students, by stepping through each of the parts of the framework and discussing what is known, with a view to developing final recommendations and considerations.

### **6.3.1 Institutional considerations**

It was clear when engaging with the literature on assessment feedback that the vast majority related to 'fixing' atomised problems with assessment feedback (Henderson et al., 2019; Price et al., 2011b; Russell et al., 2013). Whilst more recent work by key feedback researchers such as (Boud, Carless, and Winstone) has added further depth and insight into the bigger picture of driving student feedback engagement, very little has been written on the structural influences of institutional impacts on quality feedback delivery and feedback engagement. As noted in the proposed framework, there are numerous institutional factors that ultimately impact on feedback quality and feedback engagement. These include institutional resources and support to develop staff, appropriate policies and strategies related to feedback provision, and the development of academic quality processes that emphasise quality in assessment and feedback provision.

#### **Vision, strategy, and policy**

The development of the framework clearly shows that institutional drivers impact on feedback engagement. Interestingly, of the papers coded in NVIVO for the thematic analysis of feedback engagement problems, only one talked about institutional level strategies or policies to improve feedback quality and feedback engagement (Williams & Kane, 2009). Other papers did mention 'strategies' related to feedback, however, these tended to be related to individual student or task strategies for feedback engagement (Carless, 2019; De Kleijn, 2021; Hattie & Timperley, 2007) or individual tutor strategies for improving feedback engagement (De Kleijn, 2021).

There were some mentions of possible programme level strategies for improving feedback engagement (Carless et al., 2011; Handley et al., 2011) including other research on programme level assessment that can improve feedback use and engagement (Gibbs & Dunbar-Goddet, 2008; Hartley & Whitfield, 2012; Hartley, 2019), but no explicit linkages back to recommendations for institutional strategies or policies to drive improvements in feedback policy or strategy. Given this

information, there needs to be more joined up thinking within institutions that allows pedagogic research outcomes to feed up into institutional policy and strategy.

As noted in chapter 2 (2.2), there are case studies in the literature that present whole institution approaches to feedback improvement (Draper & Nicol, 2013; Holden & Glover, 2013; Russell et al., 2013; Rust et al., 2013). These examples of institutional change projects made it clear that projects with drive and funding at an institutional level can have a big impact on feedback quality, improve student satisfaction, and increase NSS results. Draper & Nicol's (2013) work makes it clear that the drivers, or 'levers' for improvement can come from any level. These facts again make the need for institutions support, drive, and funding for large scale research on feedback improvement very clear.

A final point on strategy and policy is the blocks that they can sometimes create for wholesale improvement. Changing institutional policies and strategies can be onerous and time consuming, which may be a reason why individual research projects do not seek to drive their suggested changes up to the policy level. In addition, funding for such projects often ends when the results are reported, meaning the staff involved will be expected to move on to other work and may not have the time or support to try and drive institutional change. A suggestion for this would be to funnel pedagogic research outcomes more effectively into the central learning and teaching teams, who may have more ability to feed research outcomes into cross institutional changes to policy.

### **Professional development related to assessment and feedback**

Whilst the linkages to institutional strategy and policy was less prevalent in the literature, there were papers calling for the development of teacher feedback literacy (Tai et al., 2021). It should be noted that the development of *student* feedback literacy was much more prevalent in the literature than that of teacher feedback literacy development. Winstone et al. (2020) note that it is crucial as the development of student feedback literacy is dependent on teacher feedback literacy. Work by Wei Wei

& Xie Yanmei (2021) noted that as teachers gain more experience their feedback literacy does naturally develop, however, they also note that early-stage academics tend towards a one way model of feedback, which suggests that early training would be beneficial.

Most Universities now have central professional development opportunities available relating to assessment and feedback, whether it be through one off training sessions through to full postgraduate teaching qualifications. The requirement for publicly funded university lecturers to have a teaching qualification was suggested in the 2010 Browne review, and universities in the UK must now publish the percentage of staff with a teaching qualification. However, the training offerings usually come after the lecturer has started their role, with many being completely unprepared for the process of assessment and feedback when they first start (Beaumont et al., 2011). Indeed, many teachers in higher education report being 'thrown in at the deep end' (Quinn and Vorster, 2018; Race, 2008). Race (2008) noted:

“For many, within weeks or days of taking up their posts, there are lectures to be given, or tutorials to run, or seminars to lead, or marking of students’ work to be done. Sometimes they face one or more of these prospects without having had any opportunity to learn how to tackle such challenges. Relevant staff development opportunities may indeed exist, but not always in time for those critical first experiences of teaching or assessing.”

Given these facts, and the impacts of a lack of teacher feedback literacy, it is clear there should be standard teaching induction/support programmes in all universities, which cover the fundamentals of what good teaching, assessment and feedback looks like. Importantly, this should begin as soon as a new lecturer starts in the role. As Raman et al. (2013) stated, lecturers may be subject matter experts, but they may also lack the requisite knowledge that allows them to teach their subject matter effectively. This includes teaching methods and theories and effective assessment and feedback methods in the first instance. The following section on staff considerations notes in more detail what their initial professional development should include.

Once initial training is taken care of, ongoing central CPD, including teaching qualifications, can help to drive continuous professional development. Eventually this training must also include the ability to design an effective curriculum from scratch, which should include embedded feedback processes that allow opportunities for students to develop the skills necessary to engage with and implement feedback (Orsmond et al., 2013).

### **Quality and course validation processes that maximise the quality of assessment and feedback.**

Universities have embedded assessment and feedback quality guidance and processes. This guidance, as well as programme validation processes, should maximise the chances of making programme teams think about assessment and feedback delivery. The design of programme validation documents and processes generally means that the assessment and feedback strategy cannot be covered in much detail due to space and time reasons. However, work by PASS (2012) demonstrates an example of a programme's assessment strategy, which was short, but clearly demonstrated how a programme team had considered the following:

- Reduction of assessment pressure points and consequent stress on both staff and students.
- Consideration of how they enhance student engagement and ability to make informed judgements on their own work.
- Explanation of how they are enhancing student learning and engagement through assessment and feedback
- Explanation of their adherence to the robust quality assurance policies and procedures of the School and University, with critical self-evaluation of the Programme's learning, teaching, and assessment processes. (PASS, 2012)

This work from PASS demonstrates an effective presentation of assessment and feedback processes at the point of validation can be both expected and delivered, without the need for onerous paperwork.

The importance of institutional support for quality processes was noted by Seyfried & Pohlenz (2018) who noted that quality processes are a 'toothless tiger' without the support of senior management at an institutional level. Their research, which surveyed all higher education institutions in Germany, found that the support by institutional management is positively correlated with the perceived effectiveness of the academic quality mechanisms (Seyfried & Pohlenz, 2018).

Quality assurance mechanisms can also impact negatively on feedback processes (Winstone & Boud, 2020). Winstone & Boud (2020) note *"Where feedback accompanies a grade, it is common for the style of feedback comments to more closely reflect the justification of a grade than the provision of developmental information"*. Their work also points to work by Li & De Luca (2014), which found that teachers find it difficult to balance the expectations of grade justification with the necessities of effective feedback. These structural expectations, which are often bound within the central University quality systems, can therefore impact on feedback quality, and institutions should be willing to consider these impacts and make changes to assessment and feedback policies and processes where necessary.

The focus on 'quality' as measured by quality surveys (such as the NSS) can also have an unintended impact on approaches to feedback. Universities' focus on improving NSS scores (or similar overseas surveys) can mean a focus on improving individual elements of feedback, such as timeliness, without considering an overall improvement in student learning (Winstone et al., 2021) or the necessity for the student to take an active role in the feedback process (Winstone et al., 2020). Winstone et al. (2021) note that 'there is a risk that the practices of feedback come to be cemented by their representation in evaluation instruments'.

### **Institutional factors summary**

The framework developed through this thesis demonstrated the importance of institutional impacts on feedback engagement, and the discussion above shows

how institutions may impact positively or negatively on feedback outcomes. The outcomes of this are several recommendations for institutions, as follows:

- Institutions have processes that allow pedagogic research outcomes to feed up into institutional policy and strategy.
- A suggestion for this would be to funnel pedagogic research outcomes more effectively into the central learning and teaching teams, who may have more ability to feed into cross institutional changes to policy.
- There should be standard teaching induction programmes in all universities for new staff, which cover the fundamentals of what good teaching, assessment and feedback looks like. Importantly, this should become BEFORE they are 'thrown into the deep end'.
- Programme validation processes should maximise the chances of making programme teams think about assessment and feedback delivery.

### **6.3.2 Staff considerations**

As noted in the institutional considerations above, what staff do to drive feedback engagement is very much dependent on institutional factors, such as feedback policies, support, and professional development. However, there are also factors that affect feedback engagement that relate directly to what staff do. This includes how much they appreciate or understand the impacts of the learning they are designing on feedback engagement, their understanding of feedback as an interaction rather than 'delivery', their understanding of what 'good' feedback may look like in their context, and finally (and impacting on all those staff elements mentioned so far) the availability of, and their engagement with, available CPD related to assessment and feedback.

#### **Professional development related to assessment and feedback**

The framework developed from analysing hundreds of problems with feedback engagement very clearly has staff understanding what good feedback processes



look like as a key factor. As the framework shows, if we are to develop students with assessment and feedback literacy, we must first train our teachers in higher education the fundamentals of what good assessment and feedback design looks like, and importantly, develop them to understand the impacts of poor design on student engagement and development. The research is clear that teacher feedback literacy is crucial as the development of student feedback literacy is dependent on teacher feedback literacy (Winstone et al., 2020).

Section 6.3.1 above on institutional considerations notes a recommendation that there should be standard teaching induction programmes in all universities for new staff, which cover the fundamentals of what good teaching, assessment and feedback looks like. The work for this thesis clearly identified the problems that staff need to avoid, and therefore, led to the development of a clear list of what staff need to know to enable feedback uptake and engagement. This includes developing an understanding of the following:

- Constructive alignment
- The power of dialogue
- Assessment, feedback, and programme design
- Student assessment literacy development

Whilst we will not document in detail what staff CPD should look like, we will step through these suggested staff development aspects to note their importance and to demonstrate why they should be included in all staff development programmes.

### **Constructive alignment**

One may question why constructive alignment is mentioned as a key aspect of staff development related to feedback when the specification of what constructive alignment is does not generally mention feedback at all. Biggs & Tang in their seminal book, *Teaching for Quality Learning at University* specify the four stages of constructive alignment as:

1. describe the *intended learning outcome* in the form of a verb (learning activity), its object (the content) and specify the context and a standard the students are to attain;
2. create a learning environment using *teaching/learning activities* that address that verb and therefore are likely to bring about the intended outcomes;
3. use *assessment tasks* that also contain that verb, this enabling you to judge with the help of rubrics if and how well students' performances meet the criteria;
4. transform these judgements into standard grading criteria. (Biggs & Tang, 2011:100)

Critics of constructive alignment have suggested it is 'spoon feeding' students (Millear et al., 2017). However, recent work by Stamov Roßnagel et al. (2021) found constructive alignment led to higher ratings of learning outcome clarity and feedback effectiveness by students and developed deeper learning approaches. Whilst some constructive alignment detractors remain, the move to more transparency in assessment processes has been viewed as a positive shift (Carless, 2015).

The value of introducing constructive alignment to new teachers in higher education is that they are immediately introduced to the negative impacts of teaching and assessment that is not constructively aligned as well as understanding the value to their students if they ensure constructive alignment. The benefits are clear, the reasons for the judgements made on assessment are clearer due to assessment criteria and rubrics (Sadler, 2005), clear learning outcomes and grading criteria can lead to fairer and more consistent marking (Broadbent et al., 2018), the ability of students to understand and 'decode' feedback can increase when they have a clear understanding of assessment criteria (Nicol, 2008). It should be noted, however, that additional value is added where teachers actively engage learners with learning outcomes, criteria, and feedback to

ensure any tacit understanding held by the teachers is shared with the students (Rust et al., 2003).

The students included in the survey stage of this study also noted the value of feedback that was aligned to the criteria. When asked for examples of what good feedback looked like, many mentioned the importance of linking to criteria as noted in these student quotes when asked the question: What are the most useful pieces of feedback you have received? Why were these the best?

- *“Feedback that refers to the marking criteria as I believe it gives a straightforward easy answer.”*
- *“Feedback that relates to the marking criteria and learning outcomes and is explained what points were not covered and why.”*
- *“Specific and well-defined examples of how my work has not met an assessment criteria, for example “you attempted to do this, but here are the exact reasons why what you wrote/submitted did not fulfil this criteria”*
- *“they referenced the marking criteria and went into detail as to what i could have improved on rather than being vague.”*
- *“Descriptive feedback relating to the marking criteria, where I went wrong and how I could progress to the next band of marks are the most beneficial, as they provide me with a clear progression throughout assignments.”*

Professional development that includes training on constructive alignment and active engagement of students with learning outcomes, assessment criteria and feedback is therefore important to ensure teachers understand its purpose and value. As noted by Balloo et al. (2018) transparency in assessment mechanisms is crucial if we are to provide equality of opportunity to all students.

### **The power of dialogue**

As mentioned in the thematic review, dialogue to improve assessment and feedback engagement is one of the key suggestions from the literature (Carless et al., 2011). Yet despite this clear argument and need for dialogue that permeates the

literature, there is still a clear need for this to be driven forward into standard assessment practises if the problems are to be solved. One of the key ways to do this would be through staff training and development.

Feedback in higher education consists of too much one-way written feedback (Carless, 2007, Carless et al., 2011; Evans, 2013) and this lack of dialogue around assessment and feedback compounds the gap between tutor requirements and student understanding (Handley, 2011; Price et al., 2011a; Vattoy et al., 2021). Students need dialogue with tutors and peers to develop their skills of self-regulation and their own internal dialogue (Ajjawi et al., 2015; Jonsson 2012; Nicol, 2010; Williams & Kane, 2009). Students also need to be encouraged and supported to engage with dialogue to help them to develop a shared understanding of assessments (Evans, 2013; Nicol, 2010; Orsmond et al., 2013; Price et al., 2011a).

Despite these facts now being prevalent in the literature, dialogue around feedback is not yet standard practice in higher education. Indeed, many studies pointed to the massification of HE and time constraints squeezing out dialogue (Evans, 2013; Jonsson, 2012; Nicol, 2010; Orsmond et al., 2013). This links back to the institutional considerations mentioned earlier, institutional policies and processes need to make space for excellent feedback practice and should ensure marking processes are not strangling feedback excellence.

### **Assessment, feedback, and programme design**

Assessment and feedback design needs to be recognised as an integral part of curriculum planning, not just an ‘add on’ to the end of a curriculum (Boud et al., 2010). As such, staff development should include guidance on assessment design and embedded feedback to ensure improved feedback engagement, and importantly, improved student outcomes. Boud notes:

*“Assessment is not an ‘add-on’ to the curriculum structure of a program. It needs to be considered from the outset of course design and intimately*

*embedded and linked to considerations of student learning as part of the curriculum. Assessment tasks, types, and means of deployment need to be fully aligned with all other aspects of the curriculum. (...) Integrated whole-of-program curriculum design needs to incorporate assessment and feedback as well as learning outcomes and teaching and learning activities.” (Boud et al., 2010:3)*

The design of assessments impacts how students engage with them, and end of module stand-alone assessments that are not clearly linked to the curriculum are unlikely to encourage student engagement (Carless et al., 2011). Ajjawi et al. (2021) note that feedback research is now homing in on the importance of paying attention to feedback design. Assessment design should have relational dimensions and encourage dialogue between students and tutors, making feedback a more inclusive and social practice (Carless et al., 2011; Evans, 2013; Handley et al. 2008; Handley, 2011; Heron et al., 2021; Mutch et al., 2018; Nicol, 2010; Orsmond et al., 2013; Price et al., 2011a). The embedding of effective feedback design may also help with the provision of timely feedback.

The literature is awash with ideas for improving assessment and feedback design. The table below from Evans (2018) is an excellent resource for staff and those training them, noting how assessment and feedback practice can be shifted from transactional to transformative methods.

**TABLE 1** | Evans (2018) Transformative approaches to assessment practices using the *EAT Framework* compared to transactional approaches.

Dimension of assessment practice	Transactional approach	Transformative approach
Assessment literacy	<ul style="list-style-type: none"> <li>Telling—one directional guidance from lecturer to student. Student receives as a gift.</li> <li>Teacher driven rubrics.</li> <li>Provision of exemplars.</li> <li>Provision of assessment criteria.</li> <li>Provision of glossaries.</li> <li>Provision of information on assessment regulations.</li> </ul>	<ul style="list-style-type: none"> <li>Explaining/discussing requirements with students. Student interacts with information.</li> <li>Student generated rubrics.</li> <li>Dialogue around exemplars. Student development of exemplars; students unpacking examples.</li> <li>Students working with assessment criteria reshaping it in their own language.</li> <li>Student-/teacher-generated glossaries.</li> <li>Interpretation of what regulations mean; students contributing to policy.</li> </ul>
Assessment feedback	<ul style="list-style-type: none"> <li>Reliance on the teacher for feedback.</li> <li>Corrective feedback—one directional from teacher to student.</li> <li>Provision of guidance on how to improve.</li> <li>Asks students to reflect on their feedback.</li> <li>Directive. Solutions provided.</li> <li>Focus on the immediate requirements of the module task.</li> </ul>	<ul style="list-style-type: none"> <li>Reliance on range of sources for feedback including self-feedback—emphasis on supporting students to self-assess accurately.</li> <li>Provision of examples of how to correct with the responsibility on the student to apply the approach throughout their work.</li> <li>Feedback focused on key areas that need development in relation to student starting points. Student responsibility for developing action plan based on feedback.</li> <li>Explores with students their interpretation of feedback and self-remediating strategies, and provides models/tools in order to support understandings.</li> <li>Challenging the student to find solutions.</li> <li>Problems made explicit. Uncomfortableness of learning and difficulties in managing feedback articulated.</li> <li>Focus on how all assessment elements fit together within a programme, and application of learning within and beyond the programme.</li> </ul>
Assessment Design	<ul style="list-style-type: none"> <li>Assessment tasks designed <i>for</i> students.</li> <li>Summative assessment by teachers.</li> <li>Lecturer ownership of assessment tasks.</li> <li>No choice in assessments.</li> <li>Tasks designed exclusively to meet specific learning outcomes.</li> <li>Strongly scaffolded learning tasks—high external regulation.</li> <li>Resources to support learning provided, but links between them not explicit.</li> <li>Guidance mainly provided from within by module team.</li> <li>Resources provided for students.</li> <li>Limited opportunities for self-assessment.</li> <li>Limited opportunities to explore assessment holistically and to explore potential issues. Teacher directs solution-finding.</li> </ul>	<ul style="list-style-type: none"> <li>Assessment tasks designed <i>with</i> students as part of a co-construction model.</li> <li>Self and teacher summative assessment.</li> <li>Student/teacher ownership of assessment tasks.</li> <li>Lecturer mediated choice in assessments.</li> <li>Tasks designed to meet learning outcomes and to go beyond.</li> <li>Early scaffolding and subsequent removal of scaffolding to support independence in learning; student awareness of scaffolding needed.</li> <li>All key resources available from the outset to enable student control of learning but signposted in relation to tasks and key crunch points identified with students. Clear links to resources provided in one place.</li> <li>Students supported to build networks of support within and beyond module.</li> <li>Students/teachers responsible for the generation of resources.</li> <li>Ongoing aligned opportunities for self-assessment.</li> <li>Key threshold concepts identified from the outset. Students encouraged to provide resources to support understanding in areas seen as difficult and to find own solutions.</li> </ul>

Figure 6.2 Transformative approaches to assessment practices using the EAT framework compared to transactional approaches (Evans, 2018)

As mentioned in the institutional considerations section, processes need to be in place to ensure the design of assessment and feedback practices is considered at the programme design stage. It is unlikely that students will develop self-evaluation skills and assessment literacy as early as they could if the development of these skills is not embedded in courses and consistently reinforced (Mutch et al., 2018).

Given these facts, it is clear that developing an understanding of assessment and feedback that is *designed* into programmes is another key staff development point.

### **Understanding of student assessment literacy development**

The next section on student considerations will discuss the development of student assessment literacy in more detail. However, it is worth noting that what staff do to engage students with their assessment and feedback has a big impact on student assessment literacy development (Winstone et al., 2020). Indeed, my own previous research supported this fact (Moscrop, 2018) as it noted that students saw the value of developing assessment literacy through active engagement with criteria, but that students would not go through this process themselves until staff took the step to engage them. It demonstrated that once staff had engaged students in the development of their assessment literacy then the students were significantly more likely to then self-assess in future as they had seen the value of doing so via those previous staff interventions (Moscrop, 2018). Importantly, student assessment literacy development can also be impacted by poorly written feedback and criteria as it inhibits the students' opportunities to make sense of the feedback they receive

### **Staff considerations summary**

Whilst we may expect staff to consider how their student learn and engage with assessment and feedback when they first start teaching, the reality is that the pressures of being thrown into a teaching role, with the additional pressures of research and service roles, means they often have very little time to consider it. As such the staff consideration distil down to the required staff development. It should be noted that the staff development may not only be in the form of formal development sessions but may also come through departmental mentoring and sharing of good practice. The required development is as follows:

- Professional development on constructive alignment and active engagement of students with learning outcomes, assessment criteria and feedback
- The development of dialogic feedback practices, through staff development and feedback policies and processes that allow the space for this practice.
- Development to ensure staff understand that assessment and feedback should be designed into programmes and modules to ensure maximum engagement.

- Development that enhances their assessment and feedback literacy, which will in turn allow them to appreciate how to develop their students' feedback literacy.

Let us now move to the final section of the framework, student considerations.

### **6.3.3 Student considerations**

An interesting aspect of the study was the realisation that empowering students to use and engage with their feedback largely came down to the development of their assessment literacy. The framework flow suggests that students need to develop their assessment literacy so they can understand the assessment and feedback processes at university, this allows them to make sense of the feedback (if the feedback is understandable!), importantly allowing them to use their feedback to inform future performance. In addition, the development of this literacy should also help them to appreciate the emotional and psychological impacts that feedback can have, helping to minimise the disengagement when they disagree with feedback or find it has a negative impact.

We will step through the stages below, however, note that there is lots of overlap between the staff considerations and student considerations, as student feedback engagement is strongly correlated with what the teaching staff do. It should also be noted that these correlations do ultimately stem from the data from one computing department in one university, so whilst that data was collected to text the data from stage I of the study, there is still space for future research to check for engagement factors across faculties and universities.

#### **Development of students' assessment literacy**

The initial thematic review in stage 1 highlighted the impacts of poor student assessment literacy. The key aspects highlighted were 'sense making' of feedback and criteria, students understanding how they may use their feedback to improve future performance and giving opportunities for students to actively engage with and discuss feedback.



The thematic review highlighted the challenges of ‘Sense making’ with regards to feedback and criteria (Beaumont et al., 2011; Bloxham and Boyd, 2007; De Kleijn, 2021; Higgins et al., 2002; Van Heerden 2020; Vattoy et al., 2021; Winstone and Carless, 2020; Zimbardi et al., 2017). Whilst the responsibility to ensure feedback and criteria make sense lays with the tutors, the students still require support to develop their skills in decoding and understanding feedback. This includes how feedback comments relate to the work, how the feedback helps them to understand how they may have improved their work, and how they may apply it to help them improve future work (Beaumont et al., 2011; Sadler, 2010; Zimbardi et al., 2017).

Blockers to this development come when feedback and/or assessment criteria are unclear or in language students do not understand. Students are therefore unable to decode feedback and/or link it to the initial criteria (Carless, 2007; Handley, 2011; Nicol, 2010; Nicol et al., 2014; Parkin et al., 2011; Vattoy et al., 2021; Weaver, 2006). Students also have difficulty translating/appreciating how feedback may help them improve in future assignments (Beaumont et al., 2011; Carless, 2007; Boud & Falchikov, 2007; Scott et al. 2011; Winstone et al., 2017). These blockers are the responsibility of staff as they need to:

- Ensure feedback is clear and in language the students will understand
- Write assessment criteria that is easy to understand and relate to the assignment
- Engage students with assessment criteria and feedback to actively develop their assessment literacy

The first two points above relating to assessment criteria and feedback overlap in many ways. For example, students need to understand feedback to relate it to the assessment criteria (Nicol, 2008) before they can appreciate and ‘decode’ it so they can use it to feedforward into following assessments. The final point relates to the fact that students need to understand assessment criteria and how to use them to self-assess and build skills of self-regulation (Beaumont et al., 2011;

Carless, 2007; Evans, 2013; Jonsson, 2012; Nicol, 2010; Nicol & McFarlane-Dick, 2006; O'Donovan et al. 2004; Sadler, 2010).

The development of students' assessment literacy does of course require students to engage with the process, however, as mentioned in the staff considerations section earlier, staff need to be the drivers of this engagement in the beginning so students can immediately see the value (Moscrop, 2015). Work by Beaumont et al. (2011) included comments from students noting that they had not been 'prepared' by the tutors for the transition to HE and that tutors 'just expect them to know' how to approach assessment. One comment from a student suggested that they need to be 'shown how': "I know it's uni so we can't be spoon fed...but at least give us the spoon" (Beaumont et al., 2011:685).

Boud et al. (2010) also noted "for students to become independent and self-managing learners, they need to be supported in the development and acquisition of the skills they need for learning, including those of assessment" (Boud et al., 2010:2).

This active engagement of students through the assessment process develops their confidence to engage with and discuss their feedback. Students should engage in dialogue with tutors and peers around assessment and feedback to develop their skills of self-regulation and their own internal dialogue (Ajjawi et al., 2015; Carless, 2007; Carless et al., 2011; Evans, 2013; Jonsson 2012).

An interesting viewpoint on students' development over time emerged from the stage II data (student data), which was found to be a gap in the literature.

Price et al. (2011b) note that student readiness to engage will evolve over time and that student engagement is varied and complex across a programme. One of the questions in stage II of this study asked final year students to reflect on the feedback they had received across their programme of study, they noted:

- *“Feedback through 2nd and 3rd year has been a lot more detailed than what was given in first year, as it has gone from usually being one small sentence that lacks detail, to at least a paragraph explaining what grade you got and why, as well as how you can improve.”*
- *“The feedback has become more technical and focuses more on ways to improve rather than highlighting what was good or bad in the assessments”*
- *“Feedback seems to have gotten more in depth as the years progressed.”*

This is interesting as it suggests that first year feedback may not get as much attention from the tutors than the feedback given in later years. However, as stated earlier, the development of feedback engagement and assessment literacy should start as soon as possible in the students’ academic life to ensure that they can benefit from feedback they receive and use it to improve future performance.

In addition, when looking at some quantitative analysis of the open comments data by year of study (Appendix 3) it shows that students appear to engage more with criteria as they progress (11% of first years commenting on this engagement Vs 23% of third years), with one commenting *“From first year, I don’t think I looked at the marking criteria at all but as I progressed, I began to use it more and more. This has allowed me to identify which areas within a coursework are worth more and therefore need more time spending on than other sections”*. It also highlighted some differences in student struggles with understanding feedback, suggesting it reduces over time (17% of first years vs 4% of third years). These outcomes raise the question as to whether the active engagement of students in their assessment literacy development could roll back their understanding and use of feedback to earlier in their university life, and also whether feedback structures and delivery should differ over time. The development of feedback engagement over time is a gap in the literature that is discussed in more detail in the ‘future research’ section.

### **Managing the emotional and psychological impacts of feedback**

The emotional impacts of feedback can be mitigated by the active engagement of students in the feedback process that is mentioned above. Yorke (2003) argues that staff need an awareness of the psychology of giving and receiving feedback. It is

true that emotions are inherent in assessment and feedback, however, preparing students emotionally for receiving feedback may allow them to engage with a lesser emotional impact, and training tutors to manage the process may reduce the impacts.

Varlander (2008) highlighted the importance of 'affect' on how feedback is internalised and used by students. To reduce the impact of the affective domain feedback should focus on task performance only, not on personal aspects or aspects of 'the self' (De Nisi and Kluger, 2000). Bloom (1956) cited in Trowler's (2010) literature review on student engagement notes 'emotional engagement' as one of the three factors of positive student engagement suggesting that positive emotional engagement can also occur as they may "experience affective reactions such as interest, enjoyment, or a sense of belonging" (Trowler, 2010:5). Molloy et al. (2020) also note that 'students did not seem to have enough language to convey their discomfort in trying to wrestle with information about their work which dismayed them' (Molloy et al., 2020:535). This again speaks to the complexity of emotional engagement in the assessment and feedback process and the need to train staff to manage the process, and critically, to engage students in thinking about how they may receive, read and internalise comments.

Ultimately, developing students' assessment literacy, their ability to read and decode feedback, to relate it to criteria, to understand how to use it in future, and developing their confidence in discussing these aspects with tutors and peers can only serve to reduce frustration and other emotional impacts of feedback.

### **Student considerations summary**

The staff considerations mentioned the key things that staff must know and do to drive engagement with feedback. However, all of this is to drive what students do with feedback. Malecka et al. (2020) noted that teachers are responsible for designing feedback processes effectively, but students need to seek, engage with and use feedback given.

To summarise the student factors driving engagement:

- Students must have their assessment literacy developed in a purposeful manner through active engagement with assessment criteria and feedback.
- Students should be given the opportunity to actively discuss feedback outcomes.
- Student induction into university should include embedded 'training' on what assessment literacy is and how their own assessment literacy may develop over time.
- Student training should also discuss the emotional and psychological impacts of feedback engagement and how this may be managed.

### **Summary of institutional, staff and student considerations**

To conclude this section, the following are the key considerations when trying to improve the provision of feedback and feedback engagement:

#### **Institutional considerations**

- Institutions should have processes that allow pedagogic research outcomes to feed up into institutional policy and strategy.
- More effective funnelling of pedagogic research outcomes into the central learning and teaching teams, who may have more ability to feed into cross institutional changes to policy.
- Standard teaching induction programmes in all universities for new staff, which cover the fundamentals of what good teaching, assessment and feedback looks like. Importantly, this should become BEFORE they are 'thrown into the deep end'.
- Programme validation processes should maximise the chances of making programme teams think about assessment and feedback delivery.

## **Staff considerations**

- Professional development on constructive alignment and active engagement of students with learning outcomes, assessment criteria and feedback
- The development of dialogic feedback practices, through staff development and feedback policies and processes that allow the space for this practice.
- Development to ensure staff understand that assessment and feedback should be designed into programmes and modules to ensure timeliness and maximum engagement.
- Development that enhances their assessment and feedback literacy, which will in turn allow them to appreciate how to develop their students' feedback literacy.

## **Student Considerations**

- Students must have their assessment literacy developed in a purposeful manner through active engagement with assessment criteria and feedback.
- Students should be given the opportunity to actively discuss feedback outcomes.
- Student induction into university should include embedded 'training' on what assessment literacy is and how their own assessment literacy may develop over time.
- Students need to understand that they are active participants in the feedback process.
- Student training should also discuss the emotional and psychological impacts of feedback engagement and how this may be managed.

These outcomes are useful for enhancement of feedback practices and feedback engagement. In addition to these it is important for those involved in feedback processes to understand the different 'value'. Whilst the student data informing this study was limited to one department in one university, there is wider research that supports these outcomes. For example, Dicker et al. (2018:1429) noted the

importance of feedback quality to student perceptions of a quality higher education experience noting that Students rated feedback of significantly higher importance than staff. *“Fifty-three percent of institutions disagreed that the quality of feedback was a good marker of quality in higher education compared with 15% of staff. Seventy-two per cent of students agreed that the quality of feedback they received helped them to do better”*. The fact that students apparently value quality feedback more is something that institutions and staff should be aware of.

The value of feedback and assessment literacy in general needs to be introduced, taught, and embedded at all levels. *“Both students and educators need to be constantly aware of what they do to align with, navigate and resist the structures and practices in which learning takes place”* Tai et al. (2021:10)

#### **6.4 Significance of the study/Original contribution**

This research illuminates new aspects of understanding feedback engagement through the provision of the developed framework. It adds to the existing research in feedback engagement with the provisioning of a lens through which the problems with feedback engagement can be viewed holistically, demonstrating the importance of the interconnections between different barriers to feedback engagement and how they interlink and impact on each other. The significance of this study is around four key areas:

- The study has shown that Individual problems with feedback engagement should be considered alongside all the other aspects that may be impacting feedback engagement, with the framework developed showing the importance of the interconnections between different barriers to feedback engagement. This can ensure future research has a holistic view of feedback engagement, allowing researchers to easily link the impacts on engagement.
- This study has shown that Institutions hold the power to drive feedback uptake and engagement, which will ultimately lead to more accomplished, satisfied, and self-regulated students.

- This study has shown that what staff do to engage students with assessment and feedback processes has a big impact on student assessment literacy development and future feedback engagement.
- This research adds to the literature by providing a framework of how problems with feedback engagement interlink and impact on each other, which can inform future research.

#### **6.4.1 Contribution to the literature**

The outcome of this PhD was the development of the framework for enabling student development through feedback engagement, which allows readers to understand the problems, impacts and how they interact.

As mentioned earlier in the thesis, this was a gap in the literature as few studies could be found that took an holistic look at the problems with feedback engagement and presented a lens through which to view these in relation to each other. The closest found was a study from Henderson et al. (2019) referenced earlier in this work, who presented twelve conditions that could enable successful feedback in higher education. However, this study had a lens of creating conditions for effective feedback, rather than a framework for understanding how problems that prevent effective feedback interact.

This study looked to conceptualise the problems with feedback engagement in higher education with a view to understanding and addressing the barriers that may prevent students from engaging with and using feedback. The framework developed will allow future researchers to have a framework through which to view individual or multiple issues they may be trying to address through any future research.

#### **6.4.2 Contribution to institutional policies and practitioners**

Institutions may use the results of the thesis to inform institutional developments around assessment and feedback, specifically strategies and policies that link to assessment feedback engagement. Understanding the full picture of how higher-



level strategy and policy can affect student feedback engagement on the ground will be invaluable.

Educational developers and those engaged with the creation of staff continuing professional development courses will be able to use the results to engage staff in the understanding of how feedback engagement develops as a holistic process. This can feed into new staff induction and central assessment and feedback training courses.

Those on the front line of teaching in HE will be able to use the framework to inform their own personal practice as they will have a wider understanding of how factors outside of their immediate control may impact on their own students' engagement with their feedback, and what they can do personally to drive feedback engagement.

### **6.5 Suggested future research - Student Feedback Engagement/Use Over Time**

The consideration of active student development to promote engagement with assessment and feedback over time is a gap identified in the literature requiring further study. Indeed, most studies on assessment feedback simply refer to 'students' as a homogeneous group, with little consideration of their differences, or how their engagement or use of feedback may change over time as they develop. This point was touched on by Trowler (2010) in her literature review on student engagement, where she noted the tendency for studies to look at the 'students' or to 'type' students (e.g., 'generation Y', 'Ethnic minorities', 'older students', and 'the traditional student', etc) with some assumption of sameness within those groups. Hattie (2014) agreed, stating that tutor's feedback and mark in a mechanical way with some belief that all students are the same. Hattie (2014:65), however, is one of the few authors who explicitly states the need for differentiated feedback for students:

*"learners need different types of feedback depending on their current skills level. Beginners need feedback based on content knowledge as they are striving to build basic knowledge and vocabulary. Hence, they need*

*assurance and corrective feedback (...). Intermediate learners have acquired basic concepts but need help linking ideas together (...) At more advanced levels, helpful feedback takes the form of supporting the self-regulated learner (...). In short, different types of feedback work best depending on the individual's stage of learning"*

The student voice in this thesis clearly demonstrates that students are individuals who come into higher education with varied skill sets, confidence levels, expectations, problems and so on. The appreciation of this fact is noted in the extensive literature on student transition into higher education. Boud, et al. (2010) in their paper 'Assessment 2020: Seven propositions for assessment reform in higher education' noted the importance of inducting students into the assessment practices and cultures in HE and that it is critical to engage and support them through manageable assessed tasks to help them acquire and develop the necessary skills for success and to build confidence. The importance in supporting and scaffolding first year engagement with feedback was also discussed extensively by Beaumont et al. (2011). Mutch et al. (2018) also noted that the first-year students within their study demonstrated limited cognitive understanding of the feedback processes. These examples, as with much of the literature, concentrate on first years and transition in terms of the development of academic skills, rather than a consideration of skills development over the full course of their HE journey.

Much of the literature on student feedback engagement does talk about 'student development' or the development of the skills of self-regulation, however, very few talk about how these may differ over time across the course of a whole programme, and none were found that explicitly tested how or why feedback should differ or develop over time.

Students are also not oblivious to their need for development in assessment and feedback literacy, as noted by Beaumont et al. (2011) but, as mentioned above, much of this relates to work on student perceptions in transition to HE. There were two studies that assessed the element of feedback over time, Murdoch-Eaton et al. (2012) and Ali (2015). Murdoch-Eaton et al. (2012) specifically studied student

perception of feedback over time with students studying medicine. They noticed difference across the years of study in terms of:

- *Student perceptions of the purpose of feedback.* More senior students were more likely to see feedback as a process to inform their personal development and were happy with more constructive comments. Those more junior saw it as more of a passive activity and wanted more positive affirming comments. This is in line with Hattie's (2014) assertions quoted earlier.
- *Student recognition of feedback.* Students are much more likely to recognise verbal feedback and peer feedback as feedback as they move through the years of study.
- *Student perceptions on the credibility of feedback providers.* More junior students prefer feedback from those they perceive to be most 'credible' (senior tutors), whereas students in their final years were more likely to value verbal and immediate feedback from tutors and peers.

(Murdoch-Eaton et al., 2012)

It would be useful to study student perceptions of their development of assessment and feedback literacy across their whole programme in greater detail.

The study by Ali (2014) assessed the perception of, and level of engagement with, feedback through a survey of 447 psychology students across first, second- and third year undergraduate study. Ali noted that perceptions of feedback were reduced over time with student being less satisfied with the feedback they received. It was also noted that engagement with feedback grew from first to second year, but it then dropped in third year (Ali, 2014). However, these results were gleaned from the student *perceptions* of their engagement with feedback, not data on how much they interacted with or accessed feedback.

Price et al. (2011b) note that student readiness to engage will evolve over time and that student engagement is varied and complex across a programme. As a result,

they also suggest the need for further research into “broader systemic insights about how student engagement evolves over time as a result of multiple experiences of assessment and feedback” (Price et al., 2011b:553). It is also important to note that this thinking is not especially new. Knight and Yorke noted in 2003 that there must be different feedback for students of different levels, but this has not translated into widespread practice.

The key element to consider is the development of an understanding of the processes students go through when transitioning through their years in HE to develop a ‘map’ of what students want and need at each stage of their development (which may vary for individuals). This is complex as students enter HE at different levels of emotional intelligence, academic ability, etc. As Krapp (2005) noted, not all learners are prepared for full autonomy, they may be lacking the necessary skills to engage. It is not that they are unwilling to engage, but rather that they have not developed the skills and tacit knowledge that allow that autonomy and self-regulation. As mentioned earlier, this should be actively developed as they progress through their course.

The data from this study (stage II) noted some key differences across years of study as follows:

- 1st years value feedback on structure and process over detailed comments
- Likelihood of engaging with previous feedback increases through the years of study
- Desire for detail on how to improve increases across the years/ concise to the point feedback preferred by first years
- Negative experiences of generic/automated feedback more prevalent in 1st year
- First years more likely to struggle to make sense of feedback than later years
- Students engage more with assessment criteria over time
- Appreciation of the value of drafts increases over time

Whilst these differences across years are interesting, they were outside the scope of this study. It is suggested that further future research be carried out to probe these differences in how students develop over time.

## **6.6 Limitations of the study**

The limitations of thematic literature review (stage I), the pragmatic mixed methods methodology, the mixed survey design, and the survey itself (stage II) were all covered in the earlier research design chapter. Here we discuss the limitations not yet covered and of the study as a whole.

### **6.6.1 Additional limitations stage I**

The research design chapter covered the detail of the selection of papers for the thematic literature review. Care was taken to include research that had a focus on feedback engagement impacts and research was added to the thematic analysis until themes and nodes were exhausted and no new factors affecting feedback engagement were arising. To ensure new research did not add any additional themes, new research was continuously assessed, and some added to the thematic analysis to ensure robustness and validity of content up until the writing up of the thesis. No new themes or nodes were identified through newer research papers that were added.

Despite this the additional limitations come from the vastness of the feedback literature, and whilst every care was taken to identify the key reading, the systematic searches could have been limiting.

There are also limitations with the thematic review. To ensure a more robust result from the thematic review it would be preferable to have more than one person carry out the theming process, sharing outcomes and nodes to ensure no gaps arose. However, the nature of a PhD study means this must be carried out alone. It would be beneficial for this process to be repeated in future research.

### **6.6.2 Additional limitations stage II**

The survey design and its limitations were also discussed in detail in the research design chapter. However, a further limitation was identified in that the survey was distributed through lectures. This method of distribution limited the completion of

the survey to those students 'engaged' or attending the lecture. In hindsight this may have limited the numbers of disengaged, non-attending, or struggling students. To ensure a more complete cross-section within a chosen audience, in future I would seek to find multiple avenues of survey distribution to maximise the potential for a cross section of students.

Similar to stage one limitations above, limitations also exist in the theming process of the open survey comments as they were themed by an individual. A more robust approach would be theming by more than one researcher, however, this is not an option within a PhD. In addition, LaDonna, et al. (2018) have argued that open-ended survey questions alone are unlikely to support rigorous qualitative insights. However, they do note that this kind of data as an adjunct analysis of other data can be useful. As the student open data analysis was used to ensure no key themes were missed from stage 1 of the research (thematic analysis), this approach was felt to be valid.

There are also additional factors to consider in the wording of some of the survey questions. For example, the 'Yes/No' answer to the statement 'I always read my feedback' could result in socially-desirable responding (Braun et al., 2001), meaning students may select 'yes' to this answer as that is the socially desirable response in this situation. In addition, the answer to this question does not determine that simply reading the feedback would not always demonstrate engagement with it. Reading the feedback once may not lead to application to future assessments, learning from mistakes and so on, however, this question was a tool by which to measure those who do at least enable engagement by reading the feedback given, as demonstrated by Handley et al. (2008) in their process of student engagement with feedback diagram (Fig 2.1).

### **6.6.3 Limitations stage III**

The limitations of stage III, which was the conceptualisation of the linkages between the problems with feedback engagement, related to the individualised approach to the iterative conceptualisations of the framework. Again, the nature of PhD research means that this process must be individual, however, to try to

reduce the impact of this limitation I took steps to gain feedback on the process, taking my work to academic conferences to gain feedback from expert peers. This feedback fed into my conceptualisations and helped me to strengthen the final framework.

To try and address this limitation it would be useful to have another researcher to start with the same problems with feedback engagement, to see how their own conceptualisations may differ.

#### **6.6.4 Limitations conclusions**

The overall limitations of the study relate very much to the individual researcher approach that comes with a PhD study. As noted by Ross and Bibler Zaidi (2019) study design limitations originate from conscious choices made by the researcher. They note 'Such (de)limitations involve conscious exclusionary and inclusionary decisions made during the development of the study plan, which may represent a systematic bias intentionally introduced into the study design or instrument by the researcher'. As such, the best way for these findings to be validated would be through another researcher or researchers attempting to reproduce the findings.

#### **6.7 Summary**

The study aimed to provide a framework that integrates the literature on the problems with student feedback engagement to provide an institutional roadmap to effective development of student engagement with feedback. This was done through a three-stage pragmatic mixed methods process that initially sought to identify, from the literature, the problem factors that inhibit assessment feedback engagement in higher education. It then identified the problem factors with feedback engagement from the student point of view. Finally, linkages between each of the problem factors identified were considered to conceptualise the problem factors holistically.

Through this process the framework for enabling student development through feedback engagement was developed.

It became clear through this process that feedback engagement is not just a problem with student engagement but is instead a problem for institutions to address through their own policies and the resources they make available to ensure staff have the correct level of training and understanding of assessment and feedback processes. Institutions when considering things such as assessment and feedback outcomes from the NSS (and similar national surveys) should therefore not only look to the 'issues' within low scoring departments but should also look to their own policies and staff support mechanisms that can drive feedback quality.

The study also showed that students want to engage with feedback but often do not know how, nor can see that value until it is demonstrated to them. Indeed, students who are given opportunities by their tutors to actively engage in assessment and feedback processes as part of their study are more likely to see its value and therefore engage with feedback in future.

In addition, staff do not enter higher education with the innate ability to design effective feedback processes and deliver excellent feedback or to design excellent assessment and feedback processes that will drive student engagement. Therefore, institutions should ensure staff are given the training and support necessary to drive student feedback engagement.



## Appendices

### Appendix 1 - Survey instrument

#### Survey

Q1 Year of study (check box)

#### Initial Feedback Reflections

*Likert Scale Q's 1-5 Strongly DA to SA:*

Q2 I understand the terminology used by tutors in their written feedback

Q3 After reading feedback I can identify how to use it to improve my future performance

Q4 I receive my feedback in a timely enough manner for it inform future assessments

Q5 I feel I can approach my tutors to discuss my feedback to improve my understanding

Q6 I always read my feedback – Y/N

If you answered no to the last question, please explain what factors stop you from reading feedback (Open)

*Open question:*

Q7 Look at your answers to the above questions, can you give an example of positive and/or negative experiences that influence these answers?

#### Learning outcomes and assessment criteria

Learning outcomes are given for each module (usually in module handbooks) and look like the following example:

On successful completion of the module students will be able to:

1. Distinguish and compare the key concepts of E-Business.
2. Distinguish and compare internet based business models.
3. Identify and appraise appropriate business situations where e-business can be applied
4. Assess and evaluate the benefits of e-business in common business situations.

Q8 I am given opportunities to **actively** engage with learning outcomes (e.g. tutors may ask you to read and discuss learning outcomes and ask you to highlight anything that is unclear, etc) (Likert Scale)

Q9 I understand learning outcomes and how they are used (Y/N)

Assessment criteria/marketing rubrics are given for each module (usually in assessment handbooks) and look like the following example:

Learning Outcomes Assessed	FAIL (0-29%)	Narrow Fail (30-39%)	Satisfactory (40-49%)	Good (50-59%)	Very Good (60-69%)	Excellent (70-84%*)	Outstanding (85-100%)
LO 1.Distinguish and compare the key concepts of E-Business.	Nothing submitted or substantially plagiarised. Rudimentary work demonstrated very poor understanding of the scenario. Minimal effort.	Poster Presentation demonstrates some evidence of effort but is lacking in comprehensive understanding of the key concepts of an e-business.  Report shows some evidence of effort but is lacking in comprehensive understanding of	Poster Presentation demonstrates an understanding of the key concepts of an e-business. However, does not demonstrate a comprehensive understanding of the key concepts of an e-business  Report demonstrates some understanding of most of the business models	Poster Presentation demonstrates a good understanding of the key concepts of an e-business. However some elements may be missing.  Report demonstrates a good understanding of most of the business models that successful online retailers adopt.  Report has a good grasp of main ideas.	Poster Presentation demonstrates a very good understanding of the key concepts of an e-business.  Report demonstrates a very good understanding of the business models that successful online retailers adopt.  Report has a very good grasp of main ideas and may show some evidence of	Poster Presentation demonstrates a comprehensive understanding of the key concepts of an e-business.  Report demonstrates a comprehensive understanding of the business models that successful online retailers adopt.  Report has an excellent grasp of main ideas showing evidence of	A grade A+ (80%-100%) will only be awarded to work that would be described as 'outstanding' in all areas. Will also include additional elements over and above the original specification.  Outstanding Poster Presentation demonstrates a comprehensive
LO2.Distinguish and compare internet based							

Do you look at assessment criteria when completing an assessment? (Y/N check box)

*Likert Scale Q's:*

Q10 Assessment criteria grids/marketing rubrics make it clear how to achieve a good mark

Q11 Assessment criteria grids/marketing rubrics help me to produce better work

Q12 I am given opportunities to **actively** engage with assessment criteria grids/marketing rubrics (e.g. tutors may ask you to use assessment criteria grids/marketing rubrics to mark example work, or to discuss the differences between a 40% and a 70% in an assessment based on the criteria, etc)

*Check box Q:*

Q13 I understand how my tutors use the learning outcomes and assessment criteria/rubrics to mark my work (Y/N check box)

*Likert Scale Q's:*

Q14 My feedback explains how well I have met the assessment criteria, so I can identify where I went wrong

Q15 I am given opportunities to actively engage with my written feedback (e.g. tutors may offer to talk through feedback, may ask you to reflect on previous feedback before handing in a piece of work, etc)

### General Feedback Questions - Your own practice and development

*Likert Scale Q's:*

Q16 I find it easy to use feedback I receive in one module to improve similar assessments in future modules

Q17 I can see how assessment feedback I have received during my course has helped me to improve academically over time

Q18 Whether I read feedback is often related to my immediate feelings after seeing my mark

Q19 I feel I could engage more with learning outcomes and assessment criteria at the start of assessments

Q20 I use the assessment criteria I am given to self-assess my work before I submit

Q21 I engage with other students to peer review each other's work against the criteria before we submit

Q22 I actively try to identify points for improvement in my feedback so I can use it to improve in future assessments

### **Final Questions**

*Open Qs:*

Q23 Think about feedback you have received so far on your course. What are the most useful pieces of feedback you have received? Why were these the best?

Q24 Name one way in which you have used feedback to improve your learning.

Q25 If you were a tutor, how would you structure your written feedback to ensure it was useful to your students?

Q26 Can you identify how you have developed over time to improve your academic performance? How has your approach changed since you started the course?

Q27 (Third years only) Did you perceive or notice any difference in written tutor feedback over the three years of your degree? For example, was feedback in first year different in any way to feedback, in second year, or the feedback you receive now?

Q28 Any other points you feel would be useful regarding your experiences of assessment feedback? Have your say here!

## Appendix 2 - Carless (2007) survey



### LOAP - Learning Oriented Assessment Project

LOAP Principal Supervisor: Dr David Carless, HKIEd

#### Survey of Tertiary Students' Views and Experience of Assessment

LOAP (Learning Oriented Assessment Project) is a UGC-funded, inter-institutional project that seeks to investigate and promote effective learning-oriented assessment practices. This questionnaire is part of LOAP, designed to gather baseline descriptive data on students' views and experiences in assessment, with a view to improving your learning situations.

The LOAP team will donate **HK\$1** to The Community Chest for every completed questionnaire that is returned. This questionnaire will take you **5-10 minutes** to complete.

If you would like to know more about LOAP, please visit our website:  
<http://home.ied.edu.hk/~latdg>

Confidentiality is strictly observed in this survey. Thank you very much for your cooperation.

#### CONSENT FORM

Please sign below if you agree to a) take part in this questionnaire survey, and b) let the data from your completed questionnaire be used for research and publication purposes.

I understand that all data will be treated anonymously.

I understand that if I do not give my consent, I will suffer no discrimination or criticism, and my study grades will not be affected in any way.

Signed \_\_\_\_\_

Date \_\_\_\_\_

Survey of Tertiary Students' Views and Experience of Assessment

'Assessment' or 'assessment activities' refer(s) to formal and informal activities/assignments such as questions, quizzes, projects, essays, exams, presentations, field work, lab reports, marking, giving advice and comments, etc.

**MARKING INSTRUCTIONS**

-Fill the oval completely with a blue/black ball pencil or HB pencil.

e.g.  Correct

-Erase all mistakes and make no stray marks.

-Do not fold or staple this answer sheet.

**PART A Assessment Purposes**

Please mark the appropriate number to indicate the extent you agree or disagree with each of the following possible uses of assessment.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. To identify what essential skills and knowledge students have learned	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
2. To identify students' misunderstanding/misconceptions of subject matter	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
3. To provide advice or comments to students about their learning	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
4. To measure students' learning progress/improvement over time	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
5. To motivate student learning	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
6. To encourage real-life or practical application of learning	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
7. To develop students' ability to assess themselves	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
8. To develop students' ability to assess their classmates	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
9. To develop students' ability to learn by themselves	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
10. To prepare students for professional life	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
11. To rank students in grades or marks	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
12. To decide if students should advance to a higher level	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
13. To ensure students meet the required standards for a qualification	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
14. To monitor teachers/tutors' teaching performance	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5

**PART B Assessment Experience**

Please rate the following statements based on your main impressions of one or two major module(s)/course(s) you studied in 2002/2003. When not sure or not applicable, mark '0'.

*Not in key* ▲

	Not sure	Never	Rarely	Some-times	Often	Always
The assessment activities (e.g., doing assignments, giving comments) took up too much of my time	①	①	②	③	④	⑤
The assessment activities were stressful for me	①	①	②	③	④	⑤
The assessment activities were interesting for me	①	①	②	③	④	⑤
I learned something useful/practical from the assessment activities	①	①	②	③	④	⑤
The assessment activities motivated me to discuss the subject with my classmates	①	①	②	③	④	⑤
The assessment activities motivated me to discuss the subject with my teacher/tutor	①	①	②	③	④	⑤
I knew what learning outcomes (e.g., critical thinking, research/IT skills) were to be assessed	①	①	②	③	④	⑤
I knew what criteria (e.g., the marking scheme) were used in assessment	①	①	②	③	④	⑤
I participated in deciding what criteria were used in assessment	①	①	②	③	④	⑤
More than one assessment activity (e.g., quiz & case study) was used	①	①	②	③	④	⑤
I was assessed at the start of the modules/courses	①	①	②	③	④	⑤
I was assessed during the modules/courses	①	①	②	③	④	⑤
I was assessed at the end of the modules/courses	①	①	②	③	④	⑤
I was given advice on drafts/outlines before an assignment was submitted	①	①	②	③	④	⑤
I was given detailed comments that justified the grade/mark given for my assignment	①	①	②	③	④	⑤
I was given detailed comments that helped me improve my next assignments	①	①	②	③	④	⑤
I was given detailed comments that helped me better understand the subject	①	①	②	③	④	⑤
Comments were followed up by actions to improve my learning (e.g., reading, discussion, tutorial)	①	①	②	③	④	⑤
I was given comments on my learning progress throughout the modules/courses	①	①	②	③	④	⑤
Double marking was used	①	①	②	③	④	⑤
I also graded or assessed my classmates in the assessment activities	①	①	②	③	④	⑤
I also graded or assessed myself in the assessment activities	①	①	②	③	④	⑤

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**PART C Assessment Problems and Causes**

37. Please list three problems (and perhaps their causes) in the assessment activities you have experienced.

a. \_\_\_\_\_  
\_\_\_\_\_

b. \_\_\_\_\_  
\_\_\_\_\_

c. \_\_\_\_\_  
\_\_\_\_\_

38. If you are willing to be interviewed for 30 minutes about your assessment experience, please leave your name, email address or attach a business card: \_\_\_\_\_

**PART D Personal Particulars**

39. Gender:      ① Male              ② Female

40. Institution:    ① CityU            ② CUHK            ③ HKBaptistU      ④ HKIEd  
                         ⑤ HKPolyU       ⑥ HKU            ⑦ HKUST            ⑧ LingnanU

41. Faculty:       ① Architecture    ② Arts            ③ Business           ④ Dentistry  
                         ⑤ Engineering    ⑥ Education       ⑦ Law                ⑧ Medicine  
                         ⑨ Science        ⑩ Social Science ⑪ Others, please specify \_\_\_\_\_

42. Year of study: ① Second           ② Third            ③ Fourth            ④ Fifth  
                         ⑤ Sixth

**Thank you!**

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**Appendix 3 - Thematic analysis showing all student voice outcomes and themes including year of study differences**

**Q: Think about feedback you have received so far on your course. What are the most useful pieces of feedback you have received? Why were these the best?**

Response total comments - 1<sup>st</sup> year: 34, 2<sup>nd</sup> year: 48, 3<sup>rd</sup> year:31, TOTAL: 113 (% below are of total and by year totals)

Theme	Years	Number of instances	Open comment quotes from students
Feedback that was clear and explained how students could	Total	57 (64%)	



<p>have got higher marks/where they lost marks against criteria (inc constructive criticism)</p>	<p>First year</p>	<p>19 (56%)</p>	<ul style="list-style-type: none"> <li>• <i>I was told how to achieve higher marks, by using the correct format for my work</i></li> <li>• <i>To be less informal in my assignments when I am typing sometimes.</i></li> <li>• <i>Programming with Alice, got told how I could improve my mark.</i></li> <li>• <i>Being told exactly where I have lost marks as I then know where I improve</i></li> <li>• <i>Feedback when telling where to improve</i></li> <li>• <i>they have helped me identify weaknesses in code and report writing.</i></li> <li>• <i>Written explanation as to what can be improved within my work to make it better, this allows me to take it into the next coursework and not let it happen again.</i></li> <li>• <i>The best pieces of feedback I receive is feedback finding the lower quality areas of my work. This allows me to clearly see the errors I made and changes which need to be done to get a higher mark.</i></li> <li>• <i>the small things that would've increased my grade quite a bit</i></li> </ul>
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			<ul style="list-style-type: none"> <li>• <i>On of my first feedback pieces i was told that i was not thorough enough in my reports.</i></li> <li>• <i>Feedback which shows the parts I did well and the areas which need improving.</i></li> <li>• <i>Feedback that refers to the marking criteria as I believe it gives a straight forward easy answer.</i></li> <li>• <i>Foundations feedback is generally great as I am told what it is that I have missed out.</i></li> <li>• <i>Any form of constructive criticism, for example, extra details I could add to improve the work. An example is including a general assumptions list in the document for the Foundations of Computer Science modules. These helped me get extra marks and made the document more structured and detailed.</i></li> </ul>
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			<ul style="list-style-type: none"> <li>• <i>Feedback that relates to the marking criteria and learning outcomes and is explained what points were not covered and why.</i></li> <li>• <i>The most useful feedback received was from the Digital World module. The feedback was detailed and explained all faults with the assignment with the reason for the fault and how best to correct it in the future.</i></li> <li>• <i>The most useful feedback I've received are on work I've achieved high marks on because the feedback is more specific about my areas of improvement compared to feedback on poorly graded work which is too vague.</i></li> <li>• <i>The feedback I received was very helpful in navigating the next task and also how looked and completed the task.</i></li> <li>• <i>Improvements as I can use them to produce better work for next time</i></li> </ul>
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	Second Year	27 (%)	<ul style="list-style-type: none"> <li>• <i>The ones that tell you how you can improve</i></li> <li>• <i>They say what was good, what could have been done to get a better mark They give clear points about what went well and what could be improved</i></li> <li>• <i>Specific and well defined examples of how my work has not met an assessment criteria, for example "you attempted to do this, but here are the exact reasons why what you wrote/submitted did not fulfil this criteria"</i></li> <li>• <i>Most useful feedback is the constructive criticism, telling me what I can add and where to adjust my work.</i></li> <li>• <i>The negative comments seem to have a stronger affect as it highlights areas for improvement.</i></li> </ul>
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			<ul style="list-style-type: none"> <li>• <i>These tend to be detailed feedback, mostly those that cover which points were good, which can be improved. Small sentences or none at all is unhelpful</i></li> <li>• <i>Some feedback has specified that I need to make some points more clear in order for the reader to get a clear understanding of what I am trying to say or do. This is very useful feedback as it is a general statement that can be applied to other coursework as well.</i></li> <li>• <i>Feedback telling me where to improve</i></li> <li>• <i>Database. Told me exactly what i needed to do to meet the criteria</i></li> <li>• <i>Feedback is to the point and guides me in the right direction and helps achieve good marks</i></li> <li>• <i>Most useful pieces of feedback are highlighting where I went wrong and suggesting what could be in place of this work</i></li> <li>• <i>They explained what i needed to improve on and how to better my work</i></li> <li>• <i>The types of feedback which pin point specifics with my work</i></li> <li>• <i>Basically everything i have done wrong has helped me a lot to not do it again</i></li> </ul>
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			<ul style="list-style-type: none"> <li>• <i>The best feedback I have received is detailing what things didn't go well within the assignment and what is needed to be done the next time around. This feedback is the best as it allows me to improve in other modules.</i></li> <li>• <i>To use more of the seminar tutorial documents either in the final report or portfolio. This was good as next time it would (probably) improve my mark.</i></li> </ul>
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			<ul style="list-style-type: none"> <li>• <i>The ones that breakdown what marks were achieved for each section, like the marking grid.</i></li> <li>• <i>the most useful feedback I have ever been given was in databases where I was shown specifically what I was doing wrong and how I needed to change it for future reference.</i></li> <li>• <i>Ones directly related to the marking criteria. I find most useful feedback to be the constructed negative feedback</i></li> <li>• <i>What i did good!</i></li> <li>• <i>One piece I was given listed in detail points i should make and corrections required.</i></li>   <li>• <i>Mainly feedback on what was completed in the coursework and suggestions on how to improve upon any relevant sections or errors found in the work</i></li> <li>• <i>they referenced the marking criteria and went into detail as to what i could have improved on rather than being vague.</i></li> <li>• <i>The most useful pieces of feedback have been the ones where they suggest where I could do better in the future as well as where I have done well so I can maintain that performance.</i></li> <li>• <i>during my security module I handed a piece of work which I was very sure that was quite weak, upon reading my feedback it turned out I had actually done quite well on it, in the same hand in I submitted a piece of work which I thought I was very strong and was to a good standard, however from the feedback it turned out I was lacking in several areas of knowledge. these</i></li> </ul>
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			<p><i>two where the best examples as the both showed me where i was actually strong in and weak in in terms of the tasks that I completed for that module and helped me to understand where I need to improve</i></p>
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		<ul style="list-style-type: none"> <li>• <i>Because they were clear and unambiguous</i></li> </ul>
Third year	11 (XX%)	<ul style="list-style-type: none"> <li>• <i>Feedback that informs me about things I did well, but also that tells me what else I could add to improve my work</i></li> <li>• <i>Intelligent systems cw1.1 i understood what had been said it was very detailed told me where i went wrong and how to improve it brilliant feedback</i></li> <li>• <i>Descriptive feedback relating to the marking criteria, where I went wrong and how I could progress to the next band of marks are the most beneficial, as they provide me with a clear progression throughout assignments.</i></li> <li>• <i>These were ones that helped the structure and gave indications of what content is missing, or what should be changed and where</i></li> <li>• <i>Where it provides you with ideas as to how you could go further with the work or explaining how you could advance on points you have made and such</i></li> <li>• <i>the most useful of feedback is lots of criticism, no one does perfect work there is always somewhere in which they can improve.</i></li> <li>• <i>Feedback that identified deficient areas, as these pinpoint the weakest parts of my work or skills.</i></li> <li>• <i>Feedback that directly and clearly tells me what the issue is in my work and what I can do to rectify it are the most useful. Also feedback that tells me what I can do to get a better mark in future</i></li> </ul>
		<ul style="list-style-type: none"> <li>• <i>The best feedback includes the strengths of my work and tells me where the most important areas to improve are so that I can get the highest mark possible</i></li> </ul>

			<ul style="list-style-type: none"> <li>• <i>When feedback provides a full breakdown of the sections of work</i></li> <li>• <i>The best feedback often comes in the form of constructive criticisms, allowing one to develop and fix these issues in future submissions</i></li> <li>• <i>Using a simple vocabulary</i></li> </ul>
Feedback related to structuring work/writing/referencing	Total	24	
	First year	11	<ul style="list-style-type: none"> <li>• <i>Adding references to every piece of work, if I did not research and use references then the work isn't at the academic level that it should be</i></li> <li>• <i>Feedback in terms of report structuring allowed me to gain maximum points in assignments as originally I was struggling, the feedback on this gave examples on where I went wrong and how this could be fixed.</i></li> <li>• <i>To always include a reference, this can change a mark from 70 to 80</i></li> <li>• <i>Help with the layout of my documents has helped me create more professional reports and essays.</i></li> <li>• <i>Links given to learn how to reference.</i></li> <li>• <i>Feedback based on the structure of my answers helped me improve how I lay out and plan my reports, as I sometimes miss summaries and references.</i></li> <li>• <i>For me it was definitely telling me how to structure a report properly and reference correctly. It was the best feedback because it is useful and has been helped me complete reports for other modules too.</i></li> <li>• <i>Feedback on how to write reports and what to include in them, this type of feedback was easily transferable to other modules</i></li> </ul>

			<ul style="list-style-type: none"> <li>• <i>Always include references</i></li> <li>• <i>To format sections on different pages, even though it looks less tidy.</i></li> <li>• <i>clear and specific in ways to improve academic style</i></li> </ul>
	Second Year	4	<ul style="list-style-type: none"> <li>• <i>I have learned recently how to professionally write references and use them properly within coursework, which will hopefully positively affect my future feedback.</i></li> <li>• <i>confirming that I have the right format on my assessments is helpful.</i></li> <li>• <i>I used to have trouble with referencing and finding enough appropriate sources, some feedback on a piece of coursework in first year helped lead me on the right way to reference and find useful sources.</i></li> <li>• <i>Suggestions to be mindful to write in a more academic professional manner within reports.</i></li> </ul>
	Third year	9	<ul style="list-style-type: none"> <li>• <i>Mainly about my how I write and if I am using the right terminology. How to</i></li> <li>• <i>structure my assignments with use of references. Allowed for more coherent assignments in the future.</i></li> <li>• <i>Focusing on backing up my claims with references, these were the best as they helped me develop my referencing skills which are a much needed skill</i></li> <li>• <i>These were ones that helped the structure and gave indications of what content is missing</i></li> <li>• <i>Feedback regarding report structure has been by far the best feedback as I can apply it to every module I have/do study.</i></li> </ul>

			<ul style="list-style-type: none"> <li>Referencing better as referencing gives easy marks.</li> </ul>
			<ul style="list-style-type: none"> <li>I had received feedback about linking my chapters throughout my reports, this had helped me focus on my writing throughout my dissertation such as my literature review.</li> <li>Useful feedback for myself includes layouts, types of references that I should use.</li> <li>Feedback saying to use references in introductions and conclusions as it make the work more professional</li> </ul>
Asking for and/or getting 1 to 1 help from tutor	Total	7	
	First year	2	<ul style="list-style-type: none"> <li>Was struggling with html grids - once submitted told my lecturer i was struggling and he helped me understand it</li> <li>The most useful feedback that I receive is the feedback I get given personally rather than that used by a marking/coded sheet.</li> </ul>
	Second Year	2	<ul style="list-style-type: none"> <li>The feedback was best given to me in a verbal manner. The teach will sit down and discuss what is needed in my work to get a specific grade I'm trying to work for</li> <li>Talking to a tutor</li> </ul>



	Third year	3	<ul style="list-style-type: none"> <li>• <i>Forensic Computing feedback. This was the best as it was verbal feedback, allowing the tutor to look through my work with me there and give feedback while doing this</i></li> </ul>
			<ul style="list-style-type: none"> <li>• <i>the best pieces of feedback are usually given to me orally in a conversation like manner which allow me to understand what I need to do in the future to improve my mark.</i></li> <li>• <i>One on one feedback going through each section of the work instead of a generic couple of sentences on Blackboard</i></li> </ul>
Transferable to future assignments/specifically stated how to improve in future	Total	13	
	First year	4	<ul style="list-style-type: none"> <li>• <i>Help with the layout of my documents has helped me create more professional reports and essays.</i></li> <li>• <i>For me it was definitely telling me how to structure a report properly and reference correctly. It was the best feedback because it is useful and has been helped me complete reports for other modules too.</i></li> <li>• <i>Feedback on how to write reports and what to include in them, this type of feedback was easily transferable to other modules</i></li> <li>• <i>The feedback I received was very helpful in navigating the next task and also how looked and completed the task.</i></li> </ul>

	Second Year	5	<ul style="list-style-type: none"> <li>• <i>The ones that tell you how you can improve and give you tips for in the future, rather than just tell you what is wrong with the work</i></li> <li>• <i>Some feedback has specified that I need to make some points more clear in order for the reader to get a clear understanding of what I am trying to say or do. This is very useful feedback as it is a general statement that can be applied to other coursework as well.</i></li> </ul>
			<ul style="list-style-type: none"> <li>• <i>The best feedback I have received is detailing what things didn't go well within the assignment and what is needed to be done the next time around. This feedback is the best as it allows me to improve in other modules.</i></li> <li>• <i>The most useful pieces of feedback have been the ones where they suggest where I could do better in the future as well as where I have done well so I can maintain that performance.</i></li> <li>• <i>Receiving database work prior to the second assignment to make sure i can improve my SQL code to improve my grades</i></li> </ul>
	Third year	4	<ul style="list-style-type: none"> <li>• <i>Feedback that informs me about things I did well, but also that tells me what else I could add to improve my work, which in some cases can be applied generally across all my pieces of work.</i></li> <li>• <i>Descriptive feedback relating to the marking criteria, where I went wrong and how I could progress to the next band of marks are the most beneficial, as they provide me with a clear progression throughout assignments.</i></li> <li>• <i>Feedback regarding report structure has been by far the best feedback as I can apply it to every module I have/do study.</i></li> </ul>

			<ul style="list-style-type: none"> <li>The best feedback often comes in the form of constructive criticisms, allowing one to develop and fix these issues in future submissions.</li> </ul>
Feedback on drafts	Total	4	
	First year	0	
	Second Year	3	<ul style="list-style-type: none"> <li>The only module when a draft was allowed, got me to see how I was going wrong and I could evaluate and change up my ideas.</li> </ul>
			<ul style="list-style-type: none"> <li>Employability draft submissions because they helped me improve before the proper submission</li> <li>Draft submission help. Highlighted key points I overlooked and can correct them in time.</li> </ul>
	Third year	1	<ul style="list-style-type: none"> <li>In one module, I was give exact pointers within my draft as to where I am going wrong, it turns out I was writing in too much detail about one area and not enough about another, for example.</li> </ul>
Feedback that explained the value of wider reading and critical thinking	Total	4	
	First year	0	
	Second Year	3	<ul style="list-style-type: none"> <li>Those which tell me ways I can be more critical. These are the best because I sometimes find it hard to be critical in my work.</li> <li>To improve outside reading</li> </ul>

			<ul style="list-style-type: none"> <li>I was recommended to use a variety of sources apart from internet sources, this was helpful as I found when I started using more books I was finding more in depth knowledge on my assignments</li> </ul>
	Third year	1	<ul style="list-style-type: none"> <li>Focusing on backing up my claims with references, these were the best as they helped me develop my referencing skills</li> </ul>

**Q: Name one way in which you have used feedback to improve your learning.**

Response total comments – 1<sup>st</sup> year: 34, 2<sup>nd</sup> year: 47, 3<sup>rd</sup> year: 29, TOTAL: 110

Theme	Years	Number of instances	Open comment quotes from students
Improved use of	Total	24	

literature/academic writing/referencing	First year	7	<ul style="list-style-type: none"> <li>• <i>Use articles and journals instead of just google</i></li> <li>• <i>Getting more academic references, and learning the material at the same time.</i></li> <li>• <i>Correctly reference</i></li> <li>• <i>Including a bibliography</i></li> <li>• <i>explained more in what i have found out.</i></li> <li>• <i>started having a bibliography</i></li> <li>• <i>I have started to use more referencing.</i></li> </ul>
	Second Year	9	<ul style="list-style-type: none"> <li>• <i>In some cases using references was better explained for me to then go away and use</i></li> <li>• <i>A few errors in referencing at first were pointed out. I fixed these from that point</i></li> <li>• <i>My feedback would usually state the need for more references, so I sought out papers and books I could reference for assignments before attempting them.</i></li> </ul>

			<ul style="list-style-type: none"> <li>• <i>To be more critical within my work.</i></li> <li>• <i>I now know how frequently to use references to score higher marks.</i></li> <li>• <i>Improving referencing</i></li> <li>• <i>improve the way I reference my work</i></li> <li>• <i>Using references to back up the points I am making during a piece of work</i></li> </ul>
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			<ul style="list-style-type: none"> <li>• <i>I have modified my writing style to be more academic</i></li> </ul>
	Third year	8	<ul style="list-style-type: none"> <li>• <i>Ensuring I am concise and clear.</i></li> <li>• <i>On one assignment I was told more references would improve my mark a little and so through that advice I have found more literature for my other assignments which has improved my learning.</i></li> <li>• <i>Looked at more academic based sources.</i></li> <li>• <i>better referencing</i></li> <li>• <i>Elaborate on my points, as well as support them with more evidence.</i></li> <li>• <i>performed more research on the topic before undertaking work</i></li> <li>• <i>Improved writing and referencing styles determined by previous feedback.</i></li> <li>• <i>Adding a background reading section to each report to give readers a deeper understanding of the task</i></li> </ul>
Improved ability to structure work	Total	15	
	First year	8	<ul style="list-style-type: none"> <li>• <i>Created more consisted report pieces</i></li> <li>• <i>Created a new template for all my future work</i></li> <li>• <i>I used feedback from one assignment to improve the structure of my reports to make them more professional</i></li> </ul>

			<ul style="list-style-type: none"> <li>• <i>I have added more structure to my work</i></li> <li>• <i>Made sure to include a more structured layout to my work.</i></li> <li>• <i>I have been able to plan out my reports before implementing the content</i></li> <li>• <i>Breaking sections down into different pages.</i></li> <li>• <i>Structure of documentation</i></li> </ul>
	Second Year	5	<ul style="list-style-type: none"> <li>• <i>Structuring answers better.</i></li> <li>• <i>My structure of how i present my work. Making work look more professional</i></li> <li>• <i>I have improved the structure of my reports</i></li> <li>• <i>A comment from first year about commenting and indenting code. (For which I have now become OCD about!!)</i></li> </ul>
	Third year	2	<ul style="list-style-type: none"> <li>• <i>Report writing</i></li> <li>• <i>Formatting my reports correctly</i></li> </ul>
Using previous feedback to improve/reflection	Total	40	
	First year	12	<ul style="list-style-type: none"> <li>• <i>Use it to understand where I lost marks at so I don't do it again</i></li> <li>• <i>I used feedback from one assignment to improve the structure of my reports to make them more professional</i></li> <li>• <i>When doing the next coursework.</i></li> </ul>

			<ul style="list-style-type: none"> <li>• <i>I used feedback to make sure that I was answering the question how the tutor wanted it answering.</i></li> <li>• <i>Reflection</i></li> </ul>
			<ul style="list-style-type: none"> <li>• <i>Compared new assignments to feedback and using it as a check list to ensure I have followed the advice given from previous assignments.</i></li> <li>• <i>Checking back on simple errors made within assessments.</i></li> <li>• <i>Remembered it for next time.</i></li> <li>• <i>I have made sure I do not make the same mistake in the next piece of work</i></li> <li>• <i>Feedback has helped my ability to write a report.</i></li> <li>• <i>knowing which features to improve</i></li> <li>• <i>proof read the next assignment to ensure ive implemented what feedback was given me</i></li> </ul>
	Second Year	15	<ul style="list-style-type: none"> <li>• <i>Working on action points given in feedback</i></li> <li>• <i>I have used feedback on drafts to edit my work</i> <i>Looking over my work more and discuss with fellow class mates</i></li> <li>• <i>structurally the feedback gives me a good indication of where i may have gone wrong</i></li> <li>• <i>To get a better grade and further understand my work</i></li> <li>• <i>To reflect on what I have written to improve my work. how else?</i></li> </ul>



			<ul style="list-style-type: none"> <li>• <i>It identified areas in where i could improve for my future assessments.</i></li> <li>• <i>By correcting the mistakes</i></li> <li>• <i>Systematically applied the advice and suggestions given incrementally.</i></li> <li>• <i>I followed the feedback</i></li> <li>• <i>Took in what they have said when detailed enough to do so</i></li> <li>• <i>When starting another assignment.</i></li> <li>• <i>from the above question, i learned that I was weak in one particular area of study that I previously believed i was strong in, this lead me to further develop my understanding of that particular area</i></li> </ul>
			<ul style="list-style-type: none"> <li>• <i>Feedback i've received has helped improve my research methods</i></li> <li>• <i>Make corrections and improved my coursework</i></li> </ul>
	Third year	13	<ul style="list-style-type: none"> <li>• <i>I took the feedback and kept it in mind for my future assignments Feedback provided me with an idea of what I'd missed from the requirements and how I could improve on it</i></li> <li>• <i>Self-evaluation.</i></li> <li>• <i>Re-writing certain areas of coursework before submissions.</i></li> <li>• <i>Some feedback has changed my way of thinking/seeing a task/problem.</i></li> <li>• <i>bettering my dissertation</i></li> </ul>

			<ul style="list-style-type: none"> <li>• <i>Every time writing a report or creating a new project, I remember all my previous feedback and what I was told to do to make future reports or build that bit more professional.</i></li> <li>• <i>Feedback had helped towards writing a dissertation project.</i></li> <li>• <i>Improving in weaker areas mentioned in feedback</i></li> <li>• <i>when I failed one of my courseworks, I used the feedback to include things I had missed to improve my mark</i></li> <li>• <i>to improve my work to my best capability</i></li> <li>• <i>Better understanding as to what should be included in my work</i></li> <li>• <i>Applying constructive criticism into the next piece of work</i></li> </ul>
Increased proofreading and checking work	Total	5	
	First year	3	<ul style="list-style-type: none"> <li>• <i>proofread my work multiple times.</i></li> <li>• <i>proofread the next assignment to ensure ive implemented what feedback was given me</i></li> </ul>
			<ul style="list-style-type: none"> <li>• <i>Double check work</i></li> </ul>
	Second Year	1	<ul style="list-style-type: none"> <li>• <i>by always using a spell checker</i></li> </ul>

	Third year	1	<ul style="list-style-type: none"> <li>• <i>double checking</i></li> </ul>
Now understand the value of/use assessment criteria	Total	5	
	First year	1	<ul style="list-style-type: none"> <li>• <i>Making sure all the elements are included</i></li> </ul>
	Second Year	3	<ul style="list-style-type: none"> <li>• <i>I make sure that I fully understand what I am working on before attempting any coursework.</i></li> <li>• <i>Read the criteria multiple times until I can remember it without having to look</i></li> <li>• <i>reading the guidelines of my tutor in the last few weeks regarding the tasks</i></li> </ul>
	Third year	1	<ul style="list-style-type: none"> <li>• <i>Looked more closely at assessment criteria</i></li> </ul>
Verbal feedback/discussion to develop understanding of work	Total	3	
	First year	0	
	Second Year	2	<ul style="list-style-type: none"> <li>• <i>Talk to the student one to one after a couple of weeks</i></li> </ul>
			<ul style="list-style-type: none"> <li>• <i>When talking to lecturers about the feedback to clarify any points i had misinterpreted</i></li> </ul>

	Third year	1	<ul style="list-style-type: none"> <li>• <i>verbal feedback not written</i></li> </ul>
Value of draft work	Total	4	
	First year	0	
	Second Year	2	<ul style="list-style-type: none"> <li>• <i>I have used feedback on drafts to edit my work</i></li> <li>• <i>It helps to improve after draft work above most things</i></li> </ul>
	Third year	2	<ul style="list-style-type: none"> <li>• <i>I have used feedback to improve any drafts that have been submitted when</i></li> <li>• <i>getting useful feedback on draft submissions</i></li> </ul>

**Q: If you answered no to the last question (do you always read feedback?), please explain what factors stop you from reading feedback.**

Response total comments - All 15

Theme	Total instances	Open comments from students
Final Assessment	3	<ul style="list-style-type: none"> <li>• <i>if it is a final submission and i cannot change the more then i feel it is not needed to learn how to improve my marks when i will not be submitting more work (Third year)</i></li> </ul>

		<ul style="list-style-type: none"> <li>• <i>No other work was due after feedback was given so did not feel the need to read the given feedback (Third year)</i></li> <li>• <i>Don't need to. (Third year)</i></li> </ul>
Feedback not useful/not understood	4	<ul style="list-style-type: none"> <li>• <i>Web Design work is machine marked and only checks that the correct file has been created (Correct filename and extension) and doesn't take into consideration any syntax used, code quality or even the fact that it works. The feedback is always "Attempted." and never anything more. This should be changed. (First Year)</i></li> <li>• <i>Even though i answered yes, some of the feedback was just numbers. (First Year)</i></li> <li>• <i>It maybe best for a face-to-face feedback to then explain the written feedback (Second year)</i></li> <li>• <i>Copy and pasting the same feedback doesn't count as proper feedback. (Second year)</i></li> </ul>
If happy with mark they do not look at feedback	4	<ul style="list-style-type: none"> <li>• <i>This generally depends on the grade. If it is one i am happy with I don't always bother. (Second year)</i></li> <li>• <i>i will just look at my result mark instead of the Feedback (First Year)</i></li> <li>• <i>I usually look at feedback if I wasn't happy with my mark and wanted to find out what I could have done better. (First Year)</i></li> <li>• <i>Sometimes I forget to read it if my grade is 95+. (First Year)</i></li> </ul>

Forget/lazy/do not know when feedback is released	5	<ul style="list-style-type: none"><li>• <i>I will either forget about the feedback (or i will just look at my result mark instead of the Feedback) (First Year) Laziness (First Year)</i></li><li>•</li><li>• <i>I just simply forget to check. (First Year)</i></li><li>• <i>I forget (Second year)</i></li><li>• <i>I don't know when the feedback is released most of the time (Second year)</i></li></ul>
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**Q: If you were a tutor/lecturer, how would you structure your written feedback to ensure it was useful to your students?**

Response total comments – 1<sup>st</sup> year: 42, 2<sup>nd</sup> year: 70, 3<sup>rd</sup> year: 52, TOTAL: 164

Theme	Years	Number of instances	Open comment quotes from students
With positives, negatives	Total	86	

(actionable), and how to improve (inc. against criteria)	First year	17	<ul style="list-style-type: none"> <li>• <i>Where they went wrong, how it could be easily fixed in future while providing a hand with any other further explanations</i></li> <li>• <i>Show which mark each student has achieved in every category of the marking grid.</i></li> <li>• <i>Talk about the mistakes made that cause them most of the marks lost first.</i></li> <li>• <i>Explain what went well and what went wrong.</i></li> <li>• <i>tell them what they did well, then what they did wrong and then end with what they did great.</i></li> <li>• <i>Nothing to complicated other than a written explanation underneath, stating the improvements needed in the work.</i></li> <li>• <i>I would clearly order the parts of the work which I am praising for being good, and the parts which I am saying are bad and need improving. This is so the student could clearly see which parts of the work should stay for future academic pieces of work, and what they should try to change.</i> • <i>say what was good, then move on to make it even better</i></li> <li>• <i>Positives and areas to improve on.</i></li> </ul>
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			<ul style="list-style-type: none"> <li>• <i>Identify what is specific to that piece of work and what can be used to improve later pieces of work</i></li> <li>• <i>Make it clear for them where they have gone wrong and what they can do to improve.</i></li> <li>• <i>A breakdown of each of the learning objectives, and a 'step' as to how to improve it.</i></li> <li>• <i>I would aim to find any of the negative aspects that reside in the work, in order to ensure that these mistakes are erased, but would also praise the student in areas that they have excelled in.</i></li> </ul>
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			<ul style="list-style-type: none"> <li>• <i>I would explain which parts they hadn't included (from the criteria), explain where in the document they went wrong, and describe how they could have improved in order to achieve a higher grade.</i></li> <li>• <i>Simple but allow it to show what they need to improve on by giving examples of an more ideal answer</i></li> <li>• <i>I would firstly write the grade and each part they missed out on the criteria as well as how they could have improved the work.</i></li> <li>• <i>By comparing coursework and the assessment</i></li> </ul>
Second Year	39		<ul style="list-style-type: none"> <li>• <i>Start by saying what's good about the work and then give constructive criticism with examples relating to how it can be improved.</i></li> <li>• <i>I would give the feedback comments, but also include the % value of the mark achieved for that part, and break down the structure to further explain what mark was given for what part. The give comments for improvement and perhaps say how much it would work</i></li> <li>• <i>Clearly identify what was done well, poorly and how you could improve to gain better marks.</i></li> </ul>
			<ul style="list-style-type: none"> <li>• <i>I would justify the mark given using the marking criteria, explaining which objectives the student had met completely, which they had partially met, and which there was no evidence of attempting. I would comment on the best feature of their work and also explain where the biggest improvement could be made and briefly explain how this could be achieved.</i></li> <li>• <i>Talk through each learning objective individually, stating how each was met or not met and giving specific examples.</i></li> </ul>

		<ul style="list-style-type: none"> <li>• <i>I would mark incidents where appropriate, maybe leave a comment at the bottom of each page and then at the end highlight at least three points of where the student could improve.</i></li> <li>• <i>Identify which of the assessment criteria it does not achieve and which section of the submitted work the assessment criteria could have been included in or which section attempted to achieve the criteria but did not ultimately achieve.</i></li> <li>• <i>Break down how they achieved each marking criteria and identify why they weren't able to get the high rankings and consider specific improvements they will need to look at</i></li> <li>• <i>I would structure it in a similar format to the grading criteria, referencing each section. A percentage of each section scored would be informative.</i></li> <li>• <i>Identify areas for improvement first, then move onto strengths, don't be vague, but don't bombard students with huge amounts of feedback (mediate the two)</i></li> <li>• <i>I would tell them exactly where they went wrong while referring to the learning outcomes/marketing criteria. I would give them examples of how they can do better.</i></li> <li>• <i>TO tell them how to meet the criteria</i></li> </ul>
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		<ul style="list-style-type: none"> <li>• <i>List the reasons to improve to students, to make it easy and concise to read.</i></li> <li>• <i>I would state some of the learning outcomes that were not met, and partially demonstrate how or where the student may build the information to support the outcome.</i></li> </ul>
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			<ul style="list-style-type: none"> <li>• <i>Identify the strong and weak points of the work, how to shore up the strengths and improve the weaknesses.</i></li> <li>• <i>I would use the grading structure and try and show what points are being hit and what are missed. I would also have a draft hand in.</i></li> <li>• <i>Bullet points, highlight mistakes, explain where and how they went wrong without giving them the answer.</i></li> <li>• <i>Ensure they know what they did right, what they need to improve and give suggestions for improvement next time</i></li> <li>• <i>More in depth feedback and show how the marking criteria (rubix) more.</i></li> <li>• <i>Tell them why they went wrong and what was needed to give them the next grade up</i></li> <li>• <i>Have feedback for specific assignments before hand in dates to improve marks</i></li>   <li>• <i>What you did well, What you need to work on, What you could do to improve</i></li>   <li>• <i>I would say what they did well, what they could improve on then a couple of key improvements that could be made left in bullet points so it is straight to the point and more memorable.</i></li> <li>• <i>what was good about the work. What should be improved upon for a better mark</i></li> </ul>
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			<ul style="list-style-type: none"> <li>• <i>Bullet point lists of everything the did wrong and right. Then under this I would write a paragraph explaining how to give advice on how to correct themselves for future assignments.</i></li> </ul>
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- *I would structure it by telling the student what they did specifically wrong and a solution to fix it as well as what they missed out on marks from the criteria.*
- *I would directly and explicitly relate it to the marking criteria.*
- *in sections that are relevant to the coursework so they know what they need to hit each point if they haven't already*
- *Pick out points where you think the student could improve and make it specific to their work.*
- *tell them what they did wrong and how they can Improve*
- *I would do the same as what is practiced now. Sections of coursework commented on and changes or improvements suggested in draft feedback. In assessment feedback I'd take on board what I done well and repeat that in further assessments, and do less of what was highlighted as not necessary.*
- *Mention why the work didn't get 100% and explain how to get there*
- *I would try and write feedback the student could improve his next coursework with.*
- *I would go through sections of the coursework and say where the student could have improved on as well as what they did really good on.*
- *Highlight areas of the grid where requirements are/are not met*
- *make it as clear as possible what it is that is lacking and what they have done well to ensure that the student in question understands exactly what it is they did well and what they need to improve*

			<ul style="list-style-type: none"> <li>• <i>Be detailed with the feedback and more specific about each section that needs work so the student can improve and benefit from it when submitting coursework in the future.</i></li> <li>• <i>I would make sure it was clear and concise with examples of how to further the work.</i></li> <li>• <i>Tell them the positives and negatives about their work and also give advice on how to improve.</i></li> </ul>
	Third year	30	<ul style="list-style-type: none"> <li>• <i>I would ensure that everyone's feedback included comments from each section of the marking criteria, on how they could improve certain parts of their work, such as language and structure.</i></li> <li>• <i>By using the marking criteria to break down the grade for the student so they can see what they got for each section and why they have that grade and what areas they need to improve in.</i></li> <li>• <i>Check list of key components that are there and that are missing</i></li> <li>• <i>break down each section of the marking criteria</i></li> <li>• <i>Base it on the marking criteria where they hit it and where they missed IT</i></li> <li>• <i>I would structure the feedback using by using the assessment criteria for the module</i></li> <li>• <i>Identify weaker areas of their work and how it could be improved with some recommended actions</i></li> <li>• <i>Explain how to do better</i></li> </ul>

			<ul style="list-style-type: none"> <li>• <i>Outline shortcomings so there is a clear path to improve future work</i></li> </ul>
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			<ul style="list-style-type: none"> <li>• <i>I believe the method of structuring the feedback in two sections, practical and theoretical that directly relates to the marking criteria, with a breakdown of the marks obtained at the end of the feedback.</i></li> <li>• <i>following all the marking points from the matrix</i></li> <li>• <i>ensure everything links to the assessment criteria</i></li> <li>• <i>Specific comments, detailed information on what should have been done and how to improve.</i></li> <li>• <i>I'd go through the assessment criteria and highlight each point, and anything that wasn't achieved I'd give a detailed explanation why, what to do to change that, and how to improve in the future, something ACTIONABLE.</i></li> <li>• <i>keep it simple, to the point, what was good what wasn't. ways to improve. not to wordy either</i></li> <li>• <i>start with some positives, where they got their marks. Then highlight areas of improvement within the objectives</i></li> <li>• <i>Divide into positives and negatives, and highlight areas for improvement.</i></li> <li>• <i>Have two sections, first with positive, second with negative (constructive) feedback highlighting where you went wrong/what you could improve on.</i></li> <li>• <i>I would start with what is good about it, followed by what is not so good and why, and how to rectify these issues. Next I would state how to improve and achieve the next grade band.</i></li> <li>• <i>feedback in order of assessment criteria</i></li> </ul>
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			<ul style="list-style-type: none"> <li>• <i>Separate into sections and use examples of where mistakes were made if any.</i></li> <li>• <i>Point out where exactly the student had gone wrong, and how it could be improved for future use. Print out the report, comment throughout what is good and what could be improved upon.</i></li> </ul>
			<ul style="list-style-type: none"> <li>• <i>Write about areas that could be improved to get better marks</i></li> <li>• <i>Identify strengths and weaknesses and suggest new ways to improve working</i></li> <li>• <i>I would structure overall feedback first followed by points in each section which could improve the work to a higher standard</i></li> <li>• <i>make sure it is relevant to the assessment criteria</i></li> <li>• <i>I would structure my feedback and talk about how they met all criteria 0 - 40%, then 40% - 50%, 50% - 60% and so on.</i></li> <li>• <i>I would structure it as the report/document says, highlight points that stand out and points that could be improved upon</i></li> <li>• <i>Good and bad points. Link to assessment criteria.</i></li> <li>• <i>Referring back to the mark scheme and which criteria was met and how to improve</i></li> </ul>
Feedback on sections/detailed/annotated	Total	24	
	First year	3	<ul style="list-style-type: none"> <li>• <i>Go over each part of the assignment compared to how they wanted it to be laid out and say how I could have improved.</i></li> </ul>

		<ul style="list-style-type: none"> <li>• <i>Section by section for essays or on a per aspect basis.</i></li> <li>• <i>Make my feedback more specifically focused on one area rather than making it too broad or vague about what needs improvement</i></li> </ul>
Second Year	11	<ul style="list-style-type: none"> <li>• <i>I would structure it in a similar format to the grading criteria, referencing each section. A percentage of each section scored would be informative. I would</i></li> <li>• <i>highlight points of failure on each page, and write a comment at the bottom and summarise on the final page.</i></li> </ul>

		<ul style="list-style-type: none"> <li>• <i>I would annotate PDFs</i></li> <li>• <i>Detailed feedback for each section of an assignment not just an overview. Show how many marks were given for each section of an assignment and where marks were lost.</i></li> <li>• <i>Explain every part separately rather than paragraphs of feedback.</i></li> <li>• <i>Write the feedback in descending order so it is easy to follow and relate to areas of the assignment.</i></li> <li>• <i>Broken down, marks given for each section</i></li> <li>• <i>by section based on the coursework, so it is not confusing</i></li> <li>• <i>Give it in a structured chronological order</i></li> <li>• <i>mark each section rather than just a general overall</i></li> </ul>
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			<ul style="list-style-type: none"> <li>• <i>Be detailed with the feedback and more specific about each section that needs work so the student can improve and benefit from it when submitting coursework in the future.</i></li> </ul>
	Third year	10	<ul style="list-style-type: none"> <li>• <i>I'd do it as pros and cons of each section and how to improve it. include as much detail as possible to make it easy to understand</i></li> <li>• <i>i would start would organise the feedback to match the order of the document.</i></li> <li>• <i>Annotate on the document, produce long feedback where possible to fully explain what they did wrong or right</i></li> <li>• <i>separate it with the areas being marked</i></li> <li>• <i>Labelling specific examples within the work</i></li> <li>• <i>Notes on page</i></li> <li>• <i>once work is submitted, give work back with relevant areas highlighted and comments on text stating what good, bad and how improvement could be made</i></li> </ul>
			<ul style="list-style-type: none"> <li>• <i>Print out the report, comment throughout what is good and what could be improved upon.</i></li> <li>• <i>Split into sections and dissect each section for feedback for what was good and what was bad</i></li> </ul>

Concise/bullet points	Total	24	
	First year	7	<ul style="list-style-type: none"> <li>• <i>Clear and concise with a few tips to outline</i></li> <li>• <i>Using bullet points</i></li> <li>• <i>Bullet points</i></li> <li>• <i>I would use bullet points to outline each area of improvement rather than writing a overview paragraph.</i></li> <li>• <i>I would bullet point features of the report that haven't been included in the answer and what should've been included, short but key bullet points makes it easier to understand and can tell the student exactly what they need to improve on</i></li> <li>• <i>I would list it in bullet points, explain why it is useful and how to implement it.</i></li> <li>• <i>I would use a mixture of informal and formal language, and keep it brief</i></li> </ul>
	Second Year	11	<ul style="list-style-type: none"> <li>• <i>Bullet points</i></li> <li>• <i>Identify areas for improvement first, then move onto strengths, don't be vague, but don't bombard students with huge amounts of feedback (mediate the two)</i></li> </ul>
			<ul style="list-style-type: none"> <li>• <i>Bullet points, highlight mistakes, explain where and how they went wrong without giving them the answer.</i></li> <li>• <i>Bullet point from start to finish and possible colour contrast with green for good feedback and red for bad based on the document</i></li> </ul>

		<ul style="list-style-type: none"> <li>• <i>I would say what they did well, what they could improve on then a couple of key improvements that could be made left in bullet points so it is straight to the point and more memorable.</i></li> <li>• <i>Bullet point lists of everything the did wrong and right. Then under this I would write a paragraph explaining how to give advice on how to correct themselves for future assignments.</i></li> <li>• <i>Bullet points</i></li> <li>• <i>make feedback more clear and to the point</i></li> <li>• <i>bullet points or checklist</i></li> <li>• <i>I would make sure it was clear and concise with examples of how to further the work</i></li> <li>• <i>Make it easy and concise to read</i></li> </ul>
Third year	6	<ul style="list-style-type: none"> <li>• <i>Checklist of key components</i></li> <li>• <i>Most important points in bullet points, then expand on them below.</i></li> <li>• <i>keep it simple, to the point, what was good what wasnt. ways to improve. not to wordy either</i></li> <li>• <i>Not very wordy as there more likely to read it</i></li> <li>• <i>List things that they missed</i></li> <li>• <i>Bullet Points to make it easier to read</i></li> </ul>

Personal feedback/not automated or generic	Total	9	
	First year	4	<ul style="list-style-type: none"> <li>• <i>Anything but have a program do it for me</i></li> <li>• <i>I would make it a bit more personal to make it feel more like it was aimed at the person</i></li> <li>• <i>tailor feedback to each student</i></li> <li>• <i>Structure it to individual student</i></li> </ul>
	Second Year	4	<ul style="list-style-type: none"> <li>• <i>Make sure that the feedback is tailored to that particular piece of work.</i></li> <li>• <i>I wouldn't copy paste because id do my job. I would try and write feedback the student could improve his next coursework with. Copy and pasting straight from the module assessment criteria doesn't help me improve my work.</i></li> <li>• <i>Make sure all feed back is unique even if it is more time consuming</i></li> </ul>
	Third year	1	<ul style="list-style-type: none"> <li>• <i>Not give everyone the same feedback</i></li> </ul>
Easy to understand/clear	Total	13	
	First year	6	<ul style="list-style-type: none"> <li>• <i>Easy to read manner</i></li> <li>• <i>Easy to understand and relevant</i></li> <li>• <i>Simply and easy to understand</i></li> <li>• <i>Straight forward simple answers, the works hard enough without having to debunk what feedback your tutor has said.</i></li> </ul>

			<ul style="list-style-type: none"> <li>• <i>formative, but easy to easy to understand</i></li> </ul>
			<ul style="list-style-type: none"> <li>• <i>clearly and simple to understand where errors are made, 1 to 1s to show how to improve</i></li> </ul>
	Second Year	6	<ul style="list-style-type: none"> <li>• <i>Clearly</i></li> <li>• <i>Be clear</i></li> <li>• <i>Make it easy and concise to read</i></li> <li>• <i>Simple English, no vagueness</i></li> <li>• <i>Write it in a neat way</i></li> <li>• <i>without using very technical terminology throughout to ensure it is understandable</i></li> </ul>
	Third year	1	<ul style="list-style-type: none"> <li>• <i>Keep it simple enough for everyone to understand</i></li> </ul>
Verbal feedback	Total	6	
	First year	1	<ul style="list-style-type: none"> <li>• <i>1 to 1s to show how to improve</i></li> </ul>
	Second Year	3	<ul style="list-style-type: none"> <li>• <i>I'd have verbal and written feedback</i></li> <li>• <i>I would write notes all over them then go around the class and discuss it with them</i></li> <li>• <i>Both written and verbal</i></li> </ul>

	Third year	2	<ul style="list-style-type: none"><li>• <i>Verbal</i></li><li>• <i>Propose meetings for the students if they do not understand, or explain my viewpoints of there work in different ways.</i></li></ul>

**Q: Can you identify how you have developed over time to improve your academic performance? How has your approach changed since you started the course?**

Response total comments - 1<sup>st</sup> year: 27, 2<sup>nd</sup> year: 47, 3<sup>rd</sup> year: 35, TOTAL: 109 (% below are of total and by year totals)

Theme	Years	Number of instances	Open comment quotes from students
Engaging with more academic	Total	21	

sources/research for assignments	First year	8	<ul style="list-style-type: none"> <li>• <i>Looking up more academic references has improved the quality of the information that I research, giving me a better understanding of certain topics.</i></li> <li>• <i>Read the material on how to fix some things.</i></li> <li>• <i>Now read more academic sources</i></li> <li>• <i>I've started to research more about questions I ask, and have been looking further into the subject of computing.</i></li> <li>• <i>i have been putting more effort in finding researches to further deepening my understanding with some topics.</i></li> <li>• <i>I have done more research and dedicated more of my own time to study in order to better understand the work I am doing as I struggle in lessons.</i></li> <li>• <i>find easier to find references, and add more when appropriate.</i></li> <li>• <i>When I first started I did not research as much this led to me gaining just above 50%, I also did not look at more methods than the one provided in the seminar and lectures. By changing this I have been able to gain over 70% to over 90% in my grading.</i></li> </ul>
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	Second Year	9	<ul style="list-style-type: none"> <li>• <i>Finding better academic references to support my work and integrating them to support my statements.</i></li> <li>• <i>I now try to do more research to add extra content or justifications to my work.</i></li> <li>• <i>Since I've started my course I have read more academic papers and communicated more with my teachers</i></li> <li>• <i>I use more academic writing styles and read more books for information and references</i></li> </ul>
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			<ul style="list-style-type: none"> <li>• <i>I now read more books before starting an assignment</i></li> <li>• <i>I have used more references throughout my work.</i></li> <li>• <i>Look more for references</i></li> <li>• <i>Locating necessary reading materials and lecture slides to learn how to complete each section of the work.</i></li> <li>• <i>focusing and reading more and more</i></li> </ul>
	Third year	4	<ul style="list-style-type: none"> <li>• I also use a lot more journals and research papers now for my research than I did at the beginning of my course.</li> <li>• Somewhat, linking to literature is done moreso now than in 1st year</li> <li>• I use more references</li> <li>• Use more diverse references as opposed to a single journal and a couple of websites.</li> </ul>
Understanding how to structure work	Total	9	
	First year	3	<ul style="list-style-type: none"> <li>• I now use the same template for all my work, and get consistently high marks</li> </ul>
			<ul style="list-style-type: none"> <li>• It was mainly becoming used to the University standards of structuring work and making sure I included small details in which I had not previously considered</li> </ul>

			<ul style="list-style-type: none"> <li>• Able to structure reports better</li> </ul>
	Second Year	4	<ul style="list-style-type: none"> <li>• I now know how to properly structure my work in the correct format to achieve higher marks.</li> <li>• Improved my spelling, grammar and structure.</li> <li>• I have learned how to take on projects and what stages to undertake.</li> <li>• I've gained a greater understanding of academic writing styles and how to structure an assignment</li> </ul>
	Third year	2	<ul style="list-style-type: none"> <li>• I have structured my assignments differently, they have become more organised and more detailed.</li> <li>• Structure and flow in a report is very important now.</li> </ul>
More planning and time management	Total	24	
	First year	7	<ul style="list-style-type: none"> <li>• <i>I've gotten better with my understanding of the work so im able to work better and faster.</i></li> <li>• <i>I plan more what I will include in my work</i></li> <li>• <i>I read the objectives for the task before I start so I have an idea of what to do as well as planning out my work before I start it in order to not miss anything out.</i></li> <li>• <i>I got better at completing work sooner</i></li> </ul>

			<ul style="list-style-type: none"> <li>• <i>ive started spending more time on the work and more time proof reading near the end of the deadline to make sure i cant have added anything extra to improve</i></li> <li>• <i>i give myself more time to do work</i></li> <li>• <i>I have been more meticulous with the way I go about approaching the work in terms of what I feel is needed first</i></li> </ul>
	Second Year	11	<ul style="list-style-type: none"> <li>• <i>My approach has become much more streamlined, only seeking out relevant information rather than reading around topics to understand them better due to time constraints. Whether this is an improvement or not is up for interpretation.</i></li> <li>• <i>I have developed my performance by starting my assignments earlier and getting people to look at it prior to the hand-in date, ensuring that I have time to improve before submission.</i></li> <li>• <i>I have been required to lead people in group assignments and structure the workload correctly.</i></li> <li>• <i>I start work early, leave it for a while and then fix it up.</i></li> <li>• <i>At most my planning has improved a little.</i></li> <li>• <i>I used to just rush into a piece of work, now I plan before hand so I know where I'm going with the work before I get there.</i></li> <li>• <i>Time keeping/planning has become more of a must. If I am not to keep track of my coursework it can get overwhelming.</i></li> </ul>

			<ul style="list-style-type: none"> <li>• <i>My approach to the course has changed a lot since starting the course as now the work I do and deadlines I have are a lot more fast approaching so I have completely changed my time management to start work a lot early instead of leaving my self days to do it.</i></li> </ul>
			<ul style="list-style-type: none"> <li>• <i>I have organised my coursework and my time more efficiently</i></li> <li>• <i>ensuring the tasks where completed from a self made check list</i></li> </ul>
	Third year	6	<ul style="list-style-type: none"> <li>• <i>I have been trying to work on my time management skills so that I stay on top of all my assignments and do well.</i></li> <li>• <i>I now take a much more level-headed and logical approach to completing assignments. Instead of rushing my way into starting them and having to back track, I examine all documentation provided to ensure I fully understand what is being asked of me and the deliverables where possible.</i></li> <li>• <i>Obviously time management and organisation</i></li> <li>• <i>I do a lot more planning before starting compared to first year.</i></li> <li>• <i>Started start work earlier instead of the night before</i></li> <li>• <i>I no longer leave my work til the night before or a few days before to instead chunking it to complete it earlier for the deadline</i></li> </ul>
Learn from previous	Total	12	

work/feedback	First year	3	<ul style="list-style-type: none"> <li>• <i>My approach is that there is always some way to keep improving work. Even when achieving high marks on work, I still try to find areas in my own work which need to be changed or altered.</i></li> <li>• <i>I have developed my work by including a different layout that I used at Sixth form for my report writing due to the marking feedback I have received.</i></li> <li>• <i>When starting a piece of work, I like to go back and review old work to remind myself about the positive and negatives of that piece and how I can incorporate these positives into the next piece.</i></li> </ul>
	Second Year	7	<ul style="list-style-type: none"> <li>• <i>Yes, i have been pushed to explained my methods and research in a better and structured manner thanks to tutor feedback</i></li> <li>• <i>I tend to take into account where things need to improve more and more now, and try and aim for higher marking bands by strengthening points which were marked down/lost marks previously</i></li> <li>• <i>through guidance and feedback i have improved on my academic writing massively</i></li> <li>• <i>Making sure I read the feedback and understanding what i've done wrong or need to improve on</i></li> <li>• <i>I always read the requirements and make beneficial notes before starting the coursework as well as reading supportive feedback that relates to my assignments.</i></li> <li>• <i>I try to understand where I can improve when receiving feedback from coursework and implement techniques that have been suggested by my tutor to improve my writing style and overall quality of work</i></li> </ul>

			<ul style="list-style-type: none"> <li>• <i>Through feedback and what I have learned over the years, through improvement in my course work, and gaining more confidence</i></li> </ul>
	Third year	2	<ul style="list-style-type: none"> <li>• <i>I believe I am now better at academic writing and referencing due to feedback</i></li> <li>• <i>When it did fall short I took note of the limited feedback given and tried my best to improve arbitrarily which seems to have paid off.</i></li> </ul>

More engagement with assessment criteria	Total	18	
	First year	3	<ul style="list-style-type: none"> <li>• <i>I have learn over time to read the marking criteria more often to receive self feedback before I upload my work.</i></li> <li>• <i>I read the objectives for the task before I start so I have an idea of what to do</i></li> <li>• <i>I look over a requirement and try to implement it into the document I am producing</i></li> </ul>
	Second Year	7	<ul style="list-style-type: none"> <li>• <i>I try to work out how the work will be marked/assessed, and I always aim 1 level above where I want my grade to be in case I fall short. Look at learning outcomes throughout the report</i></li> <li>• <i>I read the marking criteria more thoroughly, identifying where I can improve my answers.</i></li> <li>• <i>I have actively started reading the grading criteria in order to ensure I got my grading targets before submission. I did not do this in first year.</i></li> </ul>

			<ul style="list-style-type: none"> <li>• <i>I read the brief and marking criteria more now</i></li> <li>• <i>I became more thorough in analyzing the coursework document and the marking criteria</i></li> <li>• <i>I always read the requirements and make beneficial notes before starting the coursework as well as reading supportive feedback that relates to my assignments.</i></li> </ul>
	Third year	8	<ul style="list-style-type: none"> <li>• <i>From first year, I don't think I looked at the marking criteria at all but as I progressed, I began to use it more and more. This has allowed me to</i></li> </ul>

			<p><i>identify which areas within a coursework are worth more and therefore need more time spending on than other sections</i></p> <ul style="list-style-type: none"> <li>• <i>start by looking at the objectives and the marking criteria</i></li> <li>• <i>I have paid closer attention to the documents</i></li> <li>• <i>I have learned to read and make sense of the criteria myself instead of waiting to be told how to go about the task</i></li> <li>• <i>I examine all documentation provided to ensure I fully understand what is being asked of me and the deliverables where possible.</i></li> <li>• <i>refer back to the assessment criteria</i></li> <li>• <i>reading the outcomes/objectives and the marking grid before starting work</i></li> <li>• <i>Marking criteria really does help</i></li> </ul>
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Understanding/improving academic writing and referencing	Total	23	
	First year	3	<ul style="list-style-type: none"> <li>• <i>Over the course of the first year, I have learnt to use "I" and "we" less in my written work.</i></li> <li>• <i>I am a lot more careful in how I word certain parts of assignments.</i></li> <li>• <i>I have developed my skills in being able to effectively reference and cite information from various sources using the Harvard referencing style.</i></li> </ul>
	Second Year	9	<ul style="list-style-type: none"> <li>• <i>I have learned how to academically approach tasks now</i></li> <li>• <i>I have learned that references should be applied every 250 words which has helped me reinforce my points in my work.</i></li> <li>• <i>Yes, i have been pushed to explained my methods and research in a better and structured manner thanks to tutor feedback</i></li> </ul>
			<ul style="list-style-type: none"> <li>• <i>Generally improved at academic style of writing.</i></li> <li>• <i>I have used more references throughout my work.</i></li> <li>• <i>Look more for references</i></li> <li>• <i>My writing has become more concise and academic in tone.</i></li> <li>• <i>Able to think about my work more and include references and examples</i></li> <li>• <i>I've gained a greater understanding of academic writing styles</i></li> </ul>



	Third year	11	<ul style="list-style-type: none"> <li>• <i>How I write has changed to become more concise but also more academically correct, to ensure the highest grades possible</i></li> <li>• <i>(my assignments) have become more organised and more detailed.</i></li> <li>• <i>I believe I am now better at academic writing and referencing due to feedback</i></li> <li>• <i>I have also learned the importance of referencing</i></li> <li>• <i>Realisation as to certain things are going to be needed to achieve significant marks, also how to include references without it being all about quotes.</i></li> <li>• <i>I have become more thorough in the explanation of my methods and reasoning</i></li> <li>• <i>I think about what I am writing and how I write it now in comparison to First year</i></li> <li>• <i>My approach has not change over time, I simply become more adept at at academic writing and builds.</i></li> <li>• <i>my written ability has improved massively</i></li> <li>• <i>I use more references</i></li> <li>• <i>I have started using a more academic format in my work with a consistent style to ensure that the important sections are covered each time</i></li> </ul>
Talking to tutors and peers about work	Total	2	
	First year	0	

Second Year	2	<ul style="list-style-type: none"> <li>• <i>Communicated more with my teachers</i></li> <li>• <i>I try to communicate more within seminars and get help if required. I have tried to communicate with other people in the class to get a better overall perspective of the work and I make sure that I try my best and understand the work to the best of my ability.</i></li> </ul>
Third year	0	

**Q: (Question for third and fourth years only) Did you perceive or notice any difference in written tutor feedback over the three years of your degree? For example, was feedback in first year different in any way to feedback, in second year, or the feedback you receive now?**

Response total comments – All 52

Theme	Total instances	Open comments from students
Varies by tutor	10	<ul style="list-style-type: none"> <li>• <i>Feedback has varied through the years but also on a tutor by tutor basis, with some tutors providing more, structured feedback than other.</i></li> <li>• <i>had different tutors for each year and each had their own style of feedback.</i></li> <li>• <i>some tutors provide better feedback than others</i></li> <li>• <i>It really has depended on the professor and the subject matter being taught</i></li> <li>• <i>it varied depending on the instructor</i></li> <li>• <i>some of the feedback given seems extremely biased on the tutor teaching the module, YOU DON'T AIM TO LEARN, YOU AIM TO PASS WHAT THE TUTOR EXPECTS AND REQUIRES.</i></li> <li>• <i>Just a difference between tutors</i></li> <li>• <i>It varies from tutor to tutor</i></li> <li>• <i>Brief in first year, second and third year was/is a lot more detailed (depending on tutor, of course).</i></li> <li>• <i>Feedback varies on the giver</i></li> </ul>

<p>2<sup>nd</sup> and 3<sup>rd</sup> year more detailed</p>	<p>22</p>	<ul style="list-style-type: none"> <li>• <i>Feedback through 2nd and 3rd year has been a lot more detailed than what was given in first year, as it has gone from usually being one small sentence that lacks detail, to at least a paragraph explaining what grade you got and why, as well as how you can improve.</i></li> <li>• <i>I get more feedback now.</i></li> <li>• <i>The feedback has become more technical and focuses more on ways to improve rather than highlighting what was good or bad in the assessments</i></li> <li>• <i>yes, feedback now is different</i></li> <li>• <i>first year seemed to contain more comments such as "well done", whereas in third year, the feedback is more critical</i></li> <li>• <i>Feedback in my first and third year seemed to be much more lackluster compared to second year (2015/2016). It feels that there is generally less time spent on marking work, thus leaving rushed or lackluster feedback.</i></li> <li>• <i>Feedback in first year is quite basic in terms of feedback, as you only need a 40 to get to the next year, tutors dont seem to detail the requirements to achieving a 70+</i></li> <li>• <i>In years two and three the feedback was more detailed as they both counted towards my degree. First year feedback was more on how it could be improved in the later years.</i></li> <li>• <i>Feedback in first year was a lot more brief.</i></li> <li>• <i>First year was probably the worst, everything was generic and not really effective, second year was a lot better and more appropriate, probably due to the year counting towards the final grade. The final year has been just as good.</i></li> <li>• <i>Usually more detailed and academically focused.</i></li> <li>• <i>The feedback has got alot better over time in some cases</i></li> </ul>
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		<ul style="list-style-type: none"> <li>• <i>Brief in first year, second and third year was/is a lot more detailed (depending on tutor, of course).</i></li> </ul>
		<ul style="list-style-type: none"> <li>• <i>Sometimes feedback is more detailed than other times, I feel there should be a set feedback structure that every tutor must follow such as the one described above.</i></li> <li>• <i>Feedback has become more detailed due to the context of the work being marked.</i></li> <li>• <i>In third year the feedback is much more helpful and in detail</i></li> <li>• <i>it became a lot more detailed</i></li> <li>• <i>it is detailed but also short and precise at the same time</i></li> <li>• <i>yes I feel it was</i></li> <li>• <i>Second and third year feedback is actually useful, first year was pointless</i></li> <li>• <i>Now get more detailed feedback</i></li> <li>• <i>Feedback seems to have gotten more in depth as the years progressed.</i></li> </ul>
No difference	20	<ul style="list-style-type: none"> <li>• <i>20 variations on 'No'</i></li> </ul>
Other points (various)	4	<ul style="list-style-type: none"> <li>• For more word-heavy courses I received more feedback than those that were more mathematically based</li> <li>• I feel there should be a set feedback structure that every tutor must follow such as the one described above.</li> <li>• Longer feedback intervals were present in the third year.</li> </ul>

- Feedback has become more general over the years as the quality of work improves so there is less to point out

**Q: Any other points you feel would be useful regarding your experiences of assessment feedback during your course?**

Response total comments – All 24

<b>Theme</b>	<b>Total instances</b>
Students understand staff time pressures	2
Drafts	3
Exemplars	1
Don't copy and paste or give generic feedback	6
More 1 to 1/Dialogue/Verbal feedback	7
Wait too long for feedback	4
Feedback needs to be person specific detailed and clear how to improve	6

Consistent marking practices	2
Feedback on non-written assessments (e.g code)	1

#### **Appendix 4 - Consent forms**

**NOTE:** This was embedded in the Google Form after the participant information sheets

I confirm that I have read and understand the information above regarding the details of this study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily (where relevant).

'I Agree' check box

I understand that my participation in this research study is voluntary and that all submissions are anonymous. I understand that I may include my email address at the end only if I wish to take part in the focus groups (optional).

'I Agree' check box

I understand that the information I provide will be used for a PhD research project and the combined results of the project may be published.

'I Agree' check box

I agree to take part in the above study.

'I Agree' check box



## Appendix 5 - Participant information sheets

**NOTE:** This was embedded in the Google Form

### A Review of Student Engagement with Online feedback at Edge Hill University

Dear Participant,

I would like to invite you to take part in my research with the Centre for Technology Enhanced Learning in the Department of Educational Research at Lancaster University. Before you decide if you wish to take part you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Ask me if there is anything that is not clear or if you would like more information.

This document includes:

- Information about the purpose of the study (what I hope to find out).
- Information about what participation means.
- Details of what sources of information may be used as 'data' in the study.
- Information about how this data will be secured and stored.
- How the information will be used in the thesis and for other purposes such as conference presentations or publication.

The purpose of the study

This study is concerned with student engagement with online written feedback within the Department of Computer Science at Edge Hill University. The aim of this study is to understand the difference in student feedback engagement across all years (1st to final year), to get a clear view of student perceptions of current feedback, and to identify some effective feedback strategies for improving student engagement with their online feedback. The study will inform the development of an online feedback strategy to encourage consistency, reliability and validity of the feedback process within the Computer Science Department at Edge Hill University.

What participation involves and how to withdraw if you no longer wish to participate-

1. Why have I been invited?

You are a student within the Department of Computer Science and have experience of receiving online feedback through Blackboard and/or Turnitin.

2. Do I have to take part?

No, your participation is entirely voluntary. As the questionnaire is anonymous, once you submit it the researcher cannot identify your particular questionnaire, so it cannot be deleted once submitted.

3. What would taking part involve for me?

Taking part involves completing a questionnaire that will ask you questions about your experiences of receiving feedback on your summative (final) assessments.

4. What will I have to do?

Simply complete the questionnaire online via the link provided.

Protecting your data and identity-

5. What will happen to the data?

'Data' here means the questionnaire results. The data may be securely stored for ten years after the successful completion of the PhD Viva as per Lancaster University requirements. The completion of this study is estimated to be by December 2018 although data collection will be complete by May 2018.

Data will only be accessed by members of the research team; this includes my supervisor. The research may be used for journal articles and conference presentations.

6. How will my identity be protected?

The questionnaire is entirely anonymous; no personal data will be captured unless you wish to add your name to volunteer to take part in the focus groups.

7. Who to contact for further information or with any concerns

If you would like further information on this project, the programme within which the research is being conducted or have any concerns about the project, participation or my conduct as a researcher please contact: Professor Paul Ashwin – Head of Department

Tel: +44 (0)1524 594443

Email: [P.Ashwin@Lancaster.ac.uk](mailto:P.Ashwin@Lancaster.ac.uk)

Room: County South, D32, Lancaster University, Lancaster, LA1 4YD, UK.

Research Supervisor: Dr Nicola Ingram

Educational Research Department, County South, Lancaster University, LA1 4YD, UK Email:

[n.ingram@lancaster.ac.uk](mailto:n.ingram@lancaster.ac.uk)

You can also contact the research lead:

Claire Moscrop

Full Address: Edge Hill University, Centre for Learning and Teaching, St Helens Road, Ormskirk. L39 4QP.

Email: [Claire.moscrop@edgehill.ac.uk](mailto:Claire.moscrop@edgehill.ac.uk)

Thank you for reading this information sheet.

Claire Moscrop

## Appendix 6 - Full list of original nodes from NVIVO

Name	Files	References
Aim of study	11	14
Assessment feedback design	11	24
Assessment literacy	13	23
Bad feedback	5	6
draft feedback	3	4
EAF	4	16
Engagement	10	25
Feedback engagement	12	51
Feedback dialogue	16	48
DAG	5	14
feedback themes	16	43
feedback training	19	71
Feedforward	6	9
Good Feedback	28	85
Other types of feedback	0	0
Adaptive release	2	3
Audio feedback	3	4
Exemplars	2	8
peer feedback	2	7
Over Time	21	92
Problems with feedback	30	113
Assessment criteria	16	39
Gaps	8	19
Scalability	7	12
psychology	5	7
affective feedback	2	3
Bias	1	1
emotion	9	18
power	4	6
questionnaire	1	1
quotes	18	52
relational dimensions	4	8
Results and findings	19	29

●	Results and findings		19	29
●	socio cultural		13	20
☐	● Student		10	17
	● COP		1	4
	● peer review and feedback		1	1
	● self regulation and self assessment		14	45
	● Students dont read feedback		1	1
☐	● student percep of fb		9	12
	● stud vs tutor percep		16	40
	● timeliness		2	2
	● To Read		4	11
	● useful example writing		1	1
	● value of feedback		5	6



## References

- Adams, A., & Cox, A.L. (2008). *Questionnaires, in-depth interviews and focus groups*. In Cairns, P., & Cox, A.L. (2008). (eds) *Research Methods for Human Computer Interaction*. Cambridge University Press: Cambridge.
- Adams, A., Wilson, H., Money, J., Palmer-Conn, S., & Fearn, J. (2020). *Student engagement with feedback and attainment: the role of academic self-efficacy*. *Assessment & Evaluation in Higher Education*, 45(2), 317-329.
- Ajjawi, R., & Boud, D. (2015). *Researching feedback dialogue: an interactional analysis approach*. *Assessment and Evaluation in Higher Education*, 42 (2), 252-265.
- Ajjawi, R., Kent, F., Broadbent, J., Hong-Meng Tai, J., Bearman, M. & Boud, D (2021). *Feedback that works: a realist review of feedback interventions for written tasks*. *Studies in Higher Education*.
- Al Hasni, AS., Asante, E., Atkan, F., Sariköse, S. and Muslihi, A. (n.d) Understanding pragmatic research. [Online] [Accessed 13/12/21]
- Almeida, F. (2018) *Strategies to perform a mixed methods study*. *European Journal of education studies*. 5 (1) 137-151.
- Bailey, R., & Garner, M. (2010). *Is the feedback in higher education assessment worth the paper it is written on? Teachers' reflections on their practices*. *Teaching in Higher Education*. 15 (2), 187-198.
- Ball, E. (2010). *Annotation an effective device for student feedback : a critical review of the literature*. *Nurse education in practice*. 10 (3), 138-143.
- Baloo, K., Evans, C., Hughes, A., Zhu, X. & Winstone, N. (2018). *Transparency Isn't SpoonFeeding: How a Transformative Approach to the Use of Explicit Assessment Criteria Can Support Student Self-Regulation*. *Frontiers in Education*. 3 (69).
- Beaumont, C., O'Doherty, M., & Shannon, L. (2011). *Reconceptualising assessment feedback: a key to improving student learning?* *Studies in Higher Education*, 36 (6), 1-17.
- Beaumont, C., Canning, S., & Moscrop, C. (2014). *Easing the transition from school to HE: scaffolding the development of self-regulated learning through a dialogic approach to feedback*. *Journal of Further and Higher Education*. 40 (3), 331-350.
- Bell, A., & Brooks, C. (2016). *What makes students satisfied? A discussion and analysis of the UK's national student survey*. *Journal of Further and Higher Education*. 42 (8), 1118-1142.
- (BERA) British Educational Research Association (2018). *Ethical guidelines for educational research*. 4th edn. Available at: <https://www.bera.ac.uk/researchersresources/publications/ethical-guidelines-for-educational-research-2018> (Accessed: 30 June 2019).
- Biggs, J., & Tang, C. (2011). *Teaching for Quality Learning at University*. Open University Press, McGraw-Hill Education.
- Black, P., & Wiliam, D. (1998). *Assessment and classroom learning*. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7–68.
- Blaikie, N. (2003). *Analyzing quantitative data: From description to explanation*. Sage Publications.

- Bloxham, S., & Boyd, P. (2007). *Developing effective assessment in higher education*. Maidenhead: Open University Press.
- Bloxham, S., & Campbell, L. (2010). *Generating Dialogue in Assessment Feedback: Exploring the Use of Interactive Cover Sheets*. *Assessment & Evaluation in Higher Education*, 35 (3): 291–300.
- Boud, D., and Dawson, P. (2021). *What feedback literate teachers do: an empirically-derived competency framework*. *Assessment & Evaluation in Higher Education*, April 2021. DOI: 10.1080/02602938.2021.1910928.
- Boud, D., & Falchikov, N. (2006). *Aligning assessment with long-term learning*. *Assessment & Evaluation in Higher Education*, 31 (4), 399-413.
- Boud, D. & Associates (2010). *Assessment 2020: Seven propositions for assessment reform in higher education*. Sydney: Australian Learning and Teaching Council.  
[https://www.uts.edu.au/sites/default/files/Assessment-2020\\_propositions\\_final.pdf](https://www.uts.edu.au/sites/default/files/Assessment-2020_propositions_final.pdf)
- Boud, D. (1995). *Assessment and learning: contradictory or complementary?* In: P. Knight (Ed) *Assessment and Learning in Higher Education*. London, Kogan Page.
- Bradley, B. (n.d). *Concept Maps*. BUR, Centre for Learning and Teaching.  
<https://ctl.byu.edu/tip/concept-mapping>
- Braun, V., and Clarke, V. (2006). *Using thematic analysis in Psychology*. *Qualitative Research in Psychology*, 3(2), 77–101.
- Braun, Hl., Jackson, D. & Wiley, D. (2001) Socially Desirable Responding: The Evolution of a Construct, in Braun, Hl., Jackson, D. & Wiley, D. (Ed) *The Role of Constructs in Psychological and Educational Measurement*. Routledge, pp50-74.
- Broadbent, J., Panadero, E., & Boud, D. (2018). *Implementing summative assessment with a formative flavour: a case study in a large class*. *Assessment and Evaluation in Higher Education*, 43, 307–322.
- Brette, A. (2003). *Needle in a haystack? Effective literature searching for research*. *Journal of Radiography*, 9 (3), 229-236.
- Bridge, P., & Appleyard, R. (2005). *System failure: A comparison of electronic and paper-based assignment submission, marking and feedback*. *British Journal of Educational Technology*, 36 (4), 669-67.
- Bronfenbrenner, U.(1979). *The Ecology of Human Development*. Cambridge, Mass: Harvard University Press.
- Bruner, J. S. (1960). *The Process of education*. Cambridge, Mass. Harvard University Press.
- Bruner, J. S. (1961). *The act of discovery*. *Harvard Educational Review*, 31, 21-32.
- Buckley, A. (2021). *Crisis? What crisis? Interpreting student feedback on assessment*. *Assessment & Evaluation in Higher Education*, 46:7, 1008-1019.
- Burgess, A., Senior, C., & Moores, E. (2018). *A 10-year case study on the changing determinants of university student satisfaction in the UK*. *PLoS ONE* 13(2): e0192976.  
<https://doi.org/10.1371/journal.pone.0192976>
- Canning, S., Beaumont, C., & Moscrop, C. (2010). *Evaluating a systematic approach to assessment guidance and feedback in first year undergraduates*. Paper presented at Centre for Learning & Teaching Research (CLTR) Conference, Ormskirk, United Kingdom.

- Carless, D. (2006). *Differing perceptions in the feedback process*. *Studies in Higher Education*, 31 (2), 219-233.
- Carless, D. & Winstone, N. (2020). *Teacher feedback literacy and its interplay with student feedback literacy*. *Teaching in Higher Education*, DOI: 10.1080/13562517.2020.1782372
- Carless, D. (2015). *Exploring learning-oriented assessment processes*. *Higher Education*. 69, 963–976.
- Carless, D. (2019.) *Feedback loops and the longer-term: towards feedback spirals*. *Assessment & Evaluation in Higher Education*, 44 (5), 705-714.
- Carless, D., & Boud, D. (2018). *The development of student feedback literacy: enabling uptake of feedback*. *Assessment & Evaluation in Higher Education*, 43(8), 1315-1325.
- Carless, D., Salter, D., Yang, M., & Lam, J. (2011). *Developing sustainable feedback practices*. *Studies in Higher Education*, 36 (4), 395-407.
- Carey, P., Milsom, C., Brooman, S., and Jubb, E. (2010). *Student views of assessment and feedback*. *Innovations in Practice*. 2, 123-130.
- Cazzell, M., & Rodriguez, A. (2011). *Qualitative analysis of student beliefs and attitudes after an objective structured clinical evaluation: Implications for affective domain learning in undergraduate nursing*. *Journal of Nursing Education*. 50, 711-714.
- Chong, S.W. (2020). *Reconsidering student feedback literacy from an ecological perspective*. *Assessment & Evaluation in Higher Education*, 46:1, 92-104, DOI: 10.1080/02602938.2020.1730765
- Coghlan, D., & Brannick, T. (2005). *Doing Action Research in Your Own Organization*. 2nd edition London: Sage.
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education (6th Ed)* Routledge: London.
- Creswell, J. (2003). *Research design: Qualitative, quantitative and mixed methods approaches (2nd ed.)*. SAGE.
- Creswell, J. (2014) *Research design: Qualitative, quantitative and mixed methods approaches (4th ed.)*. SAGE.
- Creswell, J., & Plano Clark, V. (2006). *Designing and Conducting Mixed Methods Research*. Sage Publications.
- Creswell, J., & Plano Clark, V. (2011). *Designing and Conducting Mixed Methods Research*. Sage Publications.
- Daly, B. (2004) *Concept Maps: Theory, Methodology, Technology*. Proc. of the First Int. Conference on Concept Mapping. Pamplona, Spain.
- Davis, K., Drey, N., & Gould, D. (2009). *What are scoping studies? A review of the nursing literature*. *Int J Nurs Stud*. 46, 1386-1400. 10.1016/j.ijnurstu.2009.02.010.
- DeNisi, A., & Kluger, A. N. (2000). *Feedback effectiveness*. *Academy of Management Executives*. 14, 129–139.
- Dicker, R., Garcia, M., Kelly, A., & Mulrooney, H. (2019). *What does 'quality' in higher education mean? Perceptions of staff, students and employers*. *Studies in Higher Education*. 44 (8), 1425-1441. DOI: 10.1080/03075079.2018.1445987



- Didau, D. (2016). *Assessment and feedback are not the same*. Learningspy. <https://learningspy.co.uk/assessment/whats-difference-assessment-feedback/>
- Draper, S., & Nicol, D. (2013). *Achieving transformational or sustainable educational change*. In: Merry, S., Price, M., Carless, D., & Taras, M. Eds. *Reconceptualising Feedback in Higher Education: Developing Dialogue with Students*. Routledge, pp 147-159.
- Duijnhouwer, H., Prins, F.J., and Stokking, K. (2010). "Progress Feedback Effects on Students' Writing Mastery Goal, Self-Efficacy Beliefs, and Performance." *Educational Research and Evaluation* 16 (1), 53.
- Duncan, N. (2007). 'Feed-forward': Improving students' use of tutors' comments. *Assessment & Evaluation in Higher Education*. 32 (3), 271–83.
- De Kleijn, R. (2021). *Supporting student and teacher feedback literacy: an instructional model for student feedback processes*. *Assessment & Evaluation in Higher Education*, DOI: 10.1080/02602938.2021.1967283
- Dewey, J. (1910). *How we think*. Boston, MA: D.C. Heath.
- Dewey, J. (1920). *Reconstruction in philosophy*. New York, NY: Henry Holt.
- Dewey, J. (1938). *Logic: The theory of inquiry*. New York, NY: Henry Holt.
- Dicker, R., Garcia, M., Kelly, A., & Mulrooney, H. (2019). *What does 'quality' in higher education mean? Perceptions of staff, students and employers*. *Studies in Higher Education*. 44 (8), 1425-1441.
- Draper, S., & Nicol, D. (2013). *Achieving transformational or sustainable educational change*. In: Merry, S., Price, M., Carless, D., & Taras, M. (Eds) *Reconceptualising Feedback in Higher Education: Developing Dialogue with Students*. Routledge.
- Duncan, N. (2007). 'Feedforward': Improving students' use of tutors' comments. *Assessment & Evaluation in Higher Education*, 32(3), 271–83.
- Evans, C. (2018). *A Transformative Approach to Assessment Practices Using the EAT Framework Presentation. Small Scale Projects in Experimental Innovation*. Catalyst A Funding Higher Education Funding Council for England (Southampton: HEFCE).
- Evans, C. (2013). *Making Sense of Assessment Feedback in Higher Education*. *Review of Educational Research*, 81(1), 70-120.
- Evans, B. C., Coon, D. W., & Ume, E. (2011). *Use of theoretical frameworks as a pragmatic guide for mixed methods studies*. *Journal of Mixed Methods Research*. 5(4), 276–292  
[feedbackforlearning.org](https://feedbackforlearning.org) (n.d). *Feedback for learning, closing the assessment loop*.  
<https://feedbackforlearning.org/>
- Feilzer, Y. (2010). *Doing Mixed Methods Research Pragmatically: Implications for the Rediscovery of Pragmatism as a Research Paradigm*. *Journal of Mixed Methods Research*. 4(1) 6–16.
- Fisher, R., Cavanagh, J., & Bowles, A. (2011). *Assisting Transition to University: Using Assessment as a Formative Learning Tool*. *Assessment & Evaluation in Higher Education*. 36 (2), 225–37.
- Fleming, N. (1999). *Biases in marking students' written work: quality?* in: Brown, S., & Glasner, A. (Eds) *Assessment matters in higher education: choosing and using diverse approaches*. Open University Press.

- Ghiara, V. (2019). *Disambiguating the Role of Paradigms in Mixed Methods Research*. *Journal of mixed methods research*, 14 (1), 11-25.
- Gibbs, G. (2006). *How assessment frames student learning*. In: Bryan, C., & Clegg, K. (Eds) *Innovative assessment in higher education*. London: Routledge.
- Gibbs, G., & Dunbar-Goddet, H. (2009). *Characterising programme-level assessment environments that support learning*. *Assessment & Evaluation in Higher Education*, 34 (4), 481-489.
- Grande, T. (2016). *Interpreting T Test and ANOVA with Violation of Homogeneity of Variance in SPSS*. <https://www.youtube.com/watch?v=8BMtpeij4iA>
- Gravett, K. (2020) *Feedback literacies as sociomaterial practice*. *Critical studies in education*, 63 (2), 261-274.
- Greene, J. C. (2007). *Mixed methods in social inquiry*. San Francisco, CA: Wiley.
- Hall, J. N. (2013). *Pragmatism, evidence, and mixed methods evaluation*. In Mertens, D.M., & Hesse-Biber, S. (Eds.), *Mixed methods and credibility of evidence in evaluation*. *New Directions for Evaluation*, 138, 15–26.
- Han, Y., and Hyland, F. (2015). *Exploring Learner Engagement with Written Corrective Feedback in a Chinese Tertiary EFL Classroom*. *Journal of Second Language Writing* 30: 31–44.
- Handley, K., Price, M., & Millar, J. (2008). *Engaging students with assessment feedback: Final Report for FDTL5 Project 144/03*. Oxford Brookes Business School.
- Handley, K., Price, M., & Millar, J. (2011). "Beyond 'Doing Time': Investigating the Concept of Student Engagement with Feedback." *Oxford Review of Education* 37 (4): 543–560.
- Handley, K., & Williams, L. (2011). *From copying to learning: using exemplars to engage students with assessment criteria and feedback*. *Assessment & Evaluation in Higher Education*. 36 (1), 95-108.
- Handley, K., & Cox, B. (2007). *Beyond model answers: Learners' perceptions of self assessment materials in e-learning applications*. *ALT-J Research in Learning Technology*. 15, 21–36.
- Handley, K., & Williams, L. (2011). *From copying to learning: Using exemplars to engage students with assessment criteria and feedback*. *Assessment & Evaluation in Higher Education*, 36 (1), 95-108.
- Harrison, C. (2007). *Tip sheet on question wording*. Harvard University, Programme on survey research. [https://psr.iq.harvard.edu/files/psr/files/PSRQuestionnaireTipSheet\\_0.pdf](https://psr.iq.harvard.edu/files/psr/files/PSRQuestionnaireTipSheet_0.pdf)
- Hartley, P., & Whitfield, R. (2012). *Programme assessment strategies (PASS)*. Higher Education academy. [https://www.brad.ac.uk/pass/about/PASS\\_final\\_report.pdf](https://www.brad.ac.uk/pass/about/PASS_final_report.pdf)
- Hartley, P. (2019). *Programme Assessment Strategies: Learning from a decade of PASS*. Assessment in higher education conference, 26th-27th June 2019.
- Hashim, B. (2019). *Pragmatic Research Approach (Mixed Methods)*. <https://www.slideshare.net/BahrozHashim/pragmatic-research-approach-mixed-methods>
- Hattie, J., & Timperley, H. (2007). *The Power of Feedback*. *Review of Educational Research*. 77 (1), 81-112.
- Hattie, J., & Gan, M. (2011). *Instruction based on feedback*. In Mayer, R., & Alexander, P. (Eds.), *Handbook of research on learning and instruction* (pp. 249-271). New York, NY: Routledge

- Henderson, M., Phillips, M., Ryan, T., Boud, D., Dawson, P., Molloy, E., & Mahoney, P. (2019). *Conditions that enable effective feedback*. Higher Education Research and Development. 38 (7), 1401-1416.
- Henderson, M., Ryan, T., & Phillips, M. (2019). *The challenges of feedback in higher education*. Assessment & Evaluation in Higher Education. 44 (8), 1237-1252.
- Henderson, M., Phillips, M., Ryan, T., Boud, D., Dawson, P., Molloy, E., & Mahoney, P. (2019b). *Conditions That Enable Effective Feedback*. Higher Education Research & Development 38 (7), 1401–1416.
- Hepburn, L., Borthwick, M., Kerr, J., & Vasnev, A. (2021). *A strategic framework for delivering ongoing feedback at scale*. Assessment & Evaluation in Higher Education, DOI: 10.1080/02602938.2021.1959517
- Hepplestone, S., Holden, G., Irwin, B., Parkin, H., & Thorpe, L. (2011). *Using technology to encourage student engagement with feedback: a literature review*. Research in Learning Technology, 19 (2), 117-127.
- Hepplestone, S. & Mather, R. (2007). *Meeting rising student expectations of online assignment submission and online feedback*. In Proceedings of the 11th international computer assisted assessment conference.  
[http://caaconference.co.uk/pastConferences/2007/proceedings/Hepplestone%20S%20Mather%20R%20n1\\_formatted.pdf](http://caaconference.co.uk/pastConferences/2007/proceedings/Hepplestone%20S%20Mather%20R%20n1_formatted.pdf)
- Heron, M., Medland, E., Winstone, N., & Pitt, E. (2021). *Developing the relational in teacher feedback literacy: exploring feedback talk*. Assessment & Evaluation in Higher Education, DOI: 10.1080/02602938.2021.1932735
- Higgins, R., Hartley, P., & Skelton, A. (2001). *Getting the message across: The problem of communicating assessment feedback*. Teaching in Higher Education. 6 (2), 269–74.
- Higgins, R., Hartley, P., & Skelton, A. (2002). *The conscientious consumer: Reconsidering the role of assessment feedback in student learning*. Studies in Higher Education. 27 (1), 53–64.
- Holden, G. and Glover, C. (2013). *Fostering institutional change in feedback practice through partnership*. In: Merry, S., Price, M., Carless, D., & Taras, M. Eds. *Reconceptualising Feedback in Higher Education: Developing Dialogue with Students*. Routledge, pp 147-159.
- Holyk, G. (2011). in Lavrakas, P. (Eds) *Questionnaire Design*. In: Encyclopedia of Survey Research Methods.  
<https://methods.sagepub.com/base/download/ReferenceEntry/encyclopedia-of-surveyresearch-methods/n425.xml>
- Hounsell, D., McCune, V., Hounsell, J., & Litjens, J. (2008). *The quality of guidance and feedback to students*. Higher Education Research and Development. 27 (1), 55-67.
- Humphrey, C. (2012). *Dilemmas in doing insider research in professional education*. Qualitative Social Work. 12 (5) 572-586.
- Hunter-Barnet, S., & Murrin-Bailey, S. (2011). *Embedded Audio Feedback: A Tutor's Perspective*. In Youssef, Y., & Ramirez, A. (Eds.), *Social Software in Higher Education: Pedagogical Models and University Strategies*. 1st ed. 1 (1), 135-183. Editora Unisul.
- Huxham, M. (2007). *Fast and effective feedback: are model answers the answer?* Assessment and Evaluation in Higher Education. 32, 601–611.
- Hyman, L., Lamb, J., & Bulmer, M. (2006). *The Use of Pre-Existing Survey Questions:*

*Implications for Data Quality*. Proceedings of the 2006 European Conference on Quality in Survey Statistics. <https://ec.europa.eu/eurostat/documents/64157/4374310/22-Use-of-preexisting-survey-questions-implications-for-data-quality-2006.pdf/e953a39e-50be-40b3-910f6c0d83f55ed4>

Ivankova, N. V., Creswell, J. W., & Stick, S. (2006). *Using mixed methods sequential explanatory design: From theory to practice*. *Field Methods*, 18(1), 3-20.

Jamieson, S. (2004). *Likert scales: how to (ab)use them?* *Medical Education*, 38(12), 1217-1218.

Johnson, R., & Onwuegbuzie, A. (2004). *Mixed Methods Research: A Research Paradigm Whose Time Has Come*. *Educational Researcher*, 33(7),14-26.

Jonsson, A. (2012). *Facilitating productive use of feedback in higher education*. *Active Learning in Higher Education*, 14 (1), 63-76.

Jonsson, A., & Panadero, E. (2018). *Facilitating students' active engagement with feedback*. In Lipnevich, A.A., & Smith, J.K. (Eds.), *The Cambridge handbook of instructional feedback*. Cambridge University Press.

Jørgensen, B.M. (2019). *Investigating non-engagement with feedback in higher education as a social practice*. *Assessment & Evaluation in Higher Education*. 44 (4), 623-635.

Kovacs, S., Grant, L., & Hyland, F. (2010). *A study of the use of the National Student Survey to enhance the Student Experience in Education Departments*. The Higher Education Academy: Subject Centre for Education ESCalate  
<https://www.heacademy.ac.uk/sites/default/files/8077.pdf>

Krapp, A. (2005). *Basic needs and the development of interest and intrinsic motivational orientations*. *Learning and Instruction*, 15, 381–395.

LaDonna, K., Taylor, T., & Lingard, L. (2018) *Why Open-Ended Survey Questions Are Unlikely to Support Rigorous Qualitative Insights*. *Academic Medicine*, 93(3), 347-349.

Laurillard, D. (2002). *Rethinking university teaching: A conversational framework for the effective use of learning technologies*. 2nd ed. London: Routledge.

Li, J., & De Luca, R. (2014). *Review of Assessment Feedback*. *Studies in Higher Education*. 39 (2), 378–93.

Lim, L., Dawson, S., Gašević, D., Joksimović, S., Pardo, A., Fudge, A., & Gentili, S. (2021). *Students' perceptions of, and emotional responses to, personalised learning analytics-based feedback: an exploratory study of four courses*. *Assessment & Evaluation in Higher Education*. 46 (3), 339-359.

Lizzio, A., & Wilson, K. (2008). *Feedback on assessment: students' perceptions of quality and effectiveness*. *Assessment & Evaluation in Higher Education*. 33(3), 263-275

MacLellan, E (2001) *Assessment for Learning: The differing perceptions of tutors and students*. *Assessment & Evaluation in Higher Education*, 26 (4), 307-318.

Malecka, B., Boud, D., & Carless, D. (2020). *Eliciting, processing and enacting feedback: mechanisms for embedding student feedback literacy within the curriculum*. *Teaching in Higher Education*. DOI: 10.1080/13562517.2020.1754784

Malecka, B., Ajjawi, R., Boud, D., & Tai, J. (2021). *An empirical study of student action from ipsative design of feedback processes*. *Assessment & Evaluation in Higher Education*. DOI: 10.1080/02602938.2021.1968338

- McArthur, J. (2021). Rethinking students involvement in assessment. Centre for global higher education, working paper no.58.  
<https://www.researchcghe.org/perch/resources/publications/working-paper-58final.pdf>
- Mehta, F., Brown, J., & Shaw, N. J. (2010). *Trainees' perceptions of the educational value of feedback given in case based discussion assessments*. Paper presented at Association for Medical Education in Europe (AMEE) Conference, Glasgow, United Kingdom.
- Millear, M.R., Greenaway R.R., & Schmidt, J.R. (2017). *Using curriculum design principles to renew teaching and learning in developmental psychology*. In Walker, R.G., & Bedford (Eds.), *Research and Development in Higher Education: Curriculum Transformation*, 40 (pp 250-260).
- Molloy, E., Boud, D., & Henderson, M. (2020). *Developing a learning-centred framework for feedback literacy*. *Assessment & Evaluation in Higher Education*. 45 (4), 527-540.
- Mory, E. (1996). *Feedback research*. in: Jonassen, D.H. (ed.) *Handbook of research for educational communications and technology*. Hillsdale, NJ, Lawrence Erlbaum Associates.
- Moscrop, C. (2015). *A quantitative analysis of student engagement with online feedback*. Poster presentation at: Assessment in Higher Education, 24th-25th June 2015, Birmingham.
- Moscrop, C. (2018). *Factors affecting student assessment feedback engagement*. Presented at SOLSTICE and CLT conference, 7th-8th June 2018, Edge Hill University.
- Moscrop, C., & Hartley, P. (2019) *Factors affecting student assessment feedback engagement*. Presented at Assessment in Higher Education, July 2019, Manchester.
- Moscrop, C., Pye, G., & Williams, S. (2019). *Evaluating staff assessment literacy - proposing a baseline of practice as a method of development*. Solstice and CLT conference, 5th-6th June 2019, Edge Hill University.
- Mulliner, E., & Tucker, M. (2017). *Feedback on feedback practice: perceptions of students and academics*. *Assessment and Evaluation in Higher Education*, 42(2), 266–288.
- Murdoch-Eaton, D., & Sargeant, J. (2012). *Maturational differences in undergraduate medical students' perceptions about feedback*. *Medical Education*. 46, 711–721.
- Murtagh, L., & Baker, N. (2008). *Feedback to Feed Forward*. Paper presented at Assessment in Higher Education Conference, United Kingdom.
- Mutch, A., Young, C., Davey, T., & Fitzgerald, L. (2018). *A journey towards sustainable feedback*. *Assessment & Evaluation in Higher Education*. 43(2), 248-259.
- Mutch, A. (2003). *Exploring the practice of feedback to students*. *Active learning in higher education*. 4 (1), 24-38.
- Nasri, N.M., Nasri, N., & Abd Talib, M.A. (2021). *The unsung role of assessment and feedback in self-directed learning (SDL)*. *Journal of Further and Higher Education*. DOI: 10.1080/0309877X.2021.1900552
- Netigate. (2019). *A survey expert's guide to open-ended questions*.  
<https://www.netigate.net/articles/survey-tips/survey-experts-guide-open-ended-questions/>
- Nicol, D. (2010). *From monologue to dialogue: improving written feedback processes in mass higher education*. *Assessment & Evaluation in Higher Education*. 35 (5), 501-517.
- Nicol, D. (2008). *Transforming Assessment and Feedback: Enhancing Integration and*

- Empowerment in the First Year*. Centre for Academic Practice and Learning Enhancement (CAPLE), University of Strathclyde.  
[https://www.reap.ac.uk/reap/public/papers/QAA\\_DN\\_Paper\\_final\\_08.pdf](https://www.reap.ac.uk/reap/public/papers/QAA_DN_Paper_final_08.pdf) [
- Nicol, D., & Macfarlane-Dick, D. (2006). *Formative assessment and self-regulated learning: a model and seven principles of good feedback practice*. *Studies in Higher Education*, 31(2), 199-218.
- Nicol, D., Thomson, A., & Breslin, C. (2014). *Rethinking feedback practices in higher education: a peer review perspective*. *Assessment & Evaluation in Higher Education*, 39(1), 102-122.
- Nieminen, J., Tai, J., Boud, D., & Henderson, M. (2021). *Student agency in feedback: beyond the individual*. *Assessment and Evaluation in Higher Education*. DOI: 10.1080/02602938.2021.1887080
- Nottingham Trent CADQ (2013). *CADQ Guide: Engaging students in the use of feedback to improve their work*. Nottingham Trent University. [www.ntu.ac.uk/adq](http://www.ntu.ac.uk/adq) | Mar-13
- Novak, J.D. (1998). *The Theory Underlying Concept Maps and How To Construct Them*. Cornell University  
[https://web.stanford.edu/dept/SUSE/projects/ireport/articles/concept\\_maps/The%20Theory%20Underlying%20Concept%20Maps.pdf](https://web.stanford.edu/dept/SUSE/projects/ireport/articles/concept_maps/The%20Theory%20Underlying%20Concept%20Maps.pdf)
- OFS. (2019). *Student satisfaction rises but universities should do more to improve feedback*. Office for students. <https://www.officeforstudents.org.uk/news-blog-and-events/press-and-media/student-satisfaction-rises-but-universities-should-do-more-to-improve-feedback/>
- O'Doherty, M., & Beaumont, C. (2007). *Feedback for Widening Participation?* Presented at Centres for Excellence in Teaching and Learning Research Symposium, Liverpool, United Kingdom.
- O'Donovan, B., Price, M., & Rust, C. (2004). *Know what I mean? Enhancing student understanding of assessment standards and criteria*. *Teaching in Higher Education*, 9 (3), 325-335.
- O'Donovan, B., Price, M., & Rust, C. (2008). *Developing student understanding of assessment standards: A nested hierarchy of approaches*. *Teaching in Higher Education*, 13 (2), 205-16.
- O'Donovan, B., den Outer, B., Price, M., & Lloyd, A. (2021). *What makes good feedback good?* *Studies in Higher Education*, 46 (2), 318-329.
- Orsmond, P., & Merry, S. (2011). *Feedback alignment: effective and ineffective links between tutors' and students' understanding of coursework feedback*. *Assessment & Evaluation in Higher Education*, 36 (2), 125-136.
- Orsmond, P., Maw, S., Park, J., Gomez, S., & Crook, A. (2013). *Moving feedback forward: theory to practice*. *Assessment & Evaluation in Higher Education*, 38 (2), 240-252.
- Orsmond, P., Merry, S., & Reiling, K. (2005). *Biology students' utilization of tutors' formative feedback: A qualitative interview study*. *Assessment & Evaluation in Higher Education*, 30, 369-386.
- Pederson, D. (1992). *Rapid Assessment Procedures, Qualitative Methodologies for Planning and Evaluation of Health Related Programmes*. in Scrimshaw, N., & Gleason, G. (Eds) *RAP*. International Nutrition Foundation for Developing Countries (INFDC), Boston.
- Poulos, A., & Mahony, M. (2008). *Effectiveness of Feedback: The Students' Perspective*. *Assessment & Evaluation in Higher Education*, 33 (2), 143-154.

- Parboteeah, S., & Anwar, M. (2009). *Thematic Analysis of Written Assignment Feedback: Implications for Nurse Education*. *Nurse Education Today* 29 (7): 753–7.
- Parkin, H., Hepplestone, S., Holden, G., Irwin, B., & Thorpe, L. (2012). *A role for technology in enhancing students' engagement with feedback*. *Assessment & Evaluation in Higher Education*. 37(8), 963-973.
- PASS. (2012). *Interpreting Programme Focused Assessment for the Validation of Programmes*. Bradford University. <https://www.bradford.ac.uk/pass/resources/mp-report.pdf>
- Pitt, E., Bearman, M., & Esterhazy, R. (2019). The conundrum of low achievement and feedback for learning. *Assessment and Evaluation in Higher Education*, 45(2), 239–250.
- Pitt, E., & Norton, L. (2017). 'Now That's the Feedback I Want!' *Students' Reactions to Feedback on Graded Work and What They Do with It*. *Assessment & Evaluation in Higher Education* 42 (4): 499–516.
- Plano Clark, V.L., & Creswell, J.W. (2008). *The Mixed Methods Reader*. Sage Publications, Thousand Oaks.
- Popham, J. (2018) *Assessment literacy for educators in a hurry*. Alexandria, VA: ASCD.
- Poulos, A., & Mahony, M.J. (2008). *Effectiveness of feedback: the students' perspective*. *Assessment & Evaluation in Higher Education*, 33 (2), 143-154.
- Price, M., Handley, K., & Millar, J. (2011a). *Feedback: Focusing Attention on Engagement*. *Studies in Higher Education*, 36 (8): 879–896.
- Price, M., Handley, K., and Millar, J. (2011b). *Beyond 'doing time': investigating the concept of student engagement with feedback*. *Oxford Review of Education*. 37(4), 543-560.
- Price, M., Handley, K., Millar, J., & O'Donovan, B. (2010). *Feedback: all that effort, but what is the effect?* *Assessment & Evaluation in Higher Education*. 35(3), 277-289.
- Pulfrey, C., Buchs, C., & Butera, F. (2011). **Why grades engender performance-avoidance goals: the mediating role of autonomous motivation**. *J Educ Psychol*. 2011; 103:683.
- Quinn, L., & Vorster, J. (2015). *How to turn lecturers into good university teachers*. The Conversation. <https://theconversation.com/how-to-turn-lecturers-into-good-universityteachers-42134>
- Race, P. (2008). *In at the deep end – starting to teach in higher education*. Presented at Leeds Metropolitan University. <https://www.qub.ac.uk/directorates/AcademicStudentAffairs/CentreforEducationalDevelopment/FilestoreDONOTDELETE/QUBOnly/Filetoupload,624263,en.pdf>
- Raman, M., Woods, P., & Lim A.M. (2013). *Knowledge management systems in support of an induction programme: An action research approach*. *Knowledge Management & E-Learning*, 5(4), 419–433.
- Ramshaw, A. (n.d). *The Complete Guide to Acceptable Survey Response Rates*. <https://www.genroe.com/blog/acceptable-survey-response-rate-2/11504>
- Robinson, S., Pope, D., & Holyoak, L. (2013). *Can we meet their expectations? Experiences and perceptions of feedback in first year undergraduate students*. *Assessment and Evaluation in Higher Education*, 38(3), 260-272.

- Ross, P. T., & Bibler Zaidi, N. L. (2019). *Limited by our limitations*. Perspectives on medical education, 8(4), 261–264.
- Ruel, E., Wagner, W., & Gillespie, B. (2015). *The Practice of Survey Research*. Sage.
- Russell, M., Bygate, D., & Barefoot, H. (2013). *Making learning-oriented assessment the experience of all our students*. In: Merry, S., Price, M., Carless, D., & Taras, M. Eds. *Reconceptualising Feedback in Higher Education: Developing Dialogue with Students*. Routledge, pp 147-159.
- Rust, C., O'Donovan, B., & Price, M. (2005). *A social constructivist assessment process model: how the research literature shows us this could be best practice*. Assessment and Evaluation in Higher Education, 30 (3), 231-240.
- Rust, C., Price, M., & O'Donovan, B. (2003). *Improving Students' Learning by Developing their Understanding of Assessment Criteria and Processes*. Assessment & Evaluation in Higher Education. 28 (2), 147-164
- Rust, C., Price, M., Handley, K., O'Donovan, B., & Millar, J. (2013). *An assessment compact: Changing the way an institution thinks about assessment and feedback*. In: Merry, S., Price, M., Carless, D., & Taras, M. Eds. *Reconceptualising Feedback in Higher Education: Developing Dialogue with Students*. Routledge, pp 147-159.
- Ryan, T., & Henderson, M. (2018). *Feeling feedback: students' emotional responses to educator feedback*. Assessment & Evaluation in Higher Education. 43 (6), 880-892.
- Sadler, D. R. (2010). *Beyond Feedback: Developing Student Capability in Complex Appraisal*. Assessment & Evaluation in Higher Education. 35 (5), 535–550.
- Sadler, D. R. (2005). *Interpretations of criteria-based assessment and grading in higher education*. Assessment and evaluation in higher education. 30, 175–194.
- Sadler, D.R. (1989). *Formative assessment and the design of instructional systems*. Instructional Science 18: 119–44.
- Sandars, J. (2020). *Feedback training beyond simplistic models*. British Medical Journal (BMJ), 368. <http://bmj.com/cgi/content/full/bmj.m467?ijkey=nxzZNemn6TsVwCT&keytype=ref>
- Scheffler, I. (1974). *Four Pragmatists: A Critical Introduction to Peirce, James, Mead and Dewey*. Routledge.
- Schinske, J., & Tanner, K. (2014). *Teaching More by Grading Less (or Differently)*. CBE Life Sciences Education, 13(2), 159–166.
- Scott, H. (2009). *What is Grounded Theory?* <http://www.groundedtheoryonline.com/what-isgrounded-theory>
- Scott, J., Shields, C., Gardner, J., Hancock, A., & Nutt, A. (2011). *Student Engagement with Feedback*. Bioscience Education. Vol.18  
<http://www.bioscience.heacademy.ac.uk/journal/vol18/beej-18-5SE.pdf>
- Shute, V. J. (2008). *Focus on formative feedback*. Review of Educational Research, 78, 153–189.
- Stamov Roßnagel, C., Lo Baido, K., & Fitzallen, N. (2021). *Revisiting the relationship between constructive alignment and learning approaches: A perceived alignment perspective*. PLoS ONE 16(8)



- Tai, J., Bearman, M., Gravett, K. and Molloy, E (2021): Exploring the notion of teacher feedback literacies through the theory of practice architectures. *Assessment & Evaluation in Higher Education*. DOI: 10.1080/02602938.2021.1948967
- Tang, J., & Harrison, C. (2011). *Investigating university tutor perceptions of assessment feedback: three types of tutor beliefs*. *Assessment & Evaluation in Higher Education*, 36 (5), 583-604.
- Taras, M. (2006). *Do unto others or not: Equity in feedback for undergraduates*. *Assessment & Evaluation in Higher Education*, 31(3), 365–377.
- Teddlie, C., & Yu, F. (2007). *Mixed methods sampling: A typology with examples*. *Journal of Mixed Methods Research*, 1(1), 77-100.
- TESTA. (2013). *Transforming the experience of students through assessment*. University of Bristol and University of Winchester. <https://www.testa.ac.uk/index.php/the-team>
- Trowler, V. (2010). *Student engagement literature review*. The Higher Education Academy. [https://www.heacademy.ac.uk/system/files/StudentEngagementLiteratureReview\\_1.pdf](https://www.heacademy.ac.uk/system/files/StudentEngagementLiteratureReview_1.pdf)
- Turnitin. (2014). *Instructor Training: Instructor Dashboard and Class Activity Stream*. [http://turnitin.com/en\\_us/training/instructor-training/instructor-dashboard-class-activitystream](http://turnitin.com/en_us/training/instructor-training/instructor-dashboard-class-activitystream)
- Van Heerden, M. (2020). *'It has a purpose beyond justifying a mark': examining the alignment between the purpose and practice of feedback*. *Assessment & Evaluation in Higher Education*. 45 (3), 359-371.
- Värlander, S. (2008). *The role of students' emotions in formal feedback situations*. *Teaching in Higher Education*, 13 (2), 145-156.
- Vattøy, K.D., Gamlem, S., & Rogne, W.M. (2021). *Examining students' feedback engagement and assessment experiences: a mixed study*. *Studies in Higher Education*. 46 (11), 2325-2337.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Walker, S., Salines, E., Abdillahi, A., Mason, S., Jadav, A., & Molesworth, C. (2019). *Identifying and resolving key institutional challenges in feedback and assessment: a case study for implementing change*. *Higher Education Pedagogies*, 4:1, 422-434  
<https://www.tandfonline.com/doi/full/10.1080/23752696.2019.1649513>
- Weaver, M. R. (2006). *Do students value feedback? Student perceptions of tutors' written responses*. *Assessment & Evaluation in Higher Education*, 31 (3), 379-394.
- Webster, J., & Watson, R.T. (2002). *Analyzing the past to prepare for the future: Writing a literature review*. *Management Information Systems Quarterly*. 26 (2), xiii-xxiii.
- Wei Wei & Xie Yanmei. (2018). *University teachers' reflections on the reasons behind their changing feedback practice*. *Assessment & Evaluation in Higher Education*. 43 (6), 867-879.
- Wei Wei., Yilin Sun., & Xiaoshu Xu. (2021). *Investigating the impact of increased student feedback literacy level on their expectations on university teachers' feedback*. *Assessment & Evaluation in Higher Education*, 46(7), 1092-1103.
- Williams, J. P. (2008). Emergent themes. In L. M. Given (Ed.), *The Sage encyclopedia of qualitative research methods*. 248–24). Thousand Oaks, CA: Sage Publications

- Winstone N., & Boud, D. (2020). *The need to disentangle assessment and feedback in higher education*. *Studies in Higher Education*. DOI: 10.1080/03075079.2020.1779687
- Winstone, N., Bourne, J., Medland, E., Niculescu, I., & Rees, R. (2021). "Check the grade, log out": *students' engagement with feedback in learning management systems*. *Assessment & Evaluation in Higher Education*, 46 (4), 631-643.
- Winstone, N., Ajjawi, R., Dirkx, K., & Boud, D. (2021b). *Measuring what matters: the positioning of students in feedback processes within national student satisfaction surveys*. *Studies in Higher Education*. DOI: 10.1080/03075079.2021.1916909.
- Winstone, N., Nash, R., Rowntree, J., & Parker, M. (2017). 'It'd be useful, but I wouldn't use it': *barriers to university students' feedback seeking and recipience*. *Studies in Higher Education*, 42 (11), 2026-2041.
- Winstone, N., & Carless, D. (2019). *Designing Effective Feedback Processes in Higher Education: A Learning-Focused Approach*. London: Routledge.
- Williams, J., & Kane, D. (2008). *Exploring the National Student Survey: Assessment and Feedback Issues*. The Higher Education Academy. Online.  
[http://www.heacademy.ac.uk/assets/documents/nss/nss\\_assessment\\_and\\_feedback\\_issues.pdf](http://www.heacademy.ac.uk/assets/documents/nss/nss_assessment_and_feedback_issues.pdf)
- Wohlin, C. (2014). *Guidelines for Snowballing in Systematic Literature Studies and a Replication in Software Engineering*. EASE '14: Proceedings of the 18th International Conference on Evaluation and Assessment in Software Engineering. 38, 1-10.  
<https://doi.org/10.1145/2601248.2601268>
- Yan, Z., & Carless, D. (2021). *Self-assessment is about more than self: the enabling role of feedback literacy*. *Assessment & Evaluation in Higher Education*. DOI: 10.1080/02602938.2021.2001431
- Yorke, M. (2003). *Formative assessment in higher education: moves towards theory and the enhancement of pedagogic practice*. *Higher Education*. 45, 477–501.
- Yu, S., Di Zhang, E., & Liu, C. (2022). *Assessing L2 student writing feedback literacy: A scale development and validation study*. *Assessing Writing*, 53, article 100643.
- Zepke, N. (2014). *Student engagement research in higher education: questioning an academic orthodoxy*. *Teaching in Higher Education*. 19(6), 697-708.
- Zhang, Z. (2020). *Engaging with Automated Writing Evaluation (AWE) Feedback on L2 Writing: Student Perceptions and Revisions*. *Assessing Writing*, 43, 100439.  
 doi:10.1016/j.asw.2019.100439.
- Zhao, X., Cox, A., Lu, A., & Alsuhaibani, A. (2021). *A comparison of student and staff perceptions and feelings about assessment and feedback using cartoon annotation*. *Journal of Further and Higher Education*. DOI: 10.1080/0309877X.2021.1986620
- Zhou, J., Dawson, P., Ta, J., & Bearman, M. (2021). *How conceptualising respect can inform feedback pedagogies*. *Assessment & Evaluation in Higher Education*. 46(1), 68-79.
- Zimbardi, K., Colthorpe, K., Dekker, A., Engstrom, C., Bugarcic, A., Worthy, P., Victor, R., Chunduri, P., Lluca, L., & Long, P. (2017). *Are they using my feedback? The extent of students'*

*feedback use has a large impact on subsequent academic performance.* Assessment & Evaluation in Higher Education, 42(4), 625-644.

Zimmerman, B. (2002). *Becoming a self regulated Learner: An overview.* Theory into practice. 41 (2), 64-70.