Development of a post-16 feedback policy: Staff and student perceptions

Jennifer Cogbill

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Abstract

Feedback can be considered one of the key strategies for improving student achievement. While much focus has been given to effective feedback strategies, an area of increasing focus is students' perceptions of the feedback they receive, as it is suggested that without positive perceptions, feedback will not be fully utilised. This study aimed to introduce a post-16 feedback policy. The policy was developed collaboratively within the school, incorporating staff and student perceptions of feedback, as well as building on good practice, as outlined by the literature. As a mixed methods investigation, staff and student perceptions were gathered by quantitative questionnaires, with the intention of developing more detailed views through the use of interviews. The study found that students' perceptions of feedback were largely positive, and that the introduction of the policy resulted in an increase in these positive views, although the majority of these changes were not statistically significant. One area in which a significant difference was found, was between male and female students' perceptions of feedback, particularly relating to its usefulness and its perceived importance. This is an area that has not been identified by other studies and may warrant further investigation. In contrast to existing literature, alignment was found between staff and student perceptions regarding the provision of the feedback, and the extent to which students utilise it. Staff perceptions of feedback can be considered important, as increased workload, relating to feedback, can be a barrier to implementation. This study found that workload was minimally impacted by the introduction of the feedback policy. However, low staff perceptions of the benefits of this policy, and the changes to feedback practices, may have resulted in limited engagement with the policy.

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1 Introduction

Feedback can be considered one of the most powerful strategies in improving student achievement (Brooks, Carroll, Gillies and Hattie, 2019), with the Education Endowment Fund (2018) ranking feedback as the intervention with the largest impact on student progress. Feedback can be considered essential within learning, as performance can only improve when the student has knowledge that current performance is less than optimal (King, Schrodt and Weisel, 2009), and is provided with clear guidance on the next steps (Nicol and Macfarlane-Dick, 2006). Without feedback, students are limited in their capacity to make judgements about their progress and how to further improve their learning (Ryan and Henderson, 2018).

The work within this study builds on my part 1 assignment, which focused on the provision of formative assessment within the science department, and students' perceptions of the provision. In their 1998 review, Black and Wiliam state:

> The core of the activity of formative assessment lies in the sequence of two actions. The first is the perception by the learner of a gap between a desired goal and his or her present state (of knowledge, and/or understanding, and/or skill). The second is the action taken by the learner to close that gap in order to attain the desired goal (p.20).

The overlap between the description of formative assessment, and a multitude of definitions of feedback is clear, placing feedback as a key component within formative assessment. Within my part 1 assignment, feedback was one of the strategies that students perceived to be less well implemented, particularly with regards to comment only feedback (Author, 2018). Lack of successful implementation of feedback within formative assessment has been observed by Clarke (2003), who states that feedback in formative assessment 'is the element most laden with a legacy of bad practice and misguided views' (p.3). While in their meta-analysis, Kluger and DeNisi (1996) found that although feedback had a positive average effect size (0.41), 38% of the studies they looked at had negative effects.

A large number of studies have looked at methods of providing effective feedback, and the impact on progress and learning (Nicol and Macfarlane-Dick, 2006; Poulos and Mahony, 2008; Price, Handley, Millar and O'Donovan, 2010). However, while teacher practice is important, recent studies in feedback

have moved to a more student-centred view (Molloy, Boud and Henderson, 2020). As a result of this, an increased focus is now on the receptiveness of students to the feedback message (Ryan and Henderson, 2018), and their willingness to act on the feedback given (Mulliner and Tucker, 2017). Therefore, students' perceptions of feedback, which can be considered 'the extent to which students perceive feedback to be supportive for their learning' (Agricola, Prins and Sluijsmans, 2019), can be regarded as a key component within feedback. However, far fewer studies have been conducted on students' perceptions. Furthermore, those studies that have been conducted are often on small cohort sizes, or within a particular discipline (Dawson et al, 2019), therefore reducing the ability to generalise the findings. Of even greater significance to this study, is the lack of studies on students' perceptions that are carried out at school level, and no studies could be found that looked at feedback perceptions in post-16 classes within schools.

This study into students' perceptions of feedback is being conducted in an international boarding school, located in Switzerland. The school is new, with approximately 150 students, from over 30 nationalities. This is the first year in which all year groups, including year 13, are present in the school. The post-16 provision within the school is the International Baccalaureate Diploma Programme, with 94% of students taking the full diploma, and the remaining students completing the courses option. I have recently taken on the role of International Baccalaureate (IB) coordinator. The post-16 teaching is a developing area, with our first examination class completing the course this year (2019/2020). One area of focus in developing post-16 teaching within the school is to introduce a post-16 feedback policy. It is hoped that by having a feedback policy it will allow staff to develop a unified view of the role that feedback plays (Knight, 2003), as well as ensuring that it is tailored to the needs of the IB cohort. The purpose of this study is to produce a feedback policy that is based on good practice, as outlined by the literature, as well as being responsive to staff and student needs within the school. With regards to staff, their perceptions are important as workload relating to marking is often identified as a concern (Department for Education, 2019); with regards to students, it is vital to understand their views, as without this, feedback cannot be truly student-centred (Weaver, 2006). Further, it is hoped that by

seeking student views and engaging them within the process, it will increase their sense of agency (Rudduck and McIntyre, 2007), as this is often lacking within feedback policies, with a student from a study by Carless (2006) stating 'no tutor has ever asked us what kind of feedback we would like' (p. 231). A number of studies, that will be discussed in the literature review, identify that there is often a lack of alignment between staff and student perceptions regarding the provision of useful feedback, and how students utilise it. However, it is important to note that although this has been commonly reported within the literature, all of the studies found are based at university level, and therefore this study aims to see if the same pattern is true at post-16 level.

The literature review will focus on answering the following four questions:

1. What are the main characteristics of effective feedback?
2. How do students' perceptions of feedback impact the effectiveness of feedback, and how can these be improved?
3. How do staff and student perceptions of feedback provision vary?
4. What are the main barriers to successful feedback?

2 Literature Review

Defining Feedback

When considering feedback, it is important to first define it, particularly given the number of different terms that may at times be used interchangeably. One example is the use of the terms marking, grading, and feedback. Hattie and Clarke (2019) identify that feedback is a relatively new term. In the US, grading was, and still is, used as the common term. While in the UK the term marking is used to describe grades and comments. Historically marking was not connected to any theory of feedback, rather it was considered to be intrinsic to teaching, whereby the students were informed of their progress through marks, and if they did not do well, they should apply themselves more diligently (Boud and Molloy, 2013). Within the past decade, there has been a clear shift in the emphasis put on feedback, and the role of the teacher. Traditionally, feedback depended on 'telling' as the main mechanism for communication leading to student improvement, this was in line with the transmission model of education (Askew and Lodge, 2000). Since then, there has been a move from a teacher-centric view of the teacher communicating feedback in a monologic style towards, a student-centric view, with the student as an active agent within the feedback process (Sadler, 2010), thereby moving towards a more constructivist view of learning (Alexander, 2004).

There exists little consensus about how feedback is defined and what constitutes good feedback (Van der Bergh, Ros and Beijaard, 2012). This lack of consensus includes who provides the feedback (Sadler, 1989), the form the feedback takes (Brown, Harris and Harnett, 2012), and the presence or absence of grades (Wylie and Lyon, 2015). It is clear from the literature, that definitions of feedback can be considered on a spectrum from the very broad to the very narrow (Knight, 2003). At the broad end of the spectrum Askew and Lodge (2000) define feedback as 'all dialogue to support learning in both formal and informal situations' (p.44). While this definition is vague, it does recognise the dynamic relationship between learning and teaching, and that it is not just a one-way transmission of knowledge. Some authors insist on the requirement of closing the gap between current and desired performance in order for information to be considered feedback (Black and Wiliam, 1998; Sadler 1989), however, this is not found in all definitions. Nicol and Macfarlane-Dick (2006) define feedback as 'information about how the students present state (of

learning and performance) relates to . . . goals and standards' (p.200). This definition is very similar to Hattie and Timperley (2007) who define feedback as 'information provided by an agent (e.g. teacher, peer, book, parent, self, experience) regarding some aspect of one's performance or understanding' (p.81). Although Hattie and Timperley (2007) do not include the need to close the gap within the definition, they do mention it later in the article. Differences between feedback definitions can have a significant impact on the ability to draw parallels between studies. For the purposes of this study, feedback will be considered to 'provide information to learners about their performance and how to improve it' (Elliott et al, 2016).

Feedback Typologies

Further to defining feedback, it is important to consider feedback typologies, the types and classifications of feedback. In line with the wide range of feedback definitions that exist, there is also a range of different labels and typologies which are used for feedback (Hattie and Timperley, 2007; King et al, 2009; Tunstall and Gipps, 1996). In their typology, Hattie and Timperley (2007) identified four key focuses of feedback: task, process, self-regulation and self. Task feedback identifies whether work is correct or incorrect, and may include guidance to acquire more, different, or correct information (Hattie and Timperley, 2007). This level of feedback is sometimes referred to as corrective feedback, it tends to be task specific and focus on content within a domain. Consequently, the ability of the student to develop transferable skills may be less than other feedback types (Van der Bergh et al, 2012), and may have a limited impact on knowledge construction (Butler and Winne, 1995). Hattie and Timperley (2007) suggest that as much as 90% of teacher feedback is presented at task level. This is supported by Brooks et al (2019) who found that the majority of primary classroom feedback was directed at this level. This may be due to the superficial nature of tasks set, resulting in task feedback being the only type that could be given. Another reason presented for common use of task feedback, is that it is easy to identify strengths and weaknesses of work, such as spelling mistakes. While the more academically demanding aspects of learning are more abstract, such as the strength of an argument, and are therefore harder to define and to provide feedback on (Nicol and Macfarlane-Dick, 2006). Although several studies have identified the large amount of feedback that is given at task level, the observations do not distinguish between the depth of feedback provided. Even with feedback provided at task level, there is

a difference between knowledge of results (e.g. a numerical mark) and written feedback that provides a way forward (Butler and Winne, 1995). A further limitation of these studies is the focus on feedback in the primary classroom, with fewer studies looking at feedback types provided within senior schools.

Feedback on process focuses on the processing of information, or the learning processes required in a task. It can be considered a major component for developing students' strategies for error detection, thus allowing students to develop the ability to provide self-feedback (Hattie and Timperley, 2007). Process feedback has also been shown to improve confidence and self-efficacy, 'the confidence one has about his or her ability to be successful in a particular domain' (Zumbrunn, Marrs and Mewborn, 2016, p.350). While process feedback is considered to be more effective at developing deeper learning, it is, however, important to remember that task and process feedback often do not exist in isolation from each other (Hattie and Timperley, 2007).

Feedback on self-regulation, defined as 'behaviours such as planning, goal setting, strategy use, emotion regulation, evaluation and revision' (Ekholm, Zumbrunn and Conklin, 2015), addresses the way students monitor, direct, and regulate action towards a learning goal. This type of feedback can impact self-efficacy and self-regulating proficiencies, as well as the self-belief the student has as a learner, leading to increased skills of self-evaluation (Hattie and Timperley, 2007). This is in line with observations by Butler and Winne (1995) who observe that 'in general, learning improves when feedback informs students about their monitoring of learning needs . . and guides them how to achieve learning objectives' (p.273). Feedback on self-regulation has been identified as the least commonly used feedback type (Brooks et al, 2019), and it was observed by Van der Bergh et al (2012) in just 1% of classroom feedback interactions. Feedback should ideally relate to process and self-regulation rather than to task (Knight, 2003), however, this is a balance, as more elaborative and specific feedback tends to be more directive than facilitative (Shute, 2008).

The final feedback type identified by Hattie and Timperley (2007) is feedback on self. This type of feedback is arguably the least effective, as the effectiveness of feedback can be considered the degree to which it directs information to enhance self-efficacy. As feedback on self is generally not formative, and further, may

result in the perception from the student that intelligence is fixed, it should be avoided (Brookhart, 2008). Feedback that is based on conduct or neatness of work may result in negative perceptions of feedback (Tunstall and Gipps, 1996). However, it is important to note that feedback on self does have a role to comfort and support students, although it does not enhance learning or achievement (Hattie and Gan, 2011).

Other terminology for classifying feedback can also be considered. King et al (2009) uses a number of different labels, including corrective feedback, interpersonal evaluative feedback, and feedback interventions. In this case, feedback interventions are in line with the definition that is used in this assignment, as they direct learners' awareness to discrepancies between actual performance and desired performance. After considering the focus of feedback, it is then important to consider its function. Two key functions of feedback can be considered to be directive and facilitative (Gamlen and Smith, 2013). Directive feedback can be considered to be providing information about what needs to be changed. The second type, facilitative, is less specific and provides suggestions to guide learners. These two functions are also identified by Black and Wiliam (1998) and Shute (2008).

Effective Feedback

A further challenge, when considering feedback, is the use of the term effective, with what counts as effective feedback being contested (Brown et al, 2012; Nicol and Macfarlane-Dick, 2006). Feedback is central to formative assessment and yet Clarke (2003) identifies that it 'is the element most laden with a legacy of bad practice and misguided views' (p.3). This is in line with Wiliam (2018) who identifies that while feedback should help students learn, providing effective feedback is difficult. Furthermore, much of the feedback that is given has little or no effect on learning, and some feedback can actually be counterproductive (Kluger and DeNisi, 1996). One consideration of effective feedback is that it must provide information that a student comprehends and that they can use (Brookhart, 2008). This is supported by Spendlove (2009) who states that effective feedback should provide guidance on how to improve. This can be achieved by providing feedback focused on three main questions 'Where am I going? How am I going? Where to next?' (Hattie and Timperley, 2007, p.86). Furthermore, for feedback to be effective it should not be limited to episodic and

mechanistic practices that are tacked onto existing teaching formats. Rather, effective feedback should be embedded and designed in sequence to develop over time (Boud and Molloy, 2013).

One of the most basic indicators of quality of feedback, is that it must result in a change in students' behaviour or in an outcome (Nicol and Macfarlane-Dick, 2006). This change may result in an increase in thinking (Black, Harrison, Lee, Marshall and Wiliam, 2002) or reflection (Spendlove, 2009). Alternatively, it may direct students towards mastery of tasks, resulting in enhanced self-efficacy, and encouraging effort attribution (Gipps, 2012). Good feedback should 'close the loop', as this is required to ascertain the effects rather than the intention of the feedback (Boud and Molloy, 2013). Closing the feedback loop was considered to be an essential component of feedback by Sadler (1989), with Ryan and Henderson (2018) stating 'feedback is a cyclical process in which students obtain valuable information about how they can improve their future performance and learning strategies, and then use that information to change subsequent activities or behaviours' (p.880). Therefore, effectiveness could be considered to be the extent to which it impels the learner to act upon it and positively impact future learning (Adams, Wilson, Money, Palmer-Conn and Fearn, 2020).

Characteristics of Effective Feedback

Although there is debate about the effectiveness of feedback techniques, some key factors are identifiable. In order to develop a feedback policy based on best practice, the key components of good feedback are outlined here. The first factor to consider is the timing of feedback, numerous articles have looked at whether immediate or delayed feedback is more effective (Hattie and Timperley, 2007; Shute, 2008). However, what becomes apparent is that it is more important that feedback should be given during the learning process so that it can impact the learning (Brookhart, 2008, Brooks et al, 2019), as if the feedback is delayed it therefore cannot be acted upon and becomes useless (Knight, 2003).

The role of grading or mark awarding in feedback is subject to considerable debate. Grading can be problematic, as it can result in comparison between students, and therefore risks moving students away from task-involvement towards ego-involvement, which can be an obstacle to developing a learning focused

classroom culture (Shepard, 2019). Competition between students is associated with a range of negative outcomes including student discouragement, lack of peer-to-peer support (Carnell, 2004), decrease in intrinsic motivation, as well as undermining student effort, and lowering self-efficacy (Gipps, 2012). Further to this, students may also focus on grades at the cost of the comment (Elliott et al, 2016). It has been observed as a result, that feedback given with marks is unlikely to be used formatively by the student (Wylie and Lyon, 2015), with Wiliam (2018) going so far as to say that the presence of the grade removes the value of the comment, no matter how well constructed the comments are.

Studies looking at the impact of grading and comments are often built on the study conducted by Butler (1988) who investigated the different outcomes on motivation and achievement of three scenarios- comments only, grades only, and comments and grades. The study found that students who received comments only maintained high levels of interest throughout the tasks. Comments and grades induced ego-involvement as much as grades only. Ego-involvement has been found to result in students becoming reluctant to take risks and to react badly to new challenges (Spendlove, 2009). A limitation of the Butler study was the potential lack of ecological validity, due to being carried out as a psychology study outside of the classroom, further to this is the issue of the age of the study.

A more recent long-term study on the impact of grading and comments, although based on historical data, was carried out by Klapp (2015). In a study of 8,558 students, the students who were graded in year 6 achieved lower grades in years 7-9. In contrast to the findings of Butler (1998) and Klapp (2015), a study by Smith and Gorard (2005) found no difference in outcome in maths and science when comparing two year 9 groups, one provided with comments only and one provided with traditional feedback. In addition, they found that in English, the provision of comments only resulted in lower marks in the intervention group. The comments from students however, identified issues with the methodology used. The students indicated that they did not understand the purpose of the intervention, and due to being in the same school as the non-intervention group they therefore wanted their marks as their peers were receiving them. This links to the observation by Gipps (1996) that comparison between students is still present, even if marks are removed. The students further identified issues with the comments provided, as they felt that they did not provide

enough information for improvement (Smith and Gorard, 2005). It is possible that this is due to the nature of the tasks set for the students, as not all tasks are suitable for comment only marking, and therefore planning must take place to incorporate tasks that allow students to receive meaningful feedback and demonstrate improvement (Black, Harrison, Lee, Marshall and Wiliam, 2003).

Interim marking provides a potential solution to the need for frequent formative feedback that occurs within the learning time. This allows for graded work to meet school requirements for monitoring of student progress (Brookhart, 2008), as well as providing feedback that is integrated into teaching (Gamlem and Smith, 2013). Students who receive feedback mid-project are more likely to act on it and view it as helpful (Elliott et al, 2016). Interim feedback can be incorporated into two-stage or multi-stage assignments where feedback on one stage then feeds forward into the next stage (Carless and Boud, 2018). As well as being viewed positively by students, a study by Carless, Salter, Yang and Lam (2011) found that university professors viewed interim marking positively, as they felt it was more likely to be acted upon. However, this approach has raised issues of 'spoon feeding', with the view of the teacher as an 'editor' for resubmissions. Consequently, as with other forms of feedback, it is important that it should enhance students' self-evaluative ability through questioning and promoting self-directed learning. However, as with many of the feedback proposals, this does rely on planning and preparation to support this within teaching (Brookhart, 2008).

When considering the practice of providing grades only, a review of recent literature by Elliott et al (2016) states that no evidence has been found to support that the awarding of grades with no formative comment leads to student progress. This is in line with teacher and student perceptions in a study by Mulliner and Tucker (2017). Despite this, only 61% of secondary classroom teachers indicate that they write comments about work most or all of the time when marking (Elliott et al, 2016). For a student to improve they must have an idea of the desired standard or goal and be able to compare actual and desired performance. Just awarding a grade does not do this, and therefore the student cannot improve as feedback has not provided a way forward (Gipps, 2012), resulting in the loss of a learning opportunity as the marks merely provide verification of their performance (Pollock, 2012).

The quantity of written feedback provided is a key consideration. A study of year 9 and 10 students' perceptions of feedback found that students did not like excessive volumes of feedback as they did not find it helpful, and preferred concise feedback on how to bridge the gap between current and desired performance (Peterson and Irving, 2008). Furthermore, studies suggest that students perceive large quantities of written feedback as indicative of poor work, identifying that good work often gets less feedback (Wiliam, 2018), and if feedback is too long or too complex then the learners may not pay attention and the feedback itself becomes useless (Shute, 2008). Feedback should empower students with strategically useful information and should give specific guidance on how to make improvements. This can be considered to be 'closing the loop' in feedback (Sadler, 1989) and it seems natural to consider that feedback targets should be a key part of feedback (Nicol and Macfarlane-Dick, 2006). Linking to the idea of volume of feedback, Lunsford (1997) discusses the importance of providing only a small number of targets, suggesting that three feedback comments per piece of work is reasonable if the expectation is for students to act upon them. The use of three key targets has been repeated as a key idea by a number of authors (Irons, 2008; Nicol and Macfarlane-Dick, 2006; Wiliam, 2018). One efficient approach is the incorporation of target setting into interim marking (Elliott et al, 2016). This has the advantage of guaranteeing that the student can act upon the feedback provided, and therefore can increase the validity of the feedback, and ensure that it is used in a formative way (Black et al, 2003).

Assessment should be against clear standards, and constructive feedback should be focused on individual performance (Gipps, 1996). This is supported by the study by Poulos and Mahony (2008) who found that university students want clear feedback referencing assessment criteria. These should be identified at the start of the learning process (Spendlove, 2009), as clarifying expectations and standards is a key prerequisite for effective feedback (Brooks et al, 2019). The use of assessment criteria can also allow students to start to monitor their own learning progress and develop as self-regulated learners. However, the use of assessment criteria, while important, does run the risk that students may view tasks as a tick box exercise, missing the complex and multidimensional nature of some assessment criteria. One solution to this is to use exemplar work, as well as dialogue and discussion of assessment criteria in lessons (Nicol and Macfarlane-Dick, 2006).

Further to this, teachers should strive to provide regular, purposeful, and constructive feedback that matches assessment criteria (Brooks et al, 2019) allowing students to learn to interpret and follow them (Kerr, 2017), which will result in an increase in their feedback literacy (Molloy et al, 2020).

Feedback can often be viewed as a one-way transmission of information given to the student to cause modification of actions and to result in learning (Brooks et al, 2019). It is often assumed by teachers that, when they transmit feedback to students, the message is decoded and translated into action. In a study of primary school teachers, Knight (2003) found that many teachers did not know if their students understood the feedback they had given, as it had not occurred to them to ask. Evidence suggests that feedback is often complex, and students may find it difficult to decipher, therefore requiring opportunities to discuss feedback and construct an understanding of it before it can be utilised (Nicol and Macfarlane-Dick, 2006). When feedback is a monologue it encourages students to be reactive within the feedback relationship (Sortkær, 2019), and can result in the failure by teachers to address misconceptions (Tan, Whipp, Gagné and Van Quaquebeke, 2019). Whereas feedback in the form of dialogue encourages and facilitates students to be active (Van der Schaaf, Baartman, Prins, Oosterbaan and Schaap, 2013), and to start to take responsibility for their feedback (Bloxham and Campbell, 2010). Dialogue also helps to clarify the language of assessment, allowing students to understand how marks are allocated (Chalmers, Mowat and Chapman, 2018) in a way that overcomes the limitations of one-way written comments (Carless et al, 2011).

Perceptions of Feedback

As discussed previously, the change in the conceptualisation of feedback from a teacher-centric to a student-centric view, has resulted in the idea of feedback being student driven (Dawson et al, 2019). A key factor in the effectiveness of feedback is to what extent it results in the receiver actioning the advice given in a way that positively impacts future learning (Adams et al, 2020). It has been suggested that for feedback to be effective, students must have positive perceptions about the feedback they receive (Agricola et al, 2019; Ekholm et al 2015). Consequently, fostering positive perceptions of feedback should be considered a key goal of teachers (Ekholm et al, 2015), as, by improving feedback perceptions, it has the potential to result in improved work and progress (Zumbrunn et al, 2016). While many studies have looked at the purposes and

effectiveness of feedback, far fewer have studied students' perceptions of feedback (Poulos and Mahony, 2008). Within recent years there has been an increase in university level studies, driven, in part, by student satisfaction questionnaires which have identified feedback as an area of dissatisfaction (Ryan and Henderson, 2018). However, there continues to be a lack of school level studies looking into student perceptions (Kerr, 2017; Zumbrunn et al, 2016).

Defining perceptions

Students' perceptions can be defined as 'students' affective response to, and openness towards receiving feedback' (Ekholm et al, 2015, p.200), while Agricola et al (2019) consider it to be 'the extent to which students perceive feedback to be supportive for their learning' (p.7). Students' perceptions of feedback can be considered to be on a spectrum from the extremely positive to the extremely negative (Zumbrunn et al, 2016), and this can impact feedback effectiveness. Students with positive perceptions of feedback tend to have higher self-efficacy and are often motivated to attempt difficult tasks. Whereas, students who experience negative perceptions often have difficulty engaging with the feedback (Ekholm et al, 2015). When students experience an adverse emotional reaction to feedback it can impair their cognitive processing, and as a result their receptiveness may be limited, which may also impact their motivation and willingness to act upon the feedback provided (Ryan and Henderson, 2018). A study by Zumbrunn et al (2016) found that while the majority of high-school students (years 7-9) liked to receive feedback, in those that did not, nearly a quarter of them cited negative emotions in response to receiving feedback, and, for some, the affective response was severe enough to result in students avoiding feedback.

Methods of Increasing Positive Perceptions

Based on the importance of students' perceptions to feedback, a number of studies have looked at methods of improving feedback perceptions. One method that has been found to be successful is allowing students to share their desired feedback practices in advance (Agricola et al, 2019). This builds on the observations by Ekholm et al (2015) that the provision of preferred feedback, either written comments or dialogue, can improve the students' emotional response to the feedback. This is important, as although some common

themes in students' feedback perceptions can be identified, these do vary between students (Pitt and Norton, 2017).

A second recommendation for improving students' perceptions involves the use of feedback conversations or dialogue regarding feedback, which can result in students perceiving the feedback as being more useful (Agricola et al, 2019). These interactions may increase positive perceptions by allowing for the correction of misinterpretation and misunderstanding of written feedback (Pitt and Norton, 2017), as well as allowing students to integrate the feedback into their learning (Mulliner and Tucker, 2017). Therefore, increasing the volume of feedback will not be useful unless dialogue opportunities are presented (Bloxham and Campbell, 2010). However, it is important to consider that this dialogue is not to replace written feedback, but rather to enhance the feedback and make it more accessible to the students (Mulliner and Tucker, 2017). This is supported by a study by Agricola et al (2019) who found that students who received verbal and written feedback, compared to written feedback alone, perceived most aspects of teacher feedback more positively. Similarly, Van der Schaaf et al (2013) found that students who had feedback dialogue with teachers perceived the feedback as more useful, although, interestingly, they found no difference in perceptions of quality, quantity or timing. Utility can be considered one of the four key aspects that influences students' perceptions of feedback (King et al, 2009) and this has been supported by Price et al (2010) who found that perceptions of relevance and applicability of feedback were key factors in students' engagement with the feedback. A final benefit to dialogue in feedback was identified by Tan et al (2019), who found that high-school students, perceived teachers' non-verbal listening skills, such as eye-contact and head nodding, positively and found that it supported and facilitated learning through feedback. Feedback dialogues can also be considered to be positive for teachers, as they facilitate the checking of students' understanding, as well as providing the opportunity to explain their feedback (Van der Schaaf et al, 2013).

A further consideration for fostering positive perceptions of feedback, relates to the integration of feedback within the learning process. A study by Gamlem and Smith (2013) found that giving students time to work on feedback and receive follow ups, resulted in positive perceptions that the feedback enhanced learning. A final focus for improvement of student perceptions involves the education of students with regards to

feedback methods, their design, and how to interpret and use feedback (Dawson et al, 2019; Kerr, 2017), which may be considered as students' feedback literacy (Molloy et al, 2020). These ideas build on those by Zumbrunn et al (2016) who identify that familiarising students with feedback processes and drawing attention to the benefits of feedback can be done through class activities, and help students to view feedback positively.

When considering changes to a feedback system, it is important that students are involved with the decision, this allows students to develop agency within the process and to empower them (Francis, Millington and Cederlöf, 2019). Furthermore, within the concept of student-centred feedback, the students can be considered the main actors, and their understanding of feedback and what makes it effective, are necessary within the feedback design. By increasing student agency within feedback, this can also hopefully redress the issue of the teacher being viewed as a power figure within the feedback exchange, which is often the case in monologic feedback, which can be detrimental to how the feedback is received (Kerr, 2017). This is supported by Tan et al (2019) who found that high school students who engaged in dialogic feedback felt more agentic and engaged as a result of the dialogue.

A key consideration regarding feedback, particularly when working in an international setting, is how students from different cultural and educational backgrounds perceive feedback. For example, students from collectivist cultures often prefer implicit and indirect feedback, with limited self-level feedback, and more group-level feedback. Whereas students from individualistic or Socratic cultures prefer more direct feedback, particularly relating to effort (Hattie and Gan, 2011). Furthermore, a large-scale study by Ryan and Henderson (2018) found that emotional responses to feedback were also varied, finding that international students were more likely to perceive feedback comments as upsetting or too critical, resulting in more negative emotional responses to feedback. Furthermore, international students were more likely to agree that feedback comments discouraged them from their studies. Interestingly, although the authors initially considered that linguistic barriers may be a factor, this pattern was observed even when accounting for second language learning, suggesting that cultural differences are a key factor in the emotional response of students. Although this study was conducted with university students, it is an interesting observation, and

therefore must be considered when studying students' perceptions of feedback within an international school, composed of multiple cultural backgrounds, as it does indicate that a 'one size fits all' approach to feedback may not be successful.

Comparing Staff and Student Perceptions

Numerous studies have looked at how teachers and students view feedback provision (Adams et al, 2020; Chalmers et al, 2018; Li and De Luca, 2014), however, there are only a few studies that compare perceptions of feedback from both staff and students within the same setting (Mulliner and Tucker, 2017). One area in which staff and students show similar views, relates to the provision of verbal feedback, with teachers identifying that the provision of verbal feedback allowed them to 'close the circle' and to check that feedback had been understood (Chalmers et al, 2018). This is in line with other studies that have identified that students also prefer verbal feedback (Francis et al, 2019; Mulliner and Tucker, 2017). A further area of similarity was found by Mulliner and Tucker (2017), with both staff and students considering that a mark without a comment is insufficient, in line with the findings by Gamlem and Smith (2013). The key area in which staff and student perceptions differ, relates to students' use of feedback. A number of studies indicate a belief by teachers that students do not use the feedback provided (Carless, 2006; Higgins, Hartley and Skelton, 2010). This difference in perception was also found by Mulliner and Tucker (2017), in their study of university students, 96% of students stated that they always access feedback, with 93% reporting that they always read it. This is in contrast to staff opinions of 38% and 35% agreeing with these statements. A second area of conflict relates to staff and student perceptions of the usefulness of the feedback provided. In a study of university students and tutors, Carless (2006) found that tutors believed that their feedback was more useful than reported by the students. This was supported by a study by Price et al (2010) which made similar findings.

From these studies, it indicates that students and teachers often have divergent perceptions of assessment and feedback (Li and De Luca, 2014), with teachers often considering their feedback to be more useful and effective than students do, and that staff consider students to make less use of feedback than they report (Carless, 2006; Gamlem and Smith, 2013; Mulliner and Tucker, 2017). Some of these differences may be

attributed to the fact that students may be given feedback, but not recognise it as such (Poulos and Mahony, 2008). Without alignment of perceptions and expectations, feedback practice will potentially continue to be viewed as ineffective and a source of dissatisfaction (Francis et al, 2019), with these different views acting as barriers that can distort potential learning (Carless, 2006).

Challenges to Successful Implementation

When considering the challenges to the effective use of feedback within schools, it is important to consider the two key actors within feedback, the teachers and the students. In considering barriers to staff effectively implementing feedback, the first factor that is frequently raised is time demand, which is attributed to being one of the key reasons for infrequent implementation (Elliott et al, 2016; Wylie and Lyon, 2015). Time demands are then compounded by the pressures of grading and accountability which may limit the implementation of formative feedback (Leirhaug, 2016). The Department of Education (2019) workload survey identified marking as the single biggest contributor to unsustainable workloads. It is therefore imperative that feedback is done as efficiently as possible (Elliott et al, 2016), and further this lends itself to the position of Wiliam (2018) who proposes the approach of mark less, mark better.

The second barrier to staff providing effective feedback is the judgement staff make about their feedback practices, with there often being a difference between teachers' knowledge of feedback and their implementation of this into practice. Sadler is scathing in his perception of staff judgement of feedback stating that 'judging from assessment practices common in many subjects, information generated without participation of the learner, but made available to the learner from time to time (as intelligence) is evidently assumed to satisfy' (Sadler, 1989, p.121). Although the quote from Sadler is dated, it is clear from more recent studies that there continues to often be a gap between what staff believe they are doing and what students feel like they are receiving (Chalmers et al, 2018). A study by Dawson et al (2019), found that there was a scarcity of feedback designs that were intended to make students actors in their own feedback, and despite teachers describing students as active learners, their reported feedback did not describe agentic, student driven practices. This is supported in the literature review by Haughney, Wakeman and Hart (2020) which found in a review of 70 studies between 2000 and 2018, that even when teachers understand the

elements of high-quality feedback, the implementation of these remain elusive. Further to this, teachers appear to often believe that their feedback is more useful than students believe it to be (Carless, 2006), with observations made that some teachers confuse quality with quantity, judging the effectiveness of feedback by the amount given (Price et al, 2010).

When considering ways to overcome these issues, the primary consideration must be the need to provide staff with assistance and training, both in using good assessment instruments, and in developing the skills to interpret and respond to results of assessment in a formative way (Black and Wiliam, 1998). It can be considered that 'giving quality feedback is a highly developed skill requiring a focused and deliberate approach' (Knight, 2003, p.16), and the Education Endowment Fund (2018) identify that gains can be achieved from feedback, but only if supported by professional development. This professional development can also persuade staff of the value of feedback practices (Brown et al, 2012), as it has been observed that teachers are often reluctant to try new strategies (Pollock, 2012).

After feedback has been provided, it is then subject to interpretation by students, as feedback is not only differently given, but also differently received (Hattie and Gan, 2011). It is important to remember that feedback is filtered through a students' perceptions which include prior knowledge, experience, and motivation (Brookhart, 2008). Once a student has received feedback they may choose to not read the comments, possibly due to focusing on the grade received (Butler, 1988; Pollock, 2012), or it is possible that they may not act on the comments, even if they are read (Higgins et al, 2010). The reasons for not acting on feedback may be varied. It may be that the comments lack specific or actionable advice (Carless et al, 2011), they may not understand the comments due to the level of academic language used (Carless, 2006), or they may not know how to apply the feedback (Harris, Brown and Dargusch, 2018). Dialogue can support students in these situations, but this may be limited by the need for students to seek it, as students may avoid asking for help due to embarrassment or due to perceived threats to self-esteem (Hattie and Timperley. 2007). This has been supported by Tan et al (2019) who highlighted student discomfort at initiating feedback dialogue, therefore, it is important that teachers are available to provide feedback. In addition, students make an emotional investment in their work, so their self-perception may be threatened by negative feedback

(Carless, 2006) and furthermore, use of judgemental language may impact students' receptiveness to the feedback (Tan et al, 2019).

Reasons for failing to act on feedback may also be due to students not recognising it as feedback (Irons, 2008), as students may have different ideas of what feedback is, therefore they may be receiving it, but not recognising it as such. In their study, Poulos and Mahony (2008) found that students, do not have a homogenous view of what effective feedback is and how to use it. Student workload is also an important consideration, students may be prioritising their workload and choosing to focus on something they deem more important. This is supported by Harris et al (2018) who found that students may choose to 'ignore' whole subject areas. This is of particular consideration within a system such as the International Baccalaureate, where there are compulsory subject areas which may not reflect students' interests or priorities. It is clear from this, that there are many reasons for students not acting on feedback given, and the list discussed here is, in itself, not exhaustive. However, regardless of the reasons, if a student is not acting on the comments given, then the feedback is not realising its full potential to become an integral part of the learning process (Higgins et al, 2010).

Following the literature review, this study will aim to answer the following research questions:

1. What are the current feedback practices within post-16 teaching?
2. In what ways and to what extent have students' perceptions of feedback changed following the intervention?
3. To what extent is there alignment between staff and student perceptions of feedback provision?
4. What are staff perceptions of the impact of the feedback policy?

3 Methodology

This study is a mixed methods investigation into staff and student perceptions of feedback within post-16 teaching, and their changes in perceptions following the intervention, the introduction of a post-16 feedback policy. The development of the feedback policy was through collaboration, incorporating students' views as well as collaborating with staff. The aim was to produce a cross-curricular policy, allowing for variations in teaching across the disciplines, in addition to meeting the needs of both the students and staff.

Research Approach

For this study, I carried out a piece of practitioner research, as this can be considered to be 'any research carried out by teachers and other educational professionals. . . into aspects of their work' (Burton and Bartlett, 2005, p.44). When considering the type of research carried out, some authors use practitioner research and action research interchangeably (Menter et al, 2011). However, Denscombe (2010) identifies that they are not necessarily the same thing, with action research defined by Cohen and Manion (1994) as 'a small-scale intervention in the functioning of the real world and a close examination of the effects of such an intervention' (p.186), and is considered to be made up of cycles including feedback loops. One area for discussion is the number of loops that make up the research, with Christ (2010) considering that, for the research to be considered action research, the cycle should be repeated a minimum of 3 times. Action research can aim to achieve three possible outcomes relating to 'improving practice; improving understanding of practice; improving the situation in which practice takes place' (Atkins and Wallace, 2012, p.127). This study aims to look at the first two outcomes of action research. However, based on the requirements outlined, my practitioner research would not be considered action research, as although it focuses on practice, is part of practice, and incorporates a feedback loop, it does not contain multiple loops.

This study carried out a mixed methods approach, defined by Tashakkori and Creswell (2007) as 'research in which the investigator collects and analyses data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods' (p.4). This therefore allows for the selection of the best methodological tools to answer the research questions (Teddlie and Tashakkori, 2010). One advantage of mixed methods is an increased confidence in the accuracy of findings. By using different methods to

investigate the same subject, it provides a fuller account of the situation, as well as allowing the researcher to benefit from the strengths of a particular method, without suffering the weaknesses (Denscombe, 2010). This study used quantitative questionnaires, which allowed for the collection of data from a wider range of students than would be possible using qualitative techniques alone. Interviews would then obtain a more in-depth picture to allow for further qualitative analysis of students' perceptions. The aim was to have an even balance between the qualitative and quantitative analysis, although this is not necessarily needed for a mixed-methods study (Denscombe, 2010). It was hoped that by using this method, I would be able to obtain a detailed picture of feedback within post-16 teaching, and students' perceptions of it.

Participants

The sample selection for this study was the entire IB cohort, due to the small cohort size. This equated to 36 students across the two year groups, with 20 students in Year 12 and 16 in Year 13, with an average age at the start of the study of 17 years and 3 months. Of the cohort, 19 were female and 17 were male. The group was made up of 18 nationalities, with no more than 3 members from any one country, and was largely boarding, with only five day students. Within the cohort 89% of the students were EAL (English as an Additional Language), although all students were required to have a level of English to allow them to access the teaching. The IB teaching group was made up of 23 teachers, of which 4 were part time, and they covered all of the IB subject groups, with the largest group being composed of literature and language acquisition teachers, reflecting the large number of languages taught within the IB.

Research Design

The research design for this investigation is a pre-test/post-test design (Oppenheim, 1992). A base-line measurement of staff and student perceptions of feedback was taken, and then measured again after the intervention. Due to the small sample size of staff and students, a control group was not appropriate, and indeed some studies have shown that when two groups are taught in parallel by the same teacher, dissemination of ideas and strategies occurs, which can impact the results (Black et al, 2003). The timeline for the research can be seen in figure 3.1, with the intervention taking place during the winter term.

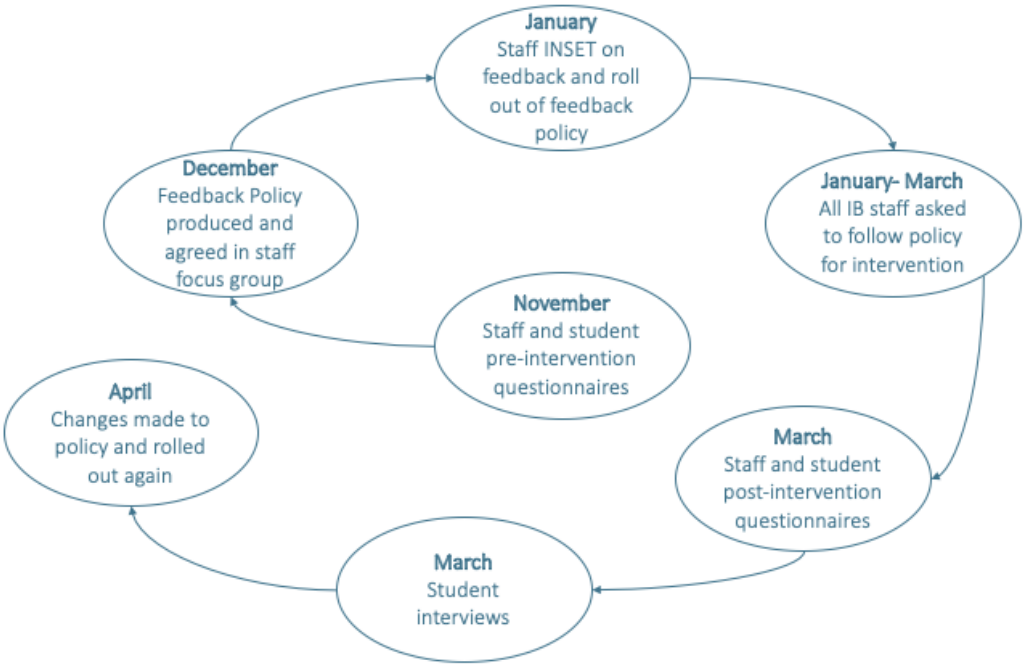

Figure 3.1: timeline of research and intervention.

Methods

Questionnaires

Questionnaires were used for staff and students to obtain information both prior to the start of the study and following the intervention. The questionnaires were made up of predominantly closed questions in which the respondent had a choice of responses provided, to allow for patterns to be observed, and comparisons to be made between the data (Cohen, Manion and Morrison, 2007). Closed questions were also used as they have been shown to reduce the time required for answering, as well as reducing the difficulty in responding to the questions, as open questions are considered to be harder to answer (Oppenheim, 1992). Furthermore, closed questions do not discriminate against how articulate the respondent is, although there is a risk of bias if the categories are not exhaustive (Cohen et al, 2007). The majority of the closed questions used a 5-point Likert scale, these are considered to be useful at obtaining attitudes, perceptions, and opinions by building in sensitivity to the responses while still generating numerical data (Cohen et al, 2007). They are commonly used in action research to determine how best to modify an intervention to meet students' needs (Christ, 2010). There are limitations to using Likert scales, as studies suggest that respondents may avoid selecting the extremes, and therefore at times a 7-point scale may be considered. However, I felt that this added an unrealistic nuance between the points. Likert scales

can be allocated with an odd or even number on the scale, an odd scale number risks the respondent selecting the mid-point of the scale. The removal of this forces the selection of either a positive or negative response (Cohen et al, 2007). However, I felt that by including a mid-point this ensured that an exhaustive range of options was provided, and that it was important that respondents had this option should they choose to use it. However, the reason for a respondent selecting a mid-answer will be unknown, as it may be due to lack of knowledge or laziness (Oppenheim, 1992).

Staff Interview Design

The pre-intervention staff questionnaire (Appendix 1), set out to answer the research questions as shown in Figure 3.2. The main aim of the questionnaire was to identify staff views of the practices that constitute feedback, as well as the reporting of their current feedback practices. The initial questions aimed to identify which definition of feedback they felt reflected their practice, as well as which practices constitute feedback (Brown et al, 2012). The second part of the questionnaire related to their feedback practices and were taken from the study by Elliott et al (2016). As well as allowing for the identification of current feedback practices, the questionnaire aimed to look for alignment between staff and student perceptions. The post-intervention questionnaire (Appendix 2) was developed using a number of similar questions from the pre-intervention questionnaire, to allow for changes in views and self-reported practices to be identified. The final series of questions related to staff implementation of feedback, and were developed to take into account some of the key challenges to successful implementation, such as workload demand and perceived effectiveness, and to allow for the answering of research question 4.

Student Questionnaire Design

The pre-intervention student questionnaire (Appendix 3) set out to identify students' perceptions of the current feedback practices that they received within IB teaching. This used a modified version of the questions from Elliott et al (2016), which were re-worded to allow for student understanding and to make them student-centric. As the aim for the intervention is for a policy to be developed based on current good practice, as identified within the literature, as well as on students' preferences. The students were asked to identify which types of feedback practice they consider to be useful, and the questionnaire included an

open-ended question to ensure that the answers were exhaustive (Cohen et al, 2007). The second part of the questionnaire contained questions to obtain students' perceptions and views on the usefulness of the feedback they received, and how they acted upon their feedback. These questions were taken from a range of literature (Carless 2006; King et al, 2009) and aimed to answer research questions 2 and 3. The post-intervention questionnaire (Appendix 4) used the same questions as the pre-intervention questionnaire in order to gauge any changes in perceptions and use of feedback practices.

Research question:	Staff		Students	
	Pre-intervention questionnaire	Post-intervention questionnaire	Pre-intervention questionnaire	Post-intervention questionnaire
What are the current feedback practices within post-16 teaching?	2, 3, 4, 5, 6		3, 6, 7	
In what ways and to what extent have students' perceptions of feedback changed following the intervention			6, 7	3, 4, 5
To what extent is there alignment between staff and student perceptions of feedback provision?	4, 5, 6	2, 3, 4, 5	3	3, 4, 5
What are staff perceptions of the impact of the feedback policy?		6 – 15		

Figure 3.2: Table showing the mapping of the research questions to the interview questions

Interviews

Although one-to-one interviews are the most common type of research interview, having the advantage that the opinions and views are clearly from one person, they do limit the number of views that can be obtained (Denscombe, 2010). Therefore, the decision was made to carry out group interviews to obtain more views, and to hopefully increase the representativeness of the data. Furthermore, it can be hoped that in group interviews lively discussion will spark new ideas from the participants (Oppenheim, 1992). A semi-structured interview type was selected, with a list of questions and issues to be addressed (Appendix 5). However, flexibility was allowed in terms of the order in which they were considered, as this would allow

the interviewees to develop ideas and speak more widely, as well as to allow follow up on angles that are considered important (Brinkmann, 2014). The reason for completing interviews following the questionnaire was that by using open-ended questions, the responses can demonstrate a greater richness and spontaneity compared to questionnaires alone (Oppenheim, 1992). The interview questions set out to mainly address research questions 2 and 3. The selection of questions for the interview, included several that were taken from other studies such as '*What do you find useful/ appreciate when getting feedback from teachers? / What do you appreciate least when getting feedback from teachers?*' (Gamlem and Smith, 2013, p.169). While other questions were aimed directly at the feedback policy developed, such as '*How frequently do you receive targets on marked work? Are they useful and easy to understand?*'.

Ethical Considerations

This study has followed the BERA Ethical Guidelines (2018), and as it was carried out within the *modus operandi*, with the research not differing from everyday practice (Farrimond, 2017), ethical approval was therefore sought using CUREC 1a (Appendix 6). A letter of consent for the research was obtained from the Head Teacher (Appendix 7). In addition, consent was sought from students at the start of the study, this was done to increase openness and to empower the students within the research (Seibar, 1992). One key aspect of practitioner research is the issue of compromising students' ability to autonomously make a decision to participate in the study, when the researcher is in a position of power, such as a teacher. Moreover, as I am the IB Coordinator, this could potentially further increase the already asymmetric relationship, as students might perceive participation to be expected of them (Farrimond, 2017). To address this, students were clearly informed that their participation was optional, and the confidentiality of responses was stressed to the students. The responses were obtained using an online survey to further allow for anonymity, and all responses during interviews would be anonymised. In addition to this, I made the decision to not ask students about their nationality or first language, despite some studies suggesting a link between this and feedback perceptions (Ryan and Henderson, 2018), as this would allow for the identification of some students, due to them being the only member of their nationality within the IB cohort.

Other considerations related to ensuring that staff and students were not adversely impacted by the time taken for the intervention and research. Therefore, to ensure that this was not the case for students, the questionnaires were delivered during IB assembly time, in order to not impact teaching time. Regarding time impact on staff, one of the reasons for selecting predominantly closed questions for the questionnaire was to reduce the time taken for completion. The INSET session on feedback took place during the start of term programme, so as to not require teachers to attend once the busy school term had started. The interviews were also planned to be conducted outside of lesson time, although within the school day, to further ensure that participation did not negatively impact the students, in terms of demand on their time.

Feedback Policy Intervention

This was a collaborative study, and collaboration was incorporated into the study at several stages. These included the use of a focus group of staff that worked collaboratively on producing the feedback policy, the use of INSET time to provide a session on feedback, and the teaching staff who were asked to incorporate the policy into their practice and provide feedback on it. Students could also be considered to be collaborators in this research, as their views were sought as a starting point for the development of the feedback policy, and their opinions were sought as to its successful implementation.

Collaborative Development of Feedback Policy

Following the pre-intervention questionnaires, the feedback policy was developed by a staff focus group. Volunteers were asked for, and representatives from each of the six IB teaching groups were selected, this was important as feedback across the disciplines is very different, and the aim was to develop a policy that suited all teaching subjects. In total eight members of staff were in the focus group. The aim of the group was to decide on a school definition of feedback and to decide on what the minimum best practice should be. Students' perceptions were also included, as they were asked their views on useful feedback in the pre-intervention questionnaire (Figure 3.3). From this it can be seen that student views of feedback were largely in line with the literature. The focus group identified five key areas of feedback to be incorporated into the policy:

- Students should be given the opportunity to act on comment only feedback at least twice every half term.
- Wherever possible marking rubrics, using examination criteria, should be used to provide clear guidance to students about the desired outcomes.
- Targets should be provided for improving work when appropriate. Ideally a maximum of three targets should be provided, and these should be clear, specific, and actionable on future work.
- Dialogue is often important to support students' understanding of the feedback provided. Students should be given the opportunity to discuss feedback when necessary.
- Feedback should be provided on task, process, and self-regulation.

After the policy had been agreed within the group it was then reviewed by the studies committee and the Director of Studies before it was published (Appendix 8).

	Not useful	Somewhat useful	Very useful
A score for work (e.g. 90%)	5.71%	45.71%	48.57%
A score and a comment for work	0.00%	14.29%	85.71%
A comment only	8.57%	80.00%	11.43%
Targets for future work	5.71%	34.29%	60.00%
Having time to talk through feedback with your teacher	0.00%	22.86%	77.14%
Receiving feedback partway through a task before submitting it	8.57%	25.71%	65.71%

Figure 3.3: Students' responses to the question: *Thinking about what type of feedback you find most useful, please indicate how useful you find each of these.*

By collaborating with staff across the range of IB subjects, this allowed for discussion of the key ideas of feedback, as well as reviewing the practicality of the intervention strategies within different departments. Furthermore, due to the small teaching body within the IB, the focus group represented 35% of the IB teachers, and therefore an additional benefit was the sense of agency and involvement with the intervention within the staff body. This involvement was then built on within the INSET session, when the feedback policy was published to the staff.

Feedback INSET

It has been frequently identified that for changes to occur within schools, particularly relating to feedback and formative assessment, it requires the support of staff by training, as well as outlining the benefits of the practice (Black and Wiliam, 1998; Education Endowment Fund, 2018). The aim of the feedback INSET was to provide staff with guidance on improving feedback practice without increasing workload, and to look at methods of embedding good feedback practice within teaching (Appendix 9). The feedback session was attended by all senior school staff and the new policy was shared with staff. As staff were collaborators in the intervention, by implementing the changes within the policy, this was an important opportunity to ensure that they were familiar with the policy and understood how to action the expectations within their practice.

Non-Completion of Method Due to Covid-19

Due to Covid-19, the school closed one week before the end of the winter term, the announcement was made by the Swiss government on Friday afternoon that schools would be closed from the following Monday. The final week of term was when I intended to send out the post-intervention questionnaires and conduct the interviews with students. As a result, the questionnaires to staff and students were sent out after we had started distance learning, which resulted in a number of challenges. As a boarding school our students had to travel all over the world to get home, often with difficulties due to flight cancellations. In addition, staff had to start moving to online lesson delivery. Both of these factors may be reasons why the response rate for both staff and student questionnaires decreased, and the completion rate decreased further as well (Figure 3.4), particularly for the staff. This is understandable as staff were having to move to online lesson delivery which would have taken up a significant amount of time in terms of planning.

	Staff (n = 23)		Student (n = 36)	
	Pre-intervention questionnaire	Post-intervention questionnaire	Pre-intervention questionnaire	Post-intervention questionnaire
Response rate (%)	91	74	97	83
Completed (%)	91	57	93	71

Figure 3.4: Response and completion rates for the questionnaires.

The interviews were cancelled, as conducting them online presented a number of difficulties, and I felt that the impact of the school closure and travelling home would not have been conducive to good interviews. Therefore, two questions were added to the end of the student questionnaire asking them how feedback had changed following the intervention, as well as inviting them to provide any additional information regarding how to improve feedback. As a result of this, the lack of interview data impacted the analysis of the findings, as the study is now largely quantitative, and the ability to draw nuanced conclusions and to explain findings is now more limited. The review of the policy following the intervention has been postponed until next academic year, and so it will be reviewed, modified, and re-published in the autumn term, as the focus of the studies department has been the implementation of distance learning, as well as handling the challenges presented by the cancellation of the IB and iGCSE examinations.

Data Analysis

Quantitative Analysis

In order to obtain data that is ordinal from the questionnaires, 5-point Likert scales were used for the majority of the questions. However, as the data does not have a metric, it therefore cannot be considered that the data points are equally distributed, and so it is not appropriate to use averages to compare the data sets (Oppenheim, 1992). Instead, Mann-Whitney U tests were conducted to compare data using SPSS Statistics, as it looks at the frequency of scoring in ordinal data sets (Cohen et al, 2007). The Mann-Whitney U test identified whether there were statistical differences between the data sets. However, as it does not indicate what the difference is, once a statistically significant difference was identified, the data was compared using cross-tabulation tables in order to identify the difference. Although the data was compared using a pre- and post-intervention questionnaire, conducted with the same students and staff, due to the questionnaires being completed anonymously, it was not possible to match the data for comparison, and therefore the Wilcoxan test could not be used.

Qualitative Analysis

Due to not completing the interviews, this section outlines how the qualitative analysis would have been conducted. Once the interviews were conducted and transcribed, the transcripts would be analysed using content analysis, this is defined by Krippendorf (2004) as 'a research technique for making replicable and valid inferences from text on the contexts of their use' (p.18). Content analysis can be considered to have three main forms: basic, interpretive, and qualitative (Drisko and Maschi, 2015). Interpretive content analysis has a particular focus on the context and variations in emphasis within the text, and therefore allows for the analysis of manifest and descriptive content. Qualitative content analysis, in addition, considers latent and interpretive content (Graneheim, Lindgren and Lundman, 2017), therefore allowing for the exploration of complexity within communications, and so was the type of content analysis selected for this study.

For the purposes of coding, an abductive approach was planned, this is a combination of inductive and deductive approaches, and is used as a way to discover meaningful underlying patterns (Graneheim et al, 2017). This approach is commonly used with newly generated interview data, where open-ended questions allow for a wide range of responses (Drisko and Maschi, 2015). The data would have been divided into categories, such as opinions, attitudes, and perceptions. Themes may also have been identified, as unifying ideas running through several categories, which can bring meaning to recurrent topics (Graneheim et al, 2017). When the data was presented quotes would have been used to show the key categories, taking care to ensure that they were representative (Drisko and Maschi, 2015). The use of these quotations is considered important to indicate the trustworthiness of the results, as it is important that the findings reflect the participants' voice (Elo et al, 2014).

4 Findings and Discussions

In the following sections I will discuss the findings relating to staff and student perceptions of feedback. In order to ensure that the research questions are fully addressed, the findings are discussed in line with each question, rather than discussing the findings of the questionnaires in isolation. The full set of responses to the questionnaires can be found in Appendix 10. Following the discussion of the findings, the role that collaboration played in this study will then be reviewed.

What are the current feedback practices within post-16 teaching?

When seeking to identify current feedback practices within post-16 teaching, the first stage was to find out what staff perceive as feedback. Staff were asked to select which factors they identified as feedback (Figure 4.1). A wide range of responses were given, with staff on average selecting 10 statements. These statements can be considered to be divided into those relating to formative feedback (shaded statements, Figure 4.1) and those that are more evaluative or based on feedback to self (non-shaded statements, Figure 4.1). From this, it can be seen that while grading is considered feedback by 68% of staff, overall, staff appear to view feedback as largely formative in nature, with the four most frequently identified forms of feedback not making reference to grading (Wylie and Lyon, 2015). Further to this, a number of the points identified are in line with good feedback practices as identified by the literature review, with *'Discussions with students about their work'* identified as feedback by 91% of staff and '*Spoken comments'* identified by 86%. Evaluative feedback such as ticks, crosses, and stickers were identified as feedback practices by fewer staff (32%).

		Responses (n = 22)
1	Reports to students' parents	54.55%
2	Advice or comments that students give each other	54.55%
3	Information on the quality of work relative to standards, norms, or expectations	77.27%
4	Grades, scores, or marks on student work	68.18%
5	Suggestions or comments from other students	59.09%
6	Praising students for how hard they have worked	68.18%
7	Detailed written comments	81.82%
8	Spoken comments	86.36%
9	Ticks or crosses on student work	31.82%
10	Giving correct answers when students answer incorrectly	31.82%
11	Parent-teacher conferences	45.45%
12	Comments students give to themselves	40.91%
13	Instant responses to students' classroom work	68.18%
14	Hints, tips, and reminders written on student work	72.73%
15	Stickers, stamps, or smiley faces on student work	31.82%
16	Discussions with students about their work.	90.91%

Figure 4.1: Table of staff responses to the question: *When I think of feedback, I think of the following practices.*

Staff were then asked to identify which definition of feedback they agreed with (Figure 4.2). As observed by Knight (2003), it can be seen that there is no consensus about the definition of feedback, with all definitions being selected by one or more teachers. Knight identifies that a lack of common definition can hinder the development of unifying principles regarding the giving of feedback within a school. From staff responses it is of note that the definition selected by the most staff, is the broadest definition by Askew and Lodge (2000) 'all dialogue to support learning in both formal and informal situations' (p.44). However, this definition makes no reference to the student improving performance and learning. Therefore, for the purposes of this study and the feedback policy, the definition that will be used is that feedback 'provides information to learners about their performance and how to improve it.' (Elliott et al, 2016). From the responses to these two initial questions, it can be seen that feedback can be considered as conceptually complex and that staff within the school have a wide range of views on what feedback is, and how to define it.

	Responses (n = 22)
Information provided by an agent (e.g. teacher, peer, book, parent, self, experience) regarding some aspect of one's performance or understanding.	4.55%
Information communicated to the learner that is intended to modify his or her thinking or behaviour for the purpose of improving learning.	22.73%
All dialogue to support learning in both formal and informal situations.	27.27%
Information given to the learner or teacher about the learner's performance relative to learning goals or outcomes.	13.64%
Feedback is information about the gap between the actual level and the reference level, which is used to alter the gap in some way	9.09%
Provides information to learners about their performance and how to improve it.	22.73%

Figure 4.2: Table showing staff selection of feedback definitions in response to the question *Please select which of the following definitions you think best defines feedback.*

In order to obtain information regarding current feedback practices, staff and students were asked to identify the frequency with which they used or received a range of different practices, as used by Elliott et al (2016). In line with the selection of the statement '*Grades, scores, or marks on student work'* as a key feedback strategy (Figure 4.1), it has been reinforced by reported practice (Figure 4.3), as all staff report putting grades on at least some of the marked work. Students report similar levels of grading on their work. As a course with an external summative assessment system, it is to be expected that grading is used within feedback, and this is also in line with the schools' demand for data recording (Leirhaug, 2016).

To look at grade provision in more detail, staff were asked whether they provided qualitative comments with or without grades (Figure 4.3). It can be seen that when grades are provided, staff report also providing a written comment, although it is worth noting that it is not possible to know the quality of the comments. In contrast, the provision of comment only feedback can be seen to be used less frequently, although 42% of staff still report providing this on some of their marking. This provides an interesting contrast to students' perceptions of feedback provision at the start of the intervention, as no students reported receiving comments on all work. Although it is worth noting that the question for students does not indicate the type of work, and therefore students may be thinking about notes and classwork, rather than assessed work. However, it appears that students do not often receive comment only marking, with 26% reporting that they never receive it, and 34% reporting that it occurs on only a few pieces of work.

When asked about the identification and correction of errors, staff provided a wide range of responses. From these it can be seen that the majority of staff indicate that they identify mistakes but do not correct them most or all of the time, and 38% of staff report that they correct errors on few or none of the pieces of work they mark. When looking at the data more closely, and comparing responses for different subject areas, the arts and science teachers present the clearest pattern in their responses. These differences in feedback between the teaching disciplines are in line with observations by Tan et al (2019), who identified that some subjects may have greater opportunities for discussion than others. The arts teachers indicate that they always identify mistakes without correcting them. When comparing this to the literature on formative feedback within the arts, this is supported, as it suggests that most feedback commonly occurs in face-to-face communication, as the concepts are difficult to capture in a concise comment (Brown and Fridmann, 2019). Further to this, students are largely working on the development of processes and skills which will be applied to future work. Therefore, the arts lend themselves to formative feedback as it is often informal and ongoing, with students reviewing and talking about their work in progress (Andrade, Hefferen and Palma, 2014).

Within science, all teachers reported correcting work in most or all cases, and only in a few cases do they report identify mistakes without correcting them. This may in part be due to the prevalence of student misconceptions in science, which must be addressed to promote conceptual change and meaningful learning (Halim, Finkestaedt-Quin, Olson, Ruggles-Gere & Shultz, 2018), with Wendt and Rockinson-Szapkiw (2014) observing that 'acquisition of knowledge and mastery of scientific concepts may only be attained when scientific misconceptions are identified and dispelled' (p.1104). Furthermore, while misconceptions can, and should, be addressed in a formative manner, allowing for discussion, studies have found that science teachers often put an emphasis on providing correct information for students, demonstrating a transmissionist notion of teaching (Larkin, 2012). This resonates with the observations by Price et al (2010) that teachers' beliefs about learning and the learning process will influence the role feedback plays in their teaching, depending on whether they focus on content, or whether they view themselves as facilitators. Furthermore, task planning is important to ensure that appropriate feedback can be provided (Gipps, 2012).

It is possible that this is an area that requires improvement within science, as overuse of task level feedback, which this may imply, would therefore indicate that the activities provided are largely superficial (Brooks et al, 2019).

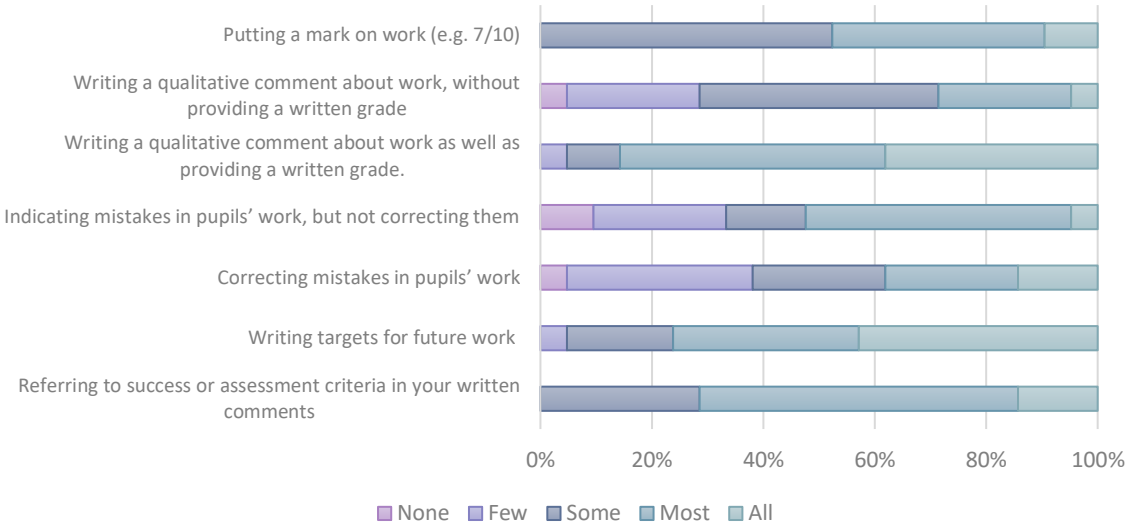

Figure 4.3: Graph showing pre-intervention questionnaire responses to the question: *How much, if at all, do you use the following feedback practices None/Few/Some/Most/All of the pieces of work I mark*.

In reporting of use of targets in feedback 76% of staff reported providing targets for most or all of the work marked (Figure 4.3). Targets are considered a key aspect of feedback by providing the answer to the question 'where to next?' (Hattie and Timperley, 2007, p.86). Despite the high level of staff reporting of targets, students have a lower view of this, indicating that only 23% receive targets most of the time. Similarly, 71% of staff report referencing success or assessment criteria in most or all of their marking. As with targets, students have a lower view, with only 37% reporting that they receive reference to success or assessment criteria most or all of the time. The final statement to discuss relates to the provision of feedback on process level, and it is notable that staff report using this type of feedback less than other types. Feedback on process level is important, as it allows for the transfer of skills from one task to another, as well as allowing students to start to develop self-assessment skills (Hattie and Timperley, 2007). The lower reported use of this feedback type has also been found in other studies, which found that the majority of feedback is provided at task level (Knight, 2003), with students also reporting that this is the most common type of feedback they receive (Gamlem and Smith, 2013).

In what ways and to what extent have students' perceptions of feedback changed following the intervention?

When considering students' feedback perceptions, the first focus is on their perceptions of the provision of feedback. When comparing the data across the pre-intervention and post-intervention questionnaires, some sets of data remained similar, such as receiving marks on work and reference to success or assessment criteria. However, some statements did show differences in results, which can be seen in Figure 4.4. These show that there has been an increase in students reporting receiving written comments about their work, with over 50% of students reporting that they receive them on most or all of their work during the intervention. Linked to this, a change can also be seen in the receiving of comment only feedback, with an increasing number of students reporting that they receive this on more of their work. The statement that appears to have the largest change, when looking at Figure 4.4, relates to students having a chance to respond to feedback, with 56% of students reporting a chance to respond to feedback in most or all cases, compared to 37% in the pre-intervention questionnaire.

In order to see whether any changes in reported feedback practice were significant, a Mann-Whitney U test was conducted to compare the responses for each statement. This showed that the majority of the responses are not significantly different, with one exception. The statement '*A chance to respond to feedback given*' was significantly different ($U = 322.500$, $\rho = 0.027$). This indicates progress in a key area of feedback within post-16 teaching, as opportunities to respond to feedback, and time allowed for this, can be considered essential within formative feedback in order for it to be useful (Brookhart, 2008). If students are not given the opportunity to respond to feedback, then some authors consider that the feedback loses its formative intentions (Black and Wiliam, 1998) and becomes essentially pointless (Nicol and Macfarlane-Dick, 2006). From these statements it can be seen that students reporting of the feedback they receive has generally improved, however, in the majority of cases this change is not significant.

Although students report an increase in receiving comments on work, one important factor is not just the receiving of written comments, but also the quality of them (Sadler, 1989). This was discussed by one student (Female, Year 13), who stated 'unfortunately, feedback [from] some do not contain any constructive

criticism, and comments, if any, are rather superficial'. One factor of quality feedback is the reference to success or assessment criteria. It is of note that students reported reference of this did not change particularly following the intervention, one student (Female, Year 13) identified a key issue with this in her comment:

> In some subjects, the feedback tends to only be a couple of words (eg. good work, without any further comments). I have also had many cases where the feedback was: "check whether you hit the assessment criteria A/B/C". Although, of course, I can check it myself, I don't feel like my identification of the mistakes is as efficient and professional as the teacher's one. Also, I already know the criteria while writing my work, so while submitting it, I give the teacher a sign that in my opinion I hit the criteria. Hence, a comment "check this assessment criteria" is incredibly confusing and vague for me, not really allowing for any improvement.

This observation supports the findings by Poulos and Mahoney (2008) who found that students want clear guidelines on assessment requirements and criteria. Relating to self-assessment, the students' observations are in line with those made by Nicol and Macfarlane-Dick (2006), that it can be considered that staff are more effective at identifying errors or misconceptions in students' work. However, this response also suggests that the student may not have been given the opportunity to develop self-assessment by provision of sufficient scaffolding to allow her to make her own judgements about her ability compared to the assessment criteria (Brooks et al, 2019). The issue with vague feedback comments has been identified by a number of studies as a key issue that needs to be addressed in order for students to perceive feedback as positive and useful (Brookhart, 2008). The quality of feedback comments provided in school is an area that would have been focused on in the interviews.

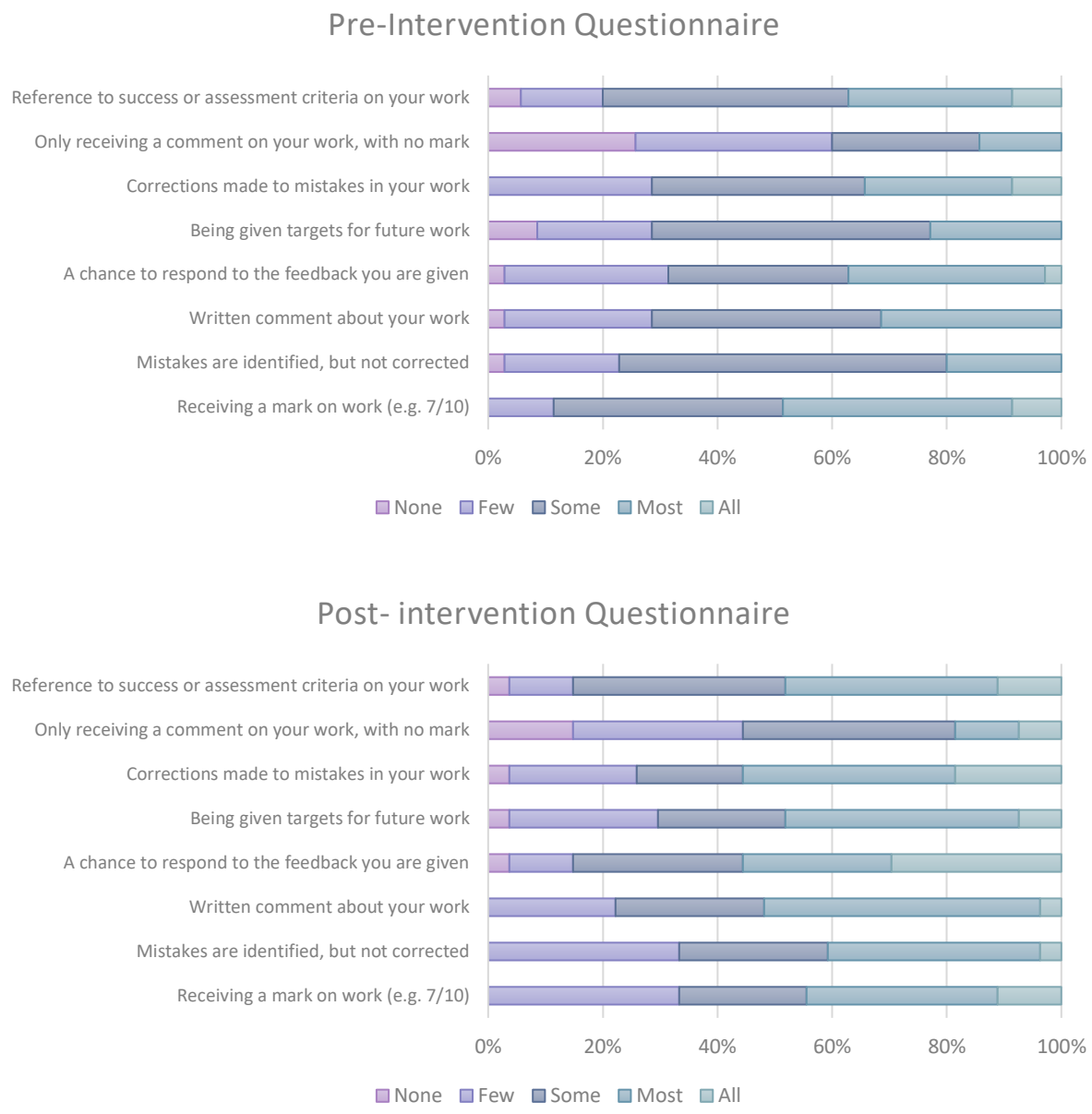

Figure 4.4: Graph showing comparison of student responses to the statement *Thinking about feedback you receive in your lessons this term, how much, if at all, do you get the following feedback*.

As well as being asked questions about the feedback they received, students were also asked about their perceptions of feedback provision. As with the previous section, a Mann-Whitney U test was conducted to compare the statements, and no statistically significant differences were found between the two sets of data. However, despite not being statistically significant, there are some interesting observations of the data, and how it has changed. Although the percentage of students agreeing and strongly agreeing with the statement '*I feel confident asking my teachers to explain comments to me*' (Figure 4.5) has remained similar, there has been a change in the distribution of answers, with an increase in those that strongly agree. Lack of student confidence in asking teachers for support with feedback has been identified by a number of

authors as a potential barrier to successful feedback (Hattie and Timperley, 2007; Tan et al, 2019). Furthermore, it is important that students can open a dialogue with teachers, as this plays an important role in allowing students to internalise their feedback before acting upon it (Nicol and Macfarlane-Dick, 2006). This was recognised by one student (Male, Year 12) who stated 'I started to communicate with my teachers more frequently about the task. This is the key point to my increase of grades and success in the program in general'. A similar change in pattern can also be seen for the statement '*I do not pay attention to feedback comments I am given*' (Figure 4.6). While a similar percentage of students disagree or strongly disagree, the students who strongly disagree increased from 26% to 42%.

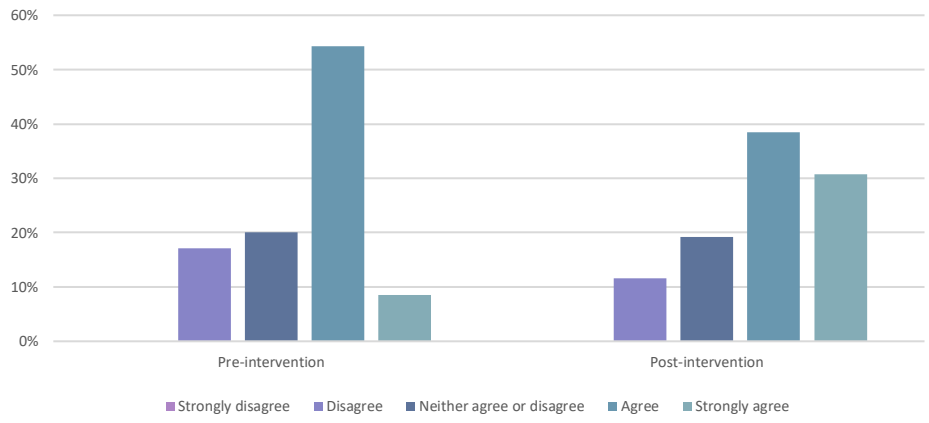

Figure 4.5 Graph showing comparison of student responses to the statement *I feel confident asking my teachers to explain comments to me.*

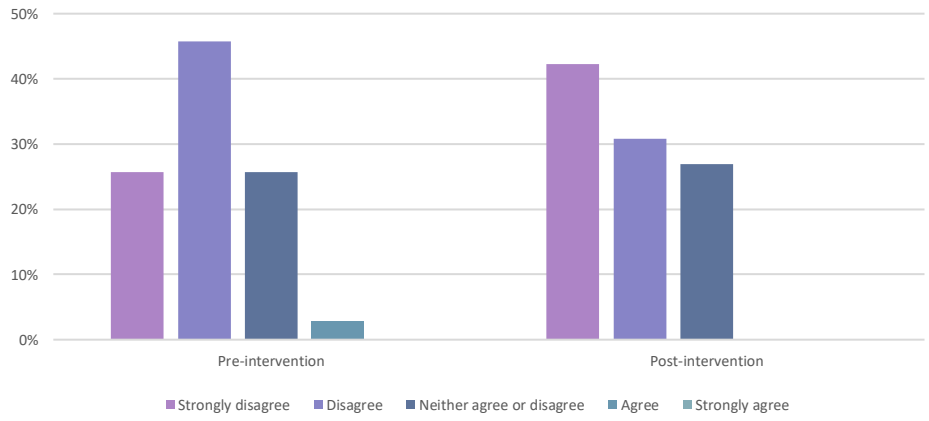

Figure 4.6 Graph showing comparison of student responses to the statement *I do not pay attention to feedback comments I am given*

Clarity of feedback and students' understanding of the feedback provided is important, enabling students to close the gap between their current and desired performance (Broadfoot, 2007). Students were asked two questions relating to this: '*I understand the feedback comments that I get*' (Figure 4.7), and '*I find feedback comments unclear and confusing*' (Figure 4.8). In the first statement, the distribution of answers has changed, with an increasing percentage of students that agree, although the percentage of students that disagree has remained similar. This is in contrast to the second statement, in which the range of answers has decreased, with no students strongly agreeing, but the percentage of students agreeing has increased from 14% to 22%, although, there is also an increase in students who strongly disagree. The responses to these two statements support the idea that feedback is complex, and that feedback is not just differently given, but also differently received (Hattie and Gan, 2011). However, for these two statements, the distribution of responses has changed in part due to the reduction in students selecting the middle response. This could be due to an increase in student confidence in answering the questions, although it may also be due to the lower response rate in the post-intervention questionnaire, which may mean that those answering the questions had stronger views, and therefore this altered the distribution. Clarity of feedback, and what makes feedback unclear, was one of the areas that would have been looked at in more detail had the interviews taken place. However, from these responses it can be taken as an indication that clarity of feedback is still an area that requires further work within IB teaching.

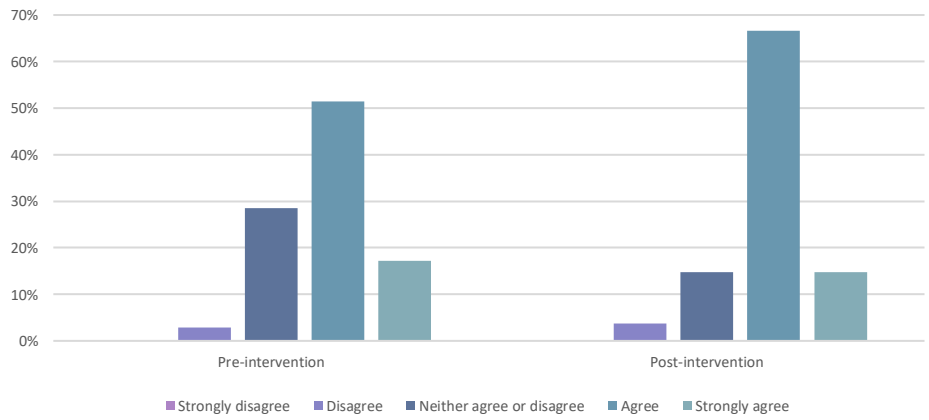

Figure 4.7: Graph showing comparison of student responses to the statement *I understand the feedback comments that I get.*

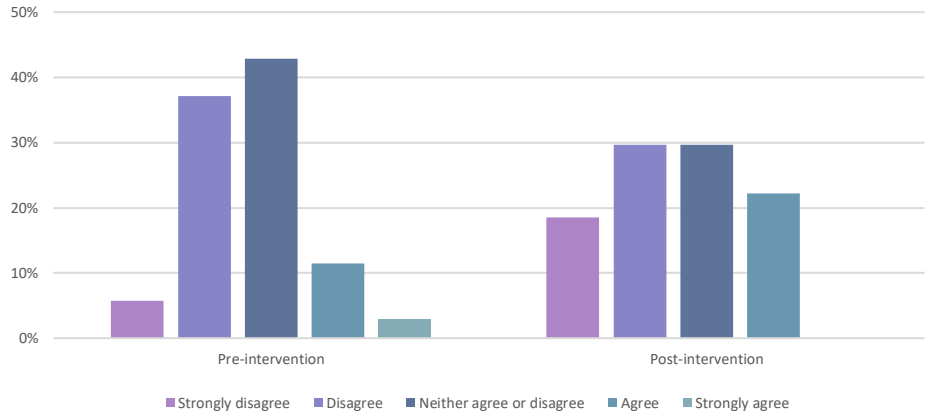

Figure 4.8: Graph showing comparison of student responses to the statement *I find feedback comments unclear and confusing.*

Another statement in which the spread of responses has changed due to a reduction in students selecting the middle answer is '*Receiving grades is more important to me than receiving written comments*' (Figure 4.9). The desire for grades can also be clearly seen in the student comments, with 6 respondents referencing the importance of grades when asked to explain their views on feedback. With one student (Female, Year 12) just writing 'Give us grades!!!!' with another student (Female, Year 12) similarly stating 'We need to know marks'. This desire for grades is similar to that found in other studies such as Francis et al (2019) and Smith and Gorard (2005).

One finding that is very much consistent with the literature is the value that students place on the feedback they receive (Carless, 2006; Dawson et al, 2019). When asked their agreement with the statement '*Receiving feedback comments is important to me*' (Figure 4.10) it can be seen that students value receiving feedback, and that there is an increase in students who strongly agree following the intervention. Another area in which students answered positively was that they value the feedback they receive, in the post-intervention questionnaire, with 70% of students agreeing or strongly agreeing that '*I receive useful feedback from my teachers*' and 81% agreeing or strongly agreeing that '*I think that feedback comments from teachers help me to do better on future tasks*'. These findings are in contrast to other studies, which found that students were generally less satisfied with the feedback they received (Carless, 2006; Price et al, 2010). However, it is possible that this is due to these studies being conducted at university level, where assessment is often based on end-of-semester assignments (Carless and Boud, 2018). Therefore, the more frequent use of

formative assessment and more frequent feedback opportunities, that occur within schools, result in more positive perceptions.

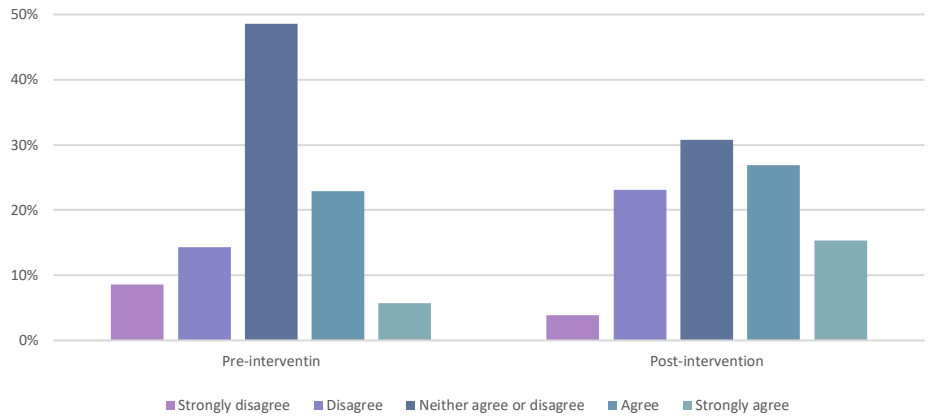

Figure 4.9: Graph showing comparison of student responses to the statement *Receiving grades is more important to me than receiving written comments.*

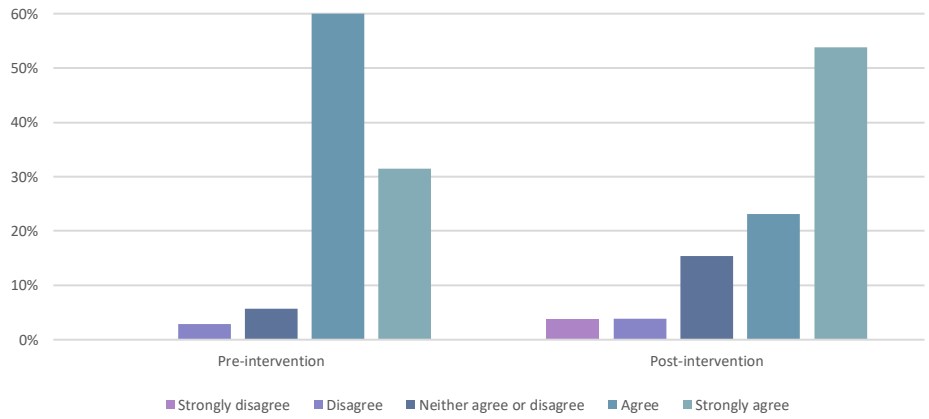

Figure 4.10: Graph showing comparison of student responses to the statement *Receiving feedback comments is important to me.*

The differences between students' perceptions may be considered to be impacted by the stage in the students' education, and consequently their experience with the assessment criteria and their level of feedback literacy (Carless and Boud, 2018; Poulos and Mahony, 2008). Therefore, a Mann-Whitney U test was conducted to see if changes in perception are more apparent in one year group than another. However, no difference was found between the pre-intervention and post-intervention questionnaires in either year groups. This is similar to the findings by Mulliner and Tucker (2017) who found no difference between students' perceptions in different years at university. Previous studies have suggested that feedback

effectiveness may vary between male and female students (Klapp, 2015). To see if there are any perception differences the Mann-Whitney U test was conducted to compare their views. Although no differences were found when comparing male and female views between the two questionnaires, when comparing the genders within the pre-intervention questionnaire, a significant difference was found between male and female views for the statement '*Receiving feedback comments is important to me*' (U = 97.000, ρ = 0.036). The results were compared using a cross-tabulation table (Appendix 11) and a graph was produced to allow for a visual comparison (Figure 4.11). From these it can be seen that more female students strongly agree with this statement compared to male students. In the post-intervention questionnaire, this statement was also found to be statistically significantly different (U = 34.500, ρ = 0.013). In addition, three further statements were significantly different: '*I take time to think about the feedback I am given*' (U = 46.000, ρ = 0.031). '*I think feedback comments from teachers are a waste of time*' (U = 45.000, ρ = 0.032). '*I do not pay attention to feedback comments I am given*' (U = 40.000, ρ = 0.036) (see Appendix 11 for cross-tabulation tables). In all of these statements, female students indicated that they view feedback comments as being more useful and more important than male students do. I was not able to find any studies that examined the difference in feedback perceptions between genders, and therefore cannot support this with the literature.

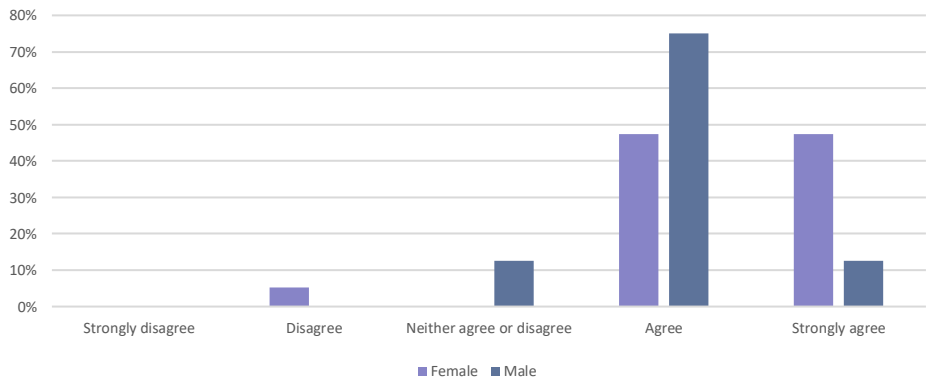

Figure 4.11: Graph showing comparison of males and female responses in the pre-intervention questionnaire to the statement: *Receiving feedback comments is important to me*.

One area that was not covered by the questionnaire, but was identified by a number of students when asked to explain their views on feedback, related to variability in feedback practices between teachers, with one student (Female, Year 13) stating 'depending on the teacher, the feedback can be extremely helpful or

useless. The teachers who were providing valuable feedback the last term keep doing so, and the teachers that didn't, did not change'. This is echoed by another student (Female, Year 12) who states, 'I get more detailed feedback from the teacher that were giving feedback before, but the teachers that didn't give feedback before still don't'. Although the reasons behind the lack of change cannot be known, it may be that the workload demand for the change in feedback practice was found to be too much. Alternatively, staff may not have felt sufficiently confident in implementing the changes (Knight, 2003), or the staff in question did not see the value in the changes and therefore opted to not implement them, as has been observed by Pollock (2012).

To what extent is there alignment between staff and student perceptions of feedback provision?

When comparing the types of feedback given, for the majority of feedback, staff and students show similar patterns in their perceptions in both the pre-intervention and post-intervention questionnaires, such as receiving marks for work and having comments corrected. One change that occurred was that for several types of feedback there was an increase in the alignment between staff and student perceptions in the post-intervention questionnaire, including identifying mistakes but not correcting them (Figure 4.12) and reference to success or assessment criteria (Figure 4.13). In both of these cases, in the pre-intervention questionnaire staff reported using these feedback methods at a higher level than students reported. In the post-intervention questionnaire, the alignment between staff and student perceptions is much closer, although it is worth noting that in both of these cases a number of students' report receiving these interventions none of the time. It is not possible from the quantitative data to know whether this change is due to an increase in the use of these strategies, or whether it is due to an increase in students' ability to recognise them, which is considered vital for feedback to be effective (Sortkær, 2019). It is possible that during the course of the intervention students' feedback literacy has increased, allowing them to develop the academic language necessary to identify, understand, and interpret the feedback provided (Carless and Boud, 2018). One area in which staff and student perceptions remain different, in both the pre-intervention and post-intervention questionnaires, is the use of targets (Figure 4.14), as it can be seen that staff report

the use of targets to a greater extent than students do in both questionnaires. Recognition of feedback and use of targets are two areas that would have been looked at in more detail during the interviews.

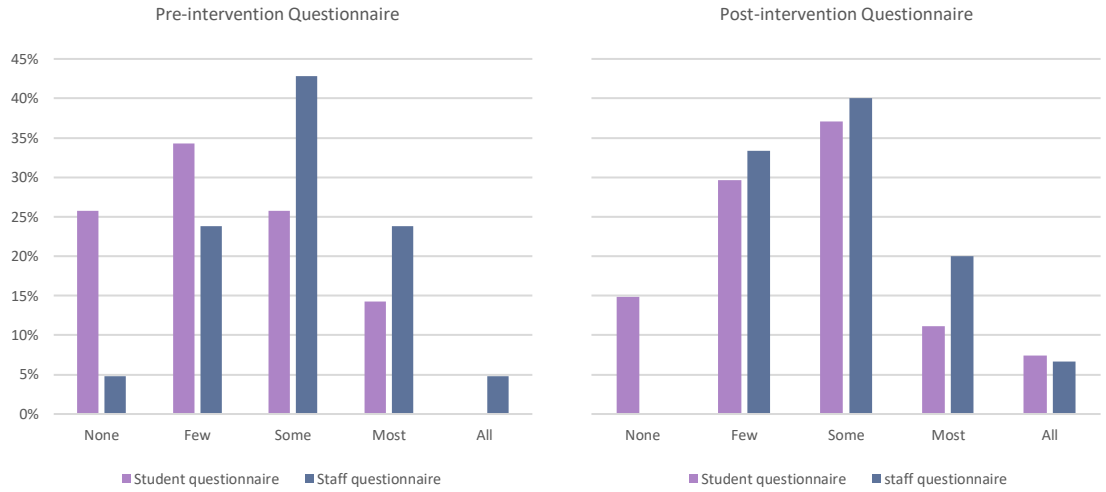

Figure 4.12: Comparison of staff and student responses in the pre-intervention and post-intervention questionnaires to the statement *How much, if at all, do you get the following feedback*: *Receiving a comment on your work with no mark.*

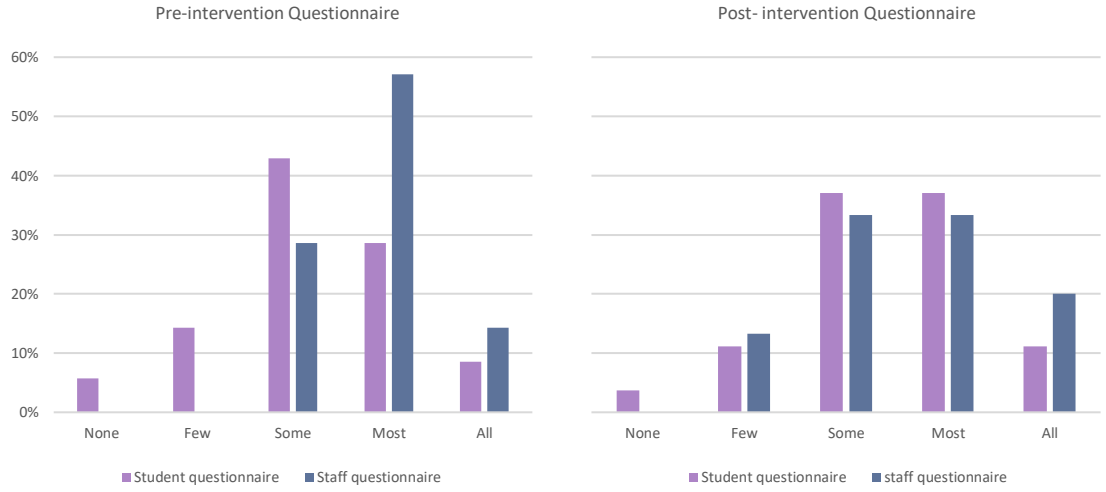

Figure 4.13: Comparison of staff and student responses in the pre-intervention and post-intervention questionnaires to the statement *How much, if at all, do you get the following feedback: Reference to success or assessment criteria on your work*

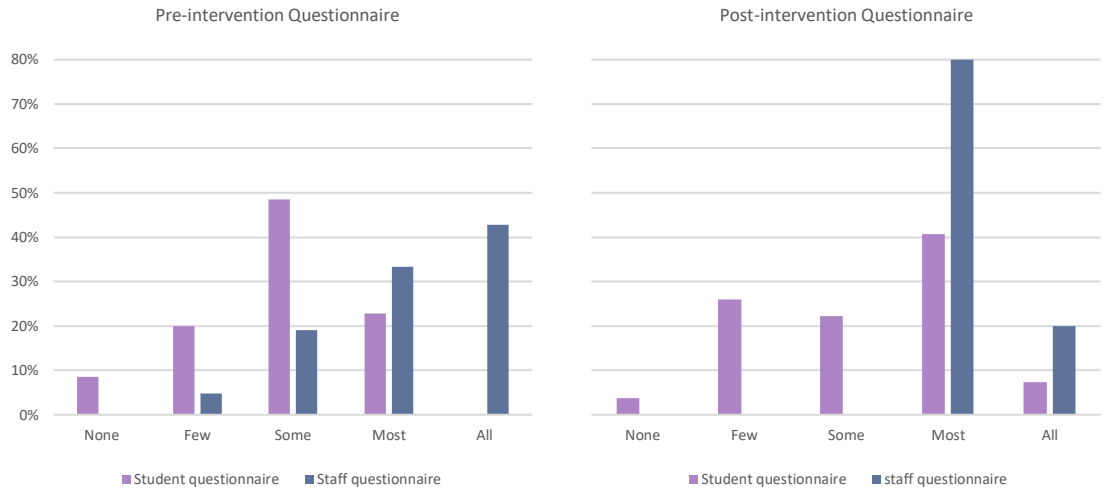

Figure 4.14: Comparison of staff and student responses in the pre-intervention and post-intervention questionnaires to the statement *How much, if at all, do you get the following feedback: Being given targets for future work*

From the comparison of perceptions of feedback provision, it can be seen that there is a largely similar perception between staff and students, and the intervention resulted in these perceptions becoming more aligned with each other. This is of note, as a number of studies indicate that there are often differences between the feedback staff consider they are giving, and the judgement of the feedback by students (Adams et al, 2020; Agricola et al, 2019; Poulos and Mahony, 2008). However, it must be noted that a limitation of these comparisons relates to students commenting across multiple subjects, therefore while one teacher may provide a feedback method all of the time, students may not receive the same level of feedback from other teachers.

In addition to the provision of feedback, questions were also asked to allow for the comparison of perceptions on use of feedback (Figure 4.15), from this it can be seen that staff have similar views to students. This is in contrast to a number of studies that have identified that there is often a lack of alignment between staff and student perceptions of how students use their feedback (Carless, 2006; Li and De Luca, 2014; Mulliner and Tucker, 2017). In this study, staff report that students use the feedback provided at a higher level (73%) than students report (63%), although the levels are close. This is in contrast to Mulliner and Tucker (2017) who found that staff consider that students do not use the feedback comments, however, as previously raised, one potential reason for this may be due to the study having been conducted at

university level. Therefore, larger groups sizes may make teachers' understanding of students' use of feedback more limited. However, no school level studies into the alignment between staff and student perceptions of feedback could be found in the literature. To look at the use of feedback by students in more detail, an additional question asked staff whether they have to frequently write the same comments on multiple pieces of work, which over 50% of staff agreed with, with only 20% of staff disagreeing. This comment would indicate that students may not be reading or actioning feedback (Black et al, 2003), in contrast to the previous statement. However, it may be due to staff interpretation of the statement: '*Students use the feedback comments given to improve their work*'. It is possible that staff have interpreted this to mean that the feedback is useful to the students, and therefore are reporting that they provide useful feedback.

The perception that students focus on grades at the expense of comments has long been held (Carless, 2006). Mulliner and Tucker (2017) found that staff consider students to be more interested in grades, with 94% agreeing, compared to 55% of students. Similarly, this study found that more staff hold this view than students, although at much lower levels, with 53% of staff agreeing or strongly agreeing, compared to 42% of students. This is supported by student views from the pre-intervention questionnaire, where 49% indicated that a grade on work was very useful, but this increased to 86% when asked about the provision of a grade with a comment. So, while it is clear that the findings are in line with other studies that found students highly value grades on work (Francis et al, 2019; Peterson and Irving, 2008; Smith and Gorard, 2005), it is clear that students also value the comments provided.

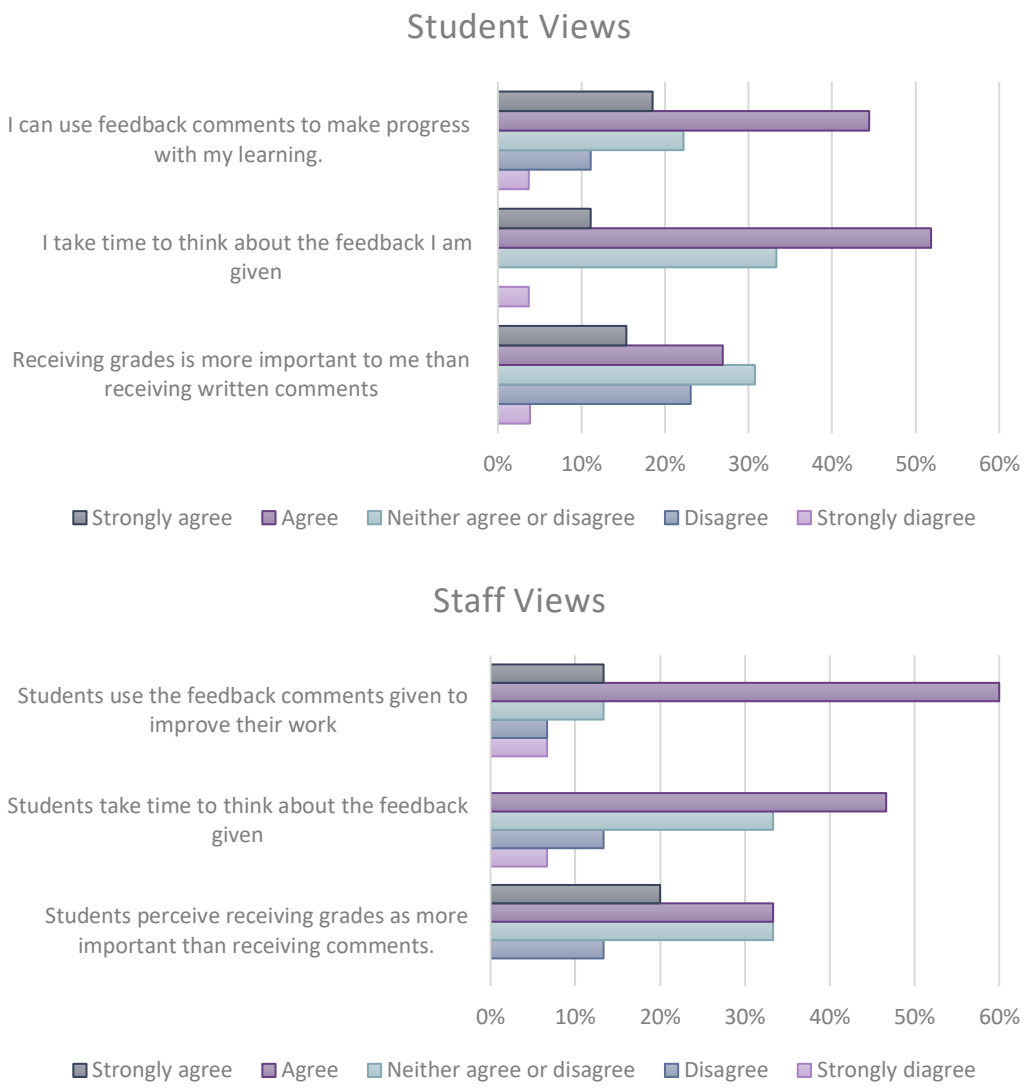

Figure 4.15: Comparison of staff and student responses to statements relating to use of feedback.

What are staff perceptions of the impact of the feedback policy?

The feedback policy (Appendix 8) contained five key strategies that staff were asked to incorporate into their feedback practices. After the intervention, staff were asked their perceptions of the impact of the policy both on workload and effectiveness. Staff were initially asked their ability to incorporate the feedback strategies into their practice (Figure 4.16). The majority of staff reported being able to incorporate the first four strategies. However, focusing feedback on task, process, and self-regulation was less positively reported, one science teacher stated 'I did not remember to give feedback on self-regulation. Feedback on task and process were given'. This is in line with several studies that show that the majority of feedback practice is at task level (Brooks et al, 2019; Knight, 2003). When asked to explain their answers, the majority of the staff commented on target setting, with one language and literature teacher writing 'I set targets when needed, sometimes more than three, sometimes one'. A humanities teacher also commented 'in some tasks, it is very practical to set targets, sometimes, it is not. Therefore, flexibility is needed'. Staff were then asked whether implementing the feedback practice required a change in their teaching. It can be seen that there are a wide range of views regarding changes to practice for all these strategies (Figure 4.17). However, with a couple of exceptions, the majority of staff did not strongly disagree with the statement. Therefore, this may indicate that these practices were already being used to some extent, with over half of the teachers reporting that the use of assessment criteria, targets, and dialogue did not require a change in feedback practice.

Staff were then asked their perceptions of the impact on their own work, related to the impact on workload (Figure 4.18). The majority of staff felt that implementing these strategies did not result in an increase in workload, with one humanities teacher commenting regarding dialogue that 'it doesn't increase workload, but takes time away from the class, or imposes on their free time'. The impact on workload is an important consideration, as it is commonly cited as a reason for not implementing changes to feedback practices (Wylie and Lyon, 2015), and 61% of secondary teachers responded that they spend too much time marking in the 2019 Workload Survey (Department for Education, 2019). To look more closely at the staff who reported an increase in workload, the majority of them also indicated that implementation of the policy required a

change to their feedback practice. This is a key consideration, as it shows that when a change in practice is required, it appears to result in an increase in reported workload.

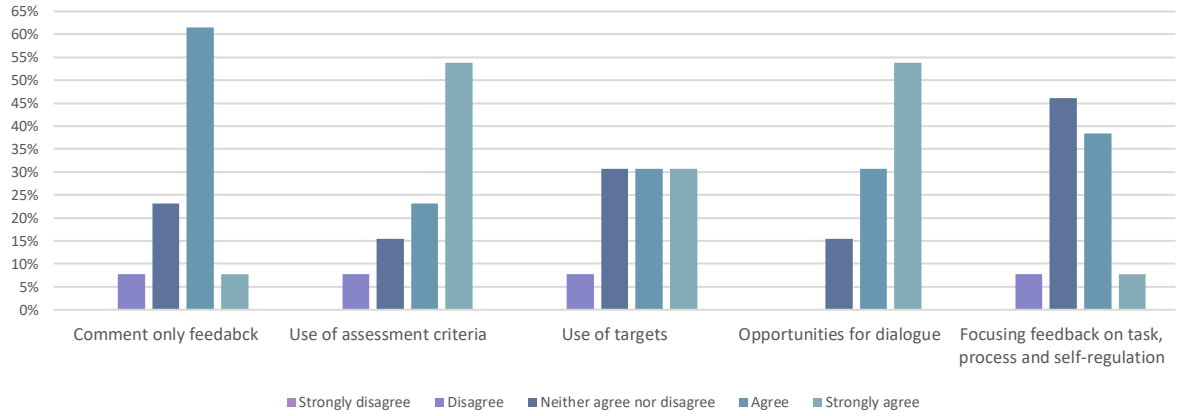

Figure 4.16: Graph showing staff responses when asked to *indicate how much you agree with each of the following statement: I was able to incorporate this into my feedback practice*

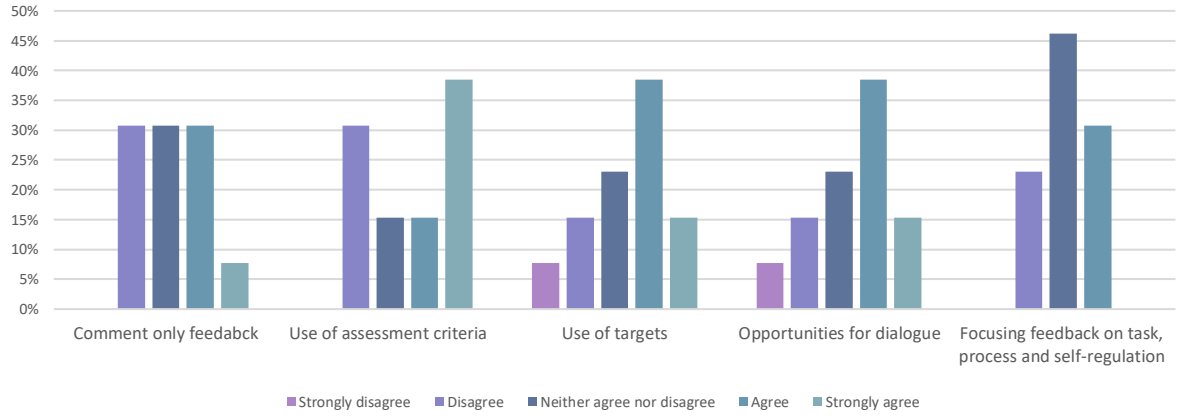

Figure 4.17: Graph showing staff responses when asked to *indicate how much you agree with each of the following statement: Implementing this required no change to my feedback practice*

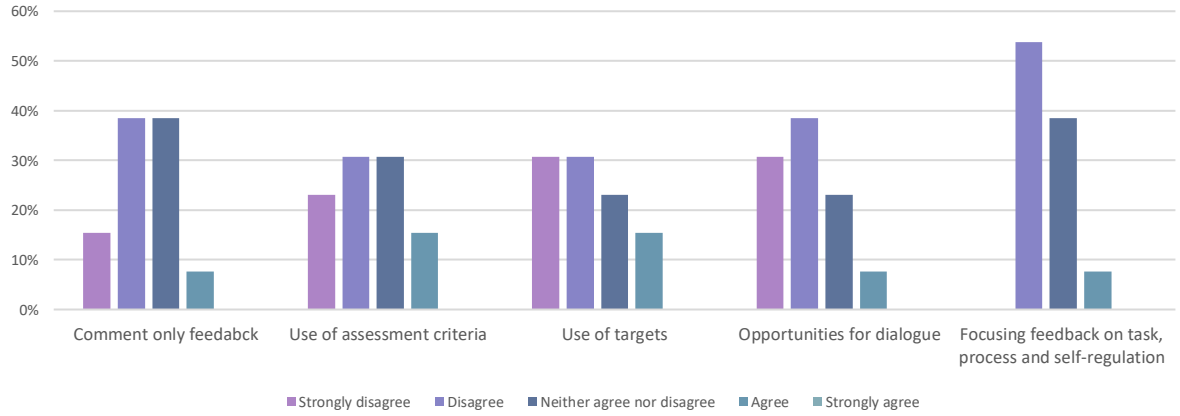

Figure 4.18: Graph showing staff responses when asked to *indicate how much you agree with each of the following statement: Implementing this increased my workload*

The final question asked about whether the strategies had a positive impact on students' work (Figure 4.19). No teacher reported finding any of the feedback strategies to have a negative impact. However, over half of the teachers reported neither agreeing nor disagreeing about the positive impact of targets and focusing feedback on task, process, and self-regulation. This is important, as studies suggest that if teachers do not see a benefit to a strategy, they may be less likely to implement it (Brown et al, 2012). One science teacher explained this by stating 'I find that the impact on student's work was varied. Some students respond very well to the feedback and others ignored it unless I then went over it verbally in a 1:1 situation'. Whereas a humanities teacher observed

> I think when the student can respond to written feedback before the work is due has best effect. I have consciously tried to do this and have seen results, more ownership over work and a willingness to improve work, inspiring more care and focussed attention on demands of IB criteria.

Dialogue was viewed most positively by staff with 85% agreeing that it had a positive impact on students' work, this is in line with the findings of Chalmers et al (2018) which found that teachers identified dialogue as a key method of checking that feedback was understood.

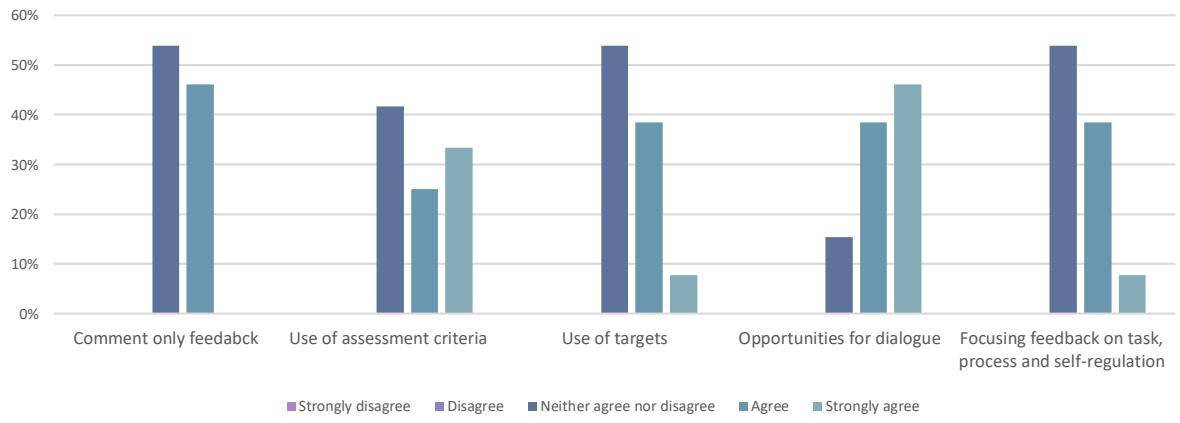

Figure 4.19: Graph showing staff responses when asked to *indicate how much you agree with each of the following statement: This had a positive impact on students work*

Collaboration

Collaboration played a key role within this study and was incorporated at several stages. The first part of collaboration involved including students' views on feedback within the feedback policy. Literature suggests that schools can significantly enhance their provision to students by listening to student voice, and it can result in students gaining positive perceptions (Rudduck and McIntyre, 2007). Initial staff collaboration involved the staff focus group to discuss the feedback policy and to provide input. The representative nature of the group, across all of the IB subject areas, led to useful discussions regarding the different nature of feedback across the disciplines. As a result of this, the staff in the group were confident that the policy developed provided a clear framework for feedback, while allowing for the flexibility needed to be applicable across all subject areas.

The other aspect of collaboration within the study involved the implementation of the policy by the IB staff. A barrier to implementing changes in practice within schools has been identified as a reluctance by staff to try new strategies (Pollock, 2012). The reasons for this may be a lack of confidence within staff to carry out the changes, or due to staff not seeing the changes as necessary or impactful. The provision of quality feedback can be considered a skill, and it requires a focused and deliberate approach (Knight, 2003). In order to support this, a session on feedback was run during the INSET at the start of the winter term, before the feedback policy was introduced. This was to support staff with their feedback strategies (Black and Wiliam, 1998; Education Endowment Fund, 2018), as well as to outline the value of them (Brown et al, 2012). Whole staff collaboration can be a challenge, as the policy may need to bring about changes in teachers' beliefs as well as their practice (Campbell-Wilcox and Lawson, 2018). Students' comments indicate that some staff did not engage with the new policy. One potential reason for this, may be that one session was insufficient to inform staff, and bring about change in practice. Therefore, this could be addressed by having more frequent training opportunities, although this would also increase teacher workload. Another method for addressing this would be to monitor the implementation across subject areas.

5 Limitations

The lack of a control group can be considered a limitation of this study, as it limits the ability to attribute any changes in reported perceptions directly to the intervention, as it is possible that the changes would have occurred anyway. The initial design sought to compensate for this by using interviews to look at changes in perceptions more closely. However, as these did not occur, it makes the ability to draw conclusions more limited. Furthermore, as the introduction of the feedback policy aimed to improve the feedback provision for students, it could be considered unethical to not allow this provision for all students if a control group had been used (Denscombe, 2010).

The inclusion of the Year 13s in the study was debated due to the intervention taking place during their mock examinations and the winter term, when classes start to move towards revision. However, due to the small cohort size, it was felt that including them would be worthwhile, and the comparison of results by year group, appears to indicate that this did not impact the results, as no significant differences were identified between them. Another factor relating to the small cohort size, for both staff and students, is that it reduces the ability to make generalisations about the findings, this is also further increased by the unusual cohort, as the group is truly international. However, as the findings of the study are being used internally, and the student cohort is representative of the school as a whole, the findings can be applied within the school setting.

The use of questionnaires results in self-reporting by staff and students. With regards to staff, studies suggest that there may be a disparity between what teachers report to provide in terms of feedback, and their actual practice (Brown et al, 2012). With regards to students, similarly, self-reporting relies on them being accurate and honest in their responses (Swerdzewski, Harmes and Finney, 2011). A further issue relating to the self-reporting by both teachers and students comes from the lower response rate in the post-intervention questionnaires. It is possible that the staff and students who were more interested or engaged with the feedback policy may have chosen to answer the questions. The final limitation relates to staff engagement with the study, as within student responses, some of them reported seeing no difference in staff feedback practices during the intervention, and therefore it is possible that some staff may not have

fully engaged with the intervention. This is in line with other studies which have found that professional development opportunities do not necessarily result in a change in teaching practice (Lassonde and Israel, 2009; Torrance and Pryor, 1998).

6 Conclusion

Feedback can be considered intertwined with the notions of teaching, with a large amount of teaching practice providing feedback in some form or other, so much so that studies suggest that teachers struggle to define it, as they see it as integral to their practice (Knight, 2003). This has been supported by this study, which found a lack of clear unifying ideas of feedback, as exemplified by the lack of consensus when staff were asked to select a definition of feedback. The aim of this study was to develop a post-16 feedback policy to ensure that students received feedback aligned with the literature, yet also to provide the flexibility required to be applicable across the range of IB subjects, and hopefully to start to develop unifying principles of feedback within the school.

What are the current feedback practices within post-16 teaching?

From the pre-intervention questionnaires, it can be seen that feedback within post-16 teaching is largely aligned with the findings from other studies (Brown et al, 2012; Elliott et al, 2016; Knight, 2003), suggesting that students receive frequent graded work and written comments, with staff and students reporting similar levels of these practices. Staff report that the use of targets and success criteria are frequently used, although students report that this occurs less frequently, and often with a lower focus on process level feedback, as has been found in a number of studies (Brooks et al, 2019; Knight, 2003). The literature suggests that the implementation of feedback can vary between subject areas (Tan et al, 2019), which is supported by this study, with the arts and science teachers reporting contrasting practices with regards to correcting work. Within the arts, the focus on the development of skills that are transferable to other pieces of work (Andrade et al, 2014), lend themselves to formative assessment, and therefore the arts teachers report not correcting errors on work. This is in contrast to science, where correction of errors was more highly reported, which is in line with studies that suggest that science teachers rely more heavily on transmissionist notions of teaching (Larkin, 2012) and may also wish to correct misconceptions (Halim et al, 2018).

In what ways and to what extent have students' perceptions of feedback changed following the intervention?

When considering changes to students' perceptions, the quantitative data indicates that students largely perceived feedback positively at the start of the intervention, and that the introduction of the feedback policy resulted in feedback being viewed even more positively, although the majority of these changes are not statistically significant. The fact that students have positive views can be considered a good indicator of feedback within the school, as it is considered that for feedback to be effective, students should have positive perceptions about it (Agricola et al, 2019; King et al, 2009). Although the majority of the statements are positive, there are still some areas to focus on. One of these is the clarity of feedback received, with some students indicating that they find the feedback unclear. Another area to be looked at more closely is the use of targets in feedback, as in both questionnaires staff indicate that they provide targets at a higher level than students report. This variation in perceptions is an area that would have been discussed in more detail in the interviews. To look at variation in perceptions within the cohort, students' perceptions were looked at in terms of gender and age, as these have been identified as areas that may impact feedback (Klapp, 2015; Mulliner and Tucker, 2017). While no difference was found between age groups, differences were found in the students' perceptions between genders, with female students reporting that they find feedback more useful, and pay more attention to it, compared to male students. As students' perceptions of feedback are linked to its effectiveness (Ekholm et al, 2015), and some studies have found that feedback practices are less effective for boys (Klapp, 2015) this would be an interesting area for further study.

To what extent is there alignment between staff and student perceptions of feedback provision?

Studies from the literature suggest that there is often a disparity between staff and student perceptions of feedback, both with regards to the provision of feedback (Carless, 2006), and the extent to which students use the feedback provided (Mulliner and Tucker, 2017). Similar to findings from the literature, staff reporting of feedback provision was at a higher level than students indicated, although with the exception of the use of targets, the differences in perceptions were not large. One finding that was of note, was that the alignment between staff and student perceptions of feedback provision increased following the

intervention. The lack of interviews meant that this could not be looked at in detail during the study, although it is possible that it is due to an increase in alignment between staff reported practice and their actual practice. Alternatively, an increase in student feedback literacy during the intervention has increased their ability to identify feedback.

The second area in which the alignment of staff and student perceptions were examined, related to students' use of the feedback provided. Studies of university students and staff show that staff often consider that students do not use the feedback provided (Price et al, 2010), and often focus on grades at the expense of the comments provided (Mulliner and Tucker, 2017). Similar to these studies, staff within the school also consider that students focus on grades as being more important than comments, although to a lower extent than reported in other studies. An area in contrast to the literature is staff perceptions of students' use of feedback, with staff reporting that students use their feedback at a higher level than students report. The lack of school-based studies on alignment between staff and student perceptions of feedback, makes it impossible to support this observation, but it may be that the more frequent use of formative assessment within a school setting, makes it easier for teachers to judge the use of feedback by students. From this study it appears that within post-16 teaching there is generally alignment between staff and student perceptions of the feedback provided and similarities in perceptions of students' use of feedback. This is important as it can be considered that without alignment, there is a risk that students will be dissatisfied with the feedback provided (Francis et al, 2019).

What are staff perceptions of the impact of the feedback policy?

Staff perceptions of the feedback policy are important for a number of reasons. Firstly, to ensure that the introduction of the policy does not result in an increase in workload, and secondly, if changes in practice are required, literature suggest that these are most likely to be effective if the staff view the changes as positive (Lassonde and Israel, 2009). From their feedback after the intervention, staff indicated that they were able to implement the 5 key areas of feedback, as identified within the policy, although feedback on task, process, and self-regulation was less positively reported. The impact on workload was not considered to be an issue by the majority of teachers, although there was a pattern that those teachers that did indicate an impact on

workload, were also those that indicated that implementation of the policy resulted in a change in practice. However, it is important to consider the setting for this intervention. Within a small school, with small class sizes, this may mean that changes in practice would not have as significant an impact on workload as they might in a larger school. When asked to evaluate the effectiveness of the feedback strategies, with the exception of dialogue, staff were not particularly positive about the impacts, although, none of the staff considered any of the strategies to negatively impact the students. This is of note, as, mentioned earlier, studies suggest that if staff do not see the benefit of an intervention, they may be less willing to implement the change, and therefore this suggests an area that may require further investigation.

Implications

From this study it can be seen that students value the feedback they receive and feel that it is valuable. Furthermore, based on reporting from staff and students, it appears that feedback is largely well implemented within post-16 teaching. However, some areas for further improvement have been identified as a result of the study, and these mainly come down to the level of implementation of the policy. Although this was not directly asked in the questionnaire, a number of students identified that implementation was not consistent, with some teachers making changes, and others not. This is in line with staff reporting in the post-intervention questionnaire, as the reporting of providing feedback on task, process, and self-regulation was lower than other strategies. In part this may suggest a lack of confidence in providing these types of feedback, as well as the possibility that the tasks provided were largely superficial, and therefore not appropriate for feedback on process or self-regulation (Brooks et al, 2019). The most successful tasks for feedback are those requiring higher-order thinking skills, such as unstructured tasks, comprehensions, and concept mapping (Black and Wiliam, 1998). Students' understanding of feedback is also an area identified to require further work, one method is to continue to work on developing students' feedback literacy, as it is suggested that this is a key mechanism for maximising feedback potential (Molloy et al, 2020). Continued and increased use of dialogue will also hopefully address the issue of clarity, as it presents an opportunity for teachers to check understanding and address misconceptions (Chalmers et al, 2018).

The introduction of new policies always presents a challenge, particularly when it requires a change to teachers' beliefs and practices (Campbell-Wilcox and Lawson, 2018), and studies suggest that even when provided with training, change does not always follow (Lassonde and Israel, 2009; Torrance and Pryor, 1998). To address this, feedback will continue to play a prominent role within school training this year, and furthermore, monitoring of implementation will also occur. Following discussions with the Director of Studies, it has been decided that demonstration of good feedback, in line with the policy, will now be one of the standards to be met within the staff appraisal system.

Although the small cohort size makes it impossible to generalise from the findings, there are some interesting observations which would warrant further study. The first relates to the difference in findings between this study, and university level studies regarding the alignment between staff and student perceptions of the use of feedback. The university studies conducted indicate that staff consider students to not use feedback (Carless, 2006; Li and De Luca, 2014; Mulliner and Tucker, 2017), whereas, in contrast, this study found that staff were much more positive about student use of feedback. The lack of school-based studies into this area, means that is not possible to support my findings. Therefore, further studies of alignment of perceptions between staff and students within school settings would be useful. A second area of interest to wider studies relates to differences in perceptions between male and female students, with this study finding that female students viewed feedback as more useful and important than male students. I was not able to find any studies that supported these observations, and it is not possible to know whether this has not been reported in studies, due to no differences being found, or whether it has not been looked at. The differences in effectiveness of feedback between male and female students has been identified (Klapp, 2015), and therefore it would be interesting to see whether the difference in effectiveness of feedback is impacted directly by students' perceptions.

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8 Appendices

Appendix 1. Staff Pre-Intervention Questionnaire

Feedback

1. Please indicate which IB subject group(s) you teach:

- ☐ Group 1: Language and Literature
- ☐ Group 2: Language acquision
- ☐ Group 3: Individuals and Societies
- ☐ Group 4: Sciences
- ☐ Group 5: Mathematics
- ☐ Group 6: Arts

*** 2. When I think of feedback, I think of the following practices: (tick all that apply)**

- ☐ Reports to students' parents
- ☐ Advice or comments that students give each other
- ☐ Information on the quality of work relative to standards, norms, or expectations
- ☐ Grades, scores, or marks on student work
- ☐ Suggestions or comments from other students
- ☐ Praising students for how hard they have worked
- ☐ Detailed written comments
- ☐ Spoken comments
- ☐ Ticks or crosses on student work
- ☐ Giving correct answers when students answer incorrectly
- ☐ Parent-teacher conferences
- ☐ Comments students give to themselves
- ☐ Instant responses to students' classroom work
- ☐ Hints, tips, and reminders written on student work
- ☐ Stickers, stamps, or smiley faces on student work
- ☐ Discussions with students about their work.

*** 3. Please select which of the following definitions you think best defines feedback:**

- ○ Information provided by an agent (e.g. teacher, peer, book, parent, self, experience) regarding some aspect of one's performance or understanding.
- ○ Information communicated to the learner that is intended to modify his or her thinking or behaviour for the purpose of improving learning.
- ○ All dialogue to support learning in both formal and informal situations.
- ○ Information given to the learner or teacher about the learner's performance relative to learning goals or outcomes.
- ○ Feedback is information about the gap between the actual level and the reference level, which is used to alter the gap in some way
- ○ Provides information to learners about their performance and how to improve it.

*** 4. How much, if at all, do you use the following feedback practices**

None/Few/Some/Most/All of the pieces of work I mark:

	None	Few	Some	Most	All
Putting a mark on work (e.g. 7/10)	○	○	○	○	○
Indicating mistakes in pupils' work, but not correcting them	○	○	○	○	○
Writing a qualitative/ descriptive comment about work as well as providing a written grade.	○	○	○	○	○
Giving pupils time in class to write a response to previous marking comments	○	○	○	○	○

*** 5. How much, if at all, do you use the following feedback practices**

None/Few/Some/Most/All of the pieces of work I mark:

	None	Few	Some	Most	All
Writing praise for pupils' achievement on work	○	○	○	○	○
Writing targets for future work (e.g. even better if)	○	○	○	○	○
Correcting mistakes in pupils' work	○	○	○	○	○
Writing a qualitative/descriptive comment about work, without providing a written grade	○	○	○	○	○

*** 6. How much, if at all, do you use the following feedback practices**

None/Few/Some/Most/All of the pieces of work I mark:

	None	Few	Some	Most	All
Writing praise for pupils' effort on work	○	○	○	○	○
Referring to success or assessment criteria in your written comments	○	○	○	○	○
Referring to the way work was planned and completed (as opposed to the end product) in your written comments.	○	○	○	○	○

Appendix 2. Staff Post-Intervention Questionnaire

1. Please indicate which IB subject group(s) you teach:

- ☐ Group 1: Language and Literature
- ☐ Group 2: Language acquision
- ☐ Group 3: Individuals and Societies
- ☐ Group 4: Sciences
- ☐ Group 5: Mathematics
- ☐ Group 6: Arts

*** 2. How much, if at all, do you use the following feedback practices**

None/Few/Some/Most/All of the pieces of work I mark:

	None	Few	Some	Most	All
Putting a mark on work (e.g. 7/10)	○	○	○	○	○
Indicating mistakes in pupils' work, but not correcting them	○	○	○	○	○
Writing a qualitative/ descriptive comment about work as well as providing a written grade.	○	○	○	○	○
Giving pupils time in class to write a response to previous marking comments	○	○	○	○	○

*** 3. How much, if at all, do you use the following feedback practices**

None/Few/Some/Most/All of the pieces of work I mark:

	None	Few	Some	Most	All
Writing praise for pupils' achievement on work	○	○	○	○	○
Writing targets for future work (e.g. even better if)	○	○	○	○	○
Correcting mistakes in pupils' work	○	○	○	○	○
Writing a qualitative/descriptive comment about work, without providing a written grade	○	○	○	○	○

*** 4. How much, if at all, do you use the following feedback practices**

None/Few/Some/Most/All of the pieces of work I mark:

	None	Few	Some	Most	All
Writing praise for pupils' effort on work	○	○	○	○	○
Referring to success or assessment criteria in your written comments	○	○	○	○	○
Referring to the way work was planned and completed (as opposed to the end product) in your written comments.	○	○	○	○	○

5. Please indicate how much you agree with each of the following statements from 1 (strongly disagree) to 5 (strongly agree).

	Strongly diagree	Disagree	Neither agree or disagree	Agree	Strongly agree
Students use the feedback comments given to improve their work	○	○	○	○	○
I frequently have to write the same comments on pieces of work for the same student.	○	○	○	○	○
Students take time to think about the feedback given	○	○	○	○	○
Students perceive receiving grades as more important than receiving comments.	○	○	○	○	○

The next series of questions relate to the key pieces of best practice that were outlined in the Feedback Policy

6.

'Grading of work has been shown to reduce the impact of feedback comments. Therefore, students should be given the opportunity to act on comment only feedback at least twice every half term. This can be in the form of interim feedback on work before submission or providing two similar tasks where feedback on the first task can be used on the second.'

Please indicate how much you agree with each of the following statements from 1 (strongly disagree) to 5 (strongly agree).

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I was able to incorporate this into my feedback practice	○	○	○	○	○
This had a positive impact on students work	○	○	○	○	○
Implementing this required no change to my feedback practice	○	○	○	○	○
Implementing this increased my workload	○	○	○	○	○

7.

'Grading of work has been shown to reduce the impact of feedback comments. Therefore, students should be given the opportunity to act on comment only feedback at least twice every half term. This can be in the form of interim feedback on work before submission or providing two similar tasks where feedback on the first task can be used on the second.'

Please add any further comments you have about this section.

8.

'Students should always be clear about the criteria being used when assessing their work. Wherever possible marking rubrics, using IB criteria, should be used to provide clear guidance to students about the desired outcomes.'

Please indicate how much you agree with each of the following statements from 1 (strongly disagree) to 5 (strongly agree).

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I was able to incorporate this into my feedback practice	○	○	○	○	○
This had a positive impact on students work	○	○	○	○	○
Implementing this required no change to my feedback practice	○	○	○	○	○
Implementing this increased my workload	○	○	○	○	○

9.

'Students should always be clear about the criteria being used when assessing their work. Wherever possible marking rubrics, using IB criteria, should be used to provide clear guidance to students about the desired outcomes.'

Please add any further comments you have about this section.

10.
'Targets should be provided for improving work when appropriate. Ideally a maximum of three targets should be provided, and these should be clear, specific and actionable on future work.'

Please indicate how much you agree with each of the following statements from 1 (strongly disagree) to 5 (strongly agree).

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I was able to incorporate this into my feedback practice	○	○	○	○	○
This had a positive impact on students work	○	○	○	○	○
Implementing this required no change to my feedback practice	○	○	○	○	○
Implementing this increased my workload	○	○	○	○	○

11.
'Targets should be provided for improving work when appropriate. Ideally a maximum of three targets should be provided, and these should be clear, specific and actionable on future work.'

Please add any further comments you have about this section.

12.
'Dialogue is often important to support students' understanding of the feedback provided. Students should be given the opportunity to discuss feedback when necessary.'

Please indicate how much you agree with each of the following statements from 1 (strongly disagree) to 5 (strongly agree).

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I was able to incorporate this into my feedback practice	○	○	○	○	○
This had a positive impact on students work	○	○	○	○	○
Implementing this required no change to my feedback practice	○	○	○	○	○
Implementing this increased my workload	○	○	○	○	○

13.
'Dialogue is often important to support students' understanding of the feedback provided. Students should be given the opportunity to discuss feedback when necessary.'

Please add any further comments you have about this section.

14.
'Feedback should be provided on task, process, and self-regulation (see Appendix 1 for guidance). Feedback on self should be limited.'

Please indicate how much you agree with each of the following statements from 1 (strongly disagree) to 5 (strongly agree).

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I was able to incorporate this into my feedback practice	○	○	○	○	○
This had a positive impact on students work	○	○	○	○	○
Implementing this required no change to my feedback practice	○	○	○	○	○
Implementing this increased my workload	○	○	○	○	○

15.
'Feedback should be provided on task, process, and self-regulation (see Appendix 1 for guidance). Feedback on self should be limited.'

Please add any further comments you have about this section.

Appendix 3. Student Pre-Intervention Questionnaire

The aim of this questionnaire is to get your views on the feedback that you receive in your lessons. The information you provide will be used to produce a feedback policy to be used in your lessons.

The questionnaire is anonymous.

* 1. Gender

- ○ Female
- ○ Male

* 2. Year Group

- ○ Year 12
- ○ Year 13

* 3. Thinking about feedback you receive in your lessons, how much, if at all, do you get the following feedback:

	None	Few	Some	Most	All
Receiving a mark on work (e.g. 7/10)	○	○	○	○	○
Mistakes are identified, but not corrected	○	○	○	○	○
Written comment about your work	○	○	○	○	○
A chance to respond to the feedback you are given	○	○	○	○	○
Being given targets for future work	○	○	○	○	○
Corrections made to mistakes in your work	○	○	○	○	○
Only receiving a comment on your work, with no mark	○	○	○	○	○
Reference to success or assessment criteria on your work	○	○	○	○	○

* 4. Thinking about what type of feedback you find most useful, please indicate how useful you find each of these:

	Not useful	Somewhat useful	Very useful
A score for work (e.g. 90%)	○	○	○
A score and a comment for work	○	○	○
A comment only	○	○	○
Targets for future work	○	○	○
Having time to talk through feedback with your teacher	○	○	○
Receiving feedback partway through a task before submitting it	○	○	○

5. Are there any other types of feedback that you think are useful?

* 6. Please indicate how much you agree with each of the following statements from 1 (strongly disagree) to 5 (strongly agree). Please remember that this is across all of your lessons.

	1 Strongly disagree	2 Disagree	Neither agree or disagree	4 Agree	5 Strongly agree
I receive useful feedback from my teachers	○	○	○	○	○
I understand the feedback comments that I get	○	○	○	○	○
I can use feedback comments to make progress with my learning.	○	○	○	○	○
I think feedback comments from teachers are a waste of time	○	○	○	○	○
I take time to think about the feedback I am given	○	○	○	○	○
I find feedback comments unclear and confusing.	○	○	○	○	○

* 7. Please indicate how much you agree with each of the following statements from 1 (strongly disagree) to 5 (strongly agree). Please remember that this is across all of your lessons.

3

	1 Strongly disagree	2 Disagree	Neither agree or disagree	4 Agree	5 Strongly agree
Receiving feedback comments is important to me	○	○	○	○	○
I do not pay attention to feedback comments I am given	○	○	○	○	○
I think that feedback comments from teachers help me to do better on future tasks	○	○	○	○	○
I feel confident asking my teachers to explain comments to me.	○	○	○	○	○
Receiving grades is more important to me than receiving written comments	○	○	○	○	○

8. Is there anything else you would like to add to make sure that feedback is useful for you?

Appendix 4. Student Post-Intervention Questionnaire

As you know from last term, I am currently doing my research for my Masters. This is focused on the use of feedback to students, and I am focusing on students in year 12 and 13. Last term I asked for your views on feedback, and used these to produce a school policy for teachers. The aim of the policy was to make sure that you received feedback that you find useful and hopefully to help your learning. Now that it has been in place for a term, I would like your views on how it is going, so that we can make any further changes that are needed.

Please can I ask you to fill in the following questionnaire to get your views on the lesson feedback you have received this term. .
This survey is to get your views on feedback within your lessons.

The questionnaire is anonymous.

* 1. Gender

- ○ Female
- ○ Male

* 2. Year Group

- ○ Year 12
- ○ Year 13

* 3. Thinking about feedback you receive in your lessons this term, how much, if at all, do you get the following feedback:

	None	Few	Some	Most	All
Receiving a mark on work (e.g. 7/10)	○	○	○	○	○
Mistakes are identified, but not corrected	○	○	○	○	○
Written comment about your work	○	○	○	○	○
A chance to respond to the feedback you are given	○	○	○	○	○
Being given targets for future work	○	○	○	○	○
Corrections made to mistakes in your work	○	○	○	○	○
Only receiving a comment on your work, with no mark	○	○	○	○	○
Reference to success or assessment criteria on your work	○	○	○	○	○

* 4. Please indicate how much you agree with each of the following statements from 1 (strongly disagree) to 5 (strongly agree). Please remember that this is across all of your lessons this term.

	1 Strongly disagree	2 Disagree	3 Neither agree or disagree	4 Agree	5 Strongly agree
I receive useful feedback from my teachers	○	○	○	○	○
I understand the feedback comments that I get	○	○	○	○	○
I can use feedback comments to make progress with my learning.	○	○	○	○	○
I think feedback comments from teachers are a waste of time	○	○	○	○	○
I take time to think about the feedback I am given	○	○	○	○	○
I find feedback comments unclear and confusing.	○	○	○	○	○

* 5. Please indicate how much you agree with each of the following statements from 1 (strongly disagree) to 5 (strongly agree). Please remember that this is across all of your lessons this term.

	1 Strongly disagree	2 Disagree	3 Neither agree or disagree	4 Agree	5 Strongly agree
Receiving feedback comments is important to me	○	○	○	○	○
I do not pay attention to feedback comments I am given	○	○	○	○	○
I think that feedback comments from teachers help me to do better on future tasks	○	○	○	○	○
I feel confident asking my teachers to explain comments to me.	○	○	○	○	○
Receiving grades is more important to me than receiving written comments	○	○	○	○	○

* 6. Following the changes to feedback this term please indicate how you feel feedback compares to last term.

- Feedback is better than last term
- Feedback is the same as last term
- Feedback is less good than last term

* 7. Please can you explain your answer to question 6.

8. Please provide any information about improving feedback to IB students

Appendix 5. Proposed Interview Questions

- What do you find useful/ appreciate when getting feedback from teachers? / What do you appreciate least when getting feedback from teachers?
- Can you give examples of how teachers can make feedback clearer to understand?
- Do you understand the language that is used in feedback? (If not, can you give examples of this?)
- What do you think about receiving grades on work? / If you receive grades does it make you less likely to read feedback comments?
- Do you know the criteria which you are being assessed against?
- How frequently do you receive targets on marked work? Are they useful and easy to understand?
- Do you find discussions with teachers helpful in feedback? (How often do you have the chance to do this?)

Appendix 6. CUREC Approval

Re: FW: CUREC

[redacted]

Sun 13/10/2019 10:56

To: [redacted]
Cc:

Dear [redacted]

Development of an IB feedback policy: Staff and student perceptions

The above application has been considered on behalf of the Departmental Research Ethics Committee (DREC) in accordance with the procedures laid down by the University for ethical approval of all research involving human participants. I am pleased to inform you that, on the basis of the information provided to DREC, the proposed research has been judged as meeting appropriate ethical standards, and accordingly, approval has been granted.

I noticed that the letter to the Head Teacher has been signed. Research cannot begin until ethical consent has been given, including securing consent from participating schools. Given that this is your school, I am sure that this will cause no problems, but please do note it for any future research.

Please also note that any audio-recording should be made using specific audio-recorder and then transferred to secure storage as soon as possible. **If a mobile phone is used, the automatic backup function must be disabled so that recording are not automatically backed up to cloud storage.**

Since your research involves participants whose ability to give free and informed consent is in question (this includes those under 18 and vulnerable adults), then it is also advisable to read the following NSPCC professional reporting requirements for cases of suspected abuse http://www.nspcc.org.uk/globalassets/documents/information-service/factsheet-child-abuse-reporting-requirements-professionals.pdf

Should there be any subsequent changes to the project which raise ethical issues not covered in the original application you should submit details to research.office@education.ox.ac.uk for consideration.

Good luck with your research study.

With kind regards,

[redacted]
Department of Education
University of Oxford

Appendix 7. Letter from Head Teacher

UNIVERSITY OF OXFORD
DEPARTMENT OF EDUCATION

15 Norham Gardens, Oxford OX2 6PY
Tel: +44(0)1865 274024 Fax: +44(0)1865 274027
general.enquiries@education.ox.ac.uk www.education.ox.ac.uk

Director Professor Jo-Anne Baird

[redacted]

Dear [redacted]

I am writing to enquire about conducting research in school this academic year. As you know, I am studying for the Master's in Learning and Teaching at Oxford University, supervised by [redacted] In my final research project *"Development of an IB Feedback Policy: Staff and Student Perceptions"* I will explore staff and student perceptions of current feedback practices in Year 12 and 13 and use this to develop a feedback policy to be used for IB students.

The research will involve IB teachers as I will be asking them their current feedback practices, as well as involving them in the collaborative development of the feedback policy and the implementation of it. I will ask Year 12 and 13 students their perceptions of current feedback practices within IB teaching, I will ask for their involvement in developing the policy and their views of it after it has been implemented.

By participating in the research, the school would be contributing to a project that will ensure that feedback practices in IB lessons are in line with good practice, are considered to be useful by the students, and manageable by staff.

I hope to conduct this research over this academic year. I will be asking staff and students to answer questionnaires at the start and end of the research and will also be using small focus groups to develop the policy. Some student interviews may be carried out if I require additional information on their perception. All research will be conducted to ensure that teaching time is not impacted at any point.

Oxford University has strict ethical procedures on conducting ethical research, consistent with current British Educational Research Association guidelines. The University also recognises, however, that my study is a piece of practitioner research, and that schools already operate with the highest ethical standards. Therefore only your formal consent as headteacher is necessary, and not that of individual parents or staff. However, throughout the research, students and other teachers will be able to refuse to participate in any research activities at any time.

All participants, including students, teacher and the school, would be made anonymous in all research reports. The data collected would be kept strictly confidential, available only to my supervisor, [redacted] and me, and only used for academic purposes. It will be kept for as long as it has academic value.

If you are happy for me to proceed with this study, please confirm that using the attached reply form. If you have any concerns or need more information about what is involved, please contact me or my supervisor. Further, if you have any questions about this ethics process at any time, please contact the chair of the department's research ethics committee, though: research.office@education.ox.ac.uk

I look forward to hearing from you.

Yours sincerely,

[redacted]

Development of an IB Feedback Policy: Staff and Student Perceptions

[redacted]

University of Oxford, Department of Education

[redacted]

☐ We do not wish to participate in this project.

☐ We would like to find out more about this project.

☑ We would like to take part in this project.

Head teacher's signature

Please return this form to me.

Thank you for your help.

Appendix 8. Feedback Policy



Formative Feedback Policy

Formative feedback within the school can be considered to:

'Provide information to learners about their performance and how to improve it.'
Elliott et al (2016)

Feedback should be meaningful, manageable and motivating:

- Meaningful: it varies by subject and what works best for the student and teacher in relation to any particular piece of work. Feedback approaches should be adjusted as necessary.
- Manageable: it is proportionate and considers the frequency and complexity of written feedback, as well as the cost and time-effectiveness.
- Motivating: it should help to motivate students to progress. This does not mean being universally positive, however, if errors are identified then it is important that targets are given to move the learning forward and criticism should be constructive.

Consistency should be considered in terms of consistently high standards rather than unvaried practice. Providing feedback should never involve the teacher doing more work than the students, as this can become a disincentive for students to accept challenges and take responsibility for improving their work.

Feedback can be provided on:

- Task: feedback related to surface knowledge- such as correct and incorrect answers, depth of knowledge or different sources of information.
- Process: feedback involving constructing of meaning and relates more to relationships and cognitive processes.
- Self-regulation: feedback addressing the way students monitor, direct, and regulate actions towards their learning.
- Self: feedback about the student as a person, and typically express evaluations (either positive or negative) about the student.

For feedback to be useful it must provide a clear indication of the expected level of work, how the students work compares with the expected level, and provide clear direction on how to improve the work. Following feedback students should be able to act upon it and make progress with their studies.

January 2020

The following should be considered to be the minimum best practice for feedback at [redacted] School:

- Grading of work has been shown to reduce the impact of feedback comments. Therefore, students should be given the opportunity to act on comment only feedback at least twice every half term. This can be in the form of interim feedback on work before submission or providing two similar tasks where feedback on the first task can be used on the second.

- Students should always be clear about the criteria being used when assessing their work. Wherever possible marking rubrics, using examination criteria, should be used to provide clear guidance to students about the desired outcomes.

- Targets should be provided for improving work when appropriate. Ideally a maximum of three targets should be provided, and these should be clear, specific and actionable on future work.

- Dialogue is often important to support students' understanding of the feedback provided. Students should be given the opportunity to discuss feedback when necessary.

- Feedback should be provided on task, process, and self-regulation (see Appendix 1 for guidance). Feedback on self should be limited.

Feedback will vary from subject to subject, and therefore this policy should be used in conjunction with department feedback policies.

References:
Elliott, V., Baird, J., Hopfenbeck, T.N., Ingram, J., Thompson, I., Usher, N., Zantout, M., Richardson, J., Coleman, R. (2016). *A marked improvement; a review of the evidence on written marking*.

Hattie, J. & Gan, M. (2011). Instruction based on feedback. In E.R. Mayer & P.A. Alexander (Eds.) *Handbook of Research on Learning and Instruction.* (pp 249-271). Oxon: Routledge

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January 2020

Appendix 1

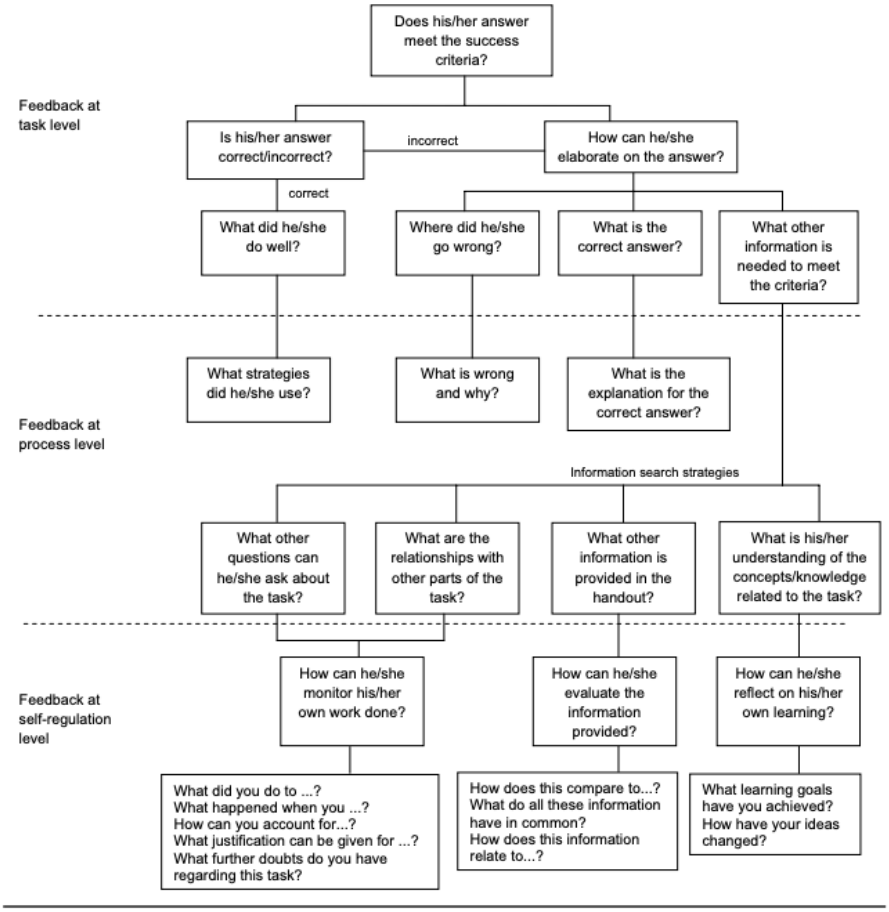


Figure 13.1 Graphic organizer on feedback levels and question prompts

From Hattie & Gan, 2011

06/01/2020

FEEDBACK

Monday 6th January

AIMS OF THIS SESSION

- To review feedback practices
- To consider how these practices can be embedded into teaching.
- Introduction of the IB Feedback policy

FEEDBACK

Feedback is regarded as one of the most powerful strategies to improve student achievement

Hattie (2009)

DEFINING FEEDBACK

All dialogue to support learning in both formal and informal situations.

Provide information to learners about their performance and how to improve it.

Information given to the learner or teacher about the learner's performance relative to learning goals or outcomes.

Information provided by an agent (e.g. teacher, peer, book, parent, self, experience) regarding some aspect of one's performance or understanding.

Feedback is information about the gap between the actual level and the reference level, which is used to alter the gap in some way

DEFINITION FOR IB FEEDBACK

'Provide information to learners about their performance and how to improve it.'

Elliott et al (2016)

For feedback to be useful it must provide a clear indication of the expected level of work, how the students work compares with the expected level, and provide clear direction on how to improve the work.

Feedback must be given in a welcoming environment, it is important for students to feel comfortable making mistakes

FEEDBACK METHODS

Discuss- Which of these feedback methods do you think are supported by good evidence regarding their effectiveness.

Grading

Dialogic marking

Acknowledgement marking

Corrections

Targets

Student opportunities to Respond to feedback

Thorough marking

Praise

1

FEEDBACK

Self **Task** **Process** **Self-regulation**

Hattie & Timperley, 2007

FEEDBACK

Self Task Process Self-regulation

Relates to feedback about the student as a person, and typically express evaluations (either positive or negative) about the student.

It typically contains little task related information, and is rarely effective at improving outcomes.

FEEDBACK

Self **Task** Process Self-regulation

Commonly relates to surface knowledge- such as correct and incorrect answers, depth of knowledge or different sources of information.

Found to be most beneficial to help students reject incorrect information.

Is often non-transferable to different tasks.

Studies suggest that as much as 90% of feedback provided in lessons is at the task level.

FEEDBACK

Self Task **Process** Self-regulation

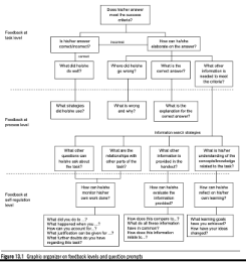
Relates to feedback involving constructing of meaning and relates more to relationships and cognitive processes. As a result this often allows for transference of skills from one task to another.

Is shown to be more effective at enhancing deeper learning.

FEEDBACK

Self Task Process **Self-regulation**

Relates to feedback addressing the way students monitor, direct, and regulate actions towards their learning.



Hattie & Gan, 2011

FEEDBACK SHOULD BE MEANINGFUL, MANAGEABLE AND MOTIVATING

- Meaningful: it varies by subject and what works best for the student and teacher in relation to any particular piece of work.
- Manageable: it is proportionate and considers the frequency and complexity of written feedback, as well as the cost and time-effectiveness.
- Motivating: it should help to motivate students to progress.

WHAT DO THE STUDENTS SAY?

- 66% of students felt that they received useful feedback from their teachers
- Over 72% saying that they could use the feedback to make progress with their learning.
- However, only 60% of students said they feel confident asking teachers to explain feedback comments to them.

WHAT DO THE STUDENTS SAY?

Thinking about what type of feedback you find most useful, please indicate how useful you find each of these

	NOT USEFUL	SOMEWHAT USEFUL	VERY USEFUL	TOTAL
A score for work (e.g. 90%)	6.06% 2	45.45% 15	48.48% 16	33
A score and a comment for work	0.00% 0	15.15% 5	84.85% 28	33
A comment only	9.09% 3	78.79% 26	12.12% 4	33
Targets for future work	6.06% 2	36.36% 12	57.58% 19	33
Having time to talk through feedback with your teacher	0.00% 0	24.24% 8	75.76% 25	33
Receiving feedback partway through a task before submitting it	9.09% 3	27.27% 9	63.64% 21	33

IB FEEDBACK POLICY

- 5 main components
  - The impact of grading & opportunities to act on feedback
  - Use of IB criteria during feedback
  - Providing targets
  - Opportunities for dialogue
  - Feedback should be given on task, process or self-regulation.

THE IMPACT OF GRADING & OPPORTUNITIES TO ACT ON FEEDBACK

- Grading of work has been shown to reduce the impact of feedback (Butler, 1986). Therefore, students should be given the opportunity to act on comment only feedback given at least twice every half term.
- This can be in the form of interim feedback on work before submission or providing two similar tasks where feedback on the first task can be used on the second.

USE OF IB CRITERIA DURING FEEDBACK

- Students should always be clear about the criteria being used when assessing their work.
- Wherever possible marking rubrics, using IB criteria, should be used to provide clear guidance to students about the desired outcomes.
- Exemplar work can be useful to help students to understand the expected outcomes.

PROVIDING TARGETS

- Targets should be provided for improving work when appropriate.
- Ideally a maximum of three targets should be provided, and these should be clear, specific and actionable on future work.

OPPORTUNITIES FOR DIALOGUE

- Dialogue is often important to support students' understanding of the feedback provided.
- Students should be given the opportunity to discuss feedback when necessary.

CHALLENGES TO FEEDBACK

Despite feedback being given, it does not always result in positive improvement (Kluger & DeNisi (1996)

Reasons for this may be:

- Students do not understand the feedback give or it is too vague.
- Feedback is given after it can be acted upon.
- Students choose not to engage with the feedback.
- Student motivation may be different to the teachers.

DISCUSSION

- What is the right balance of grades and comments?
- Do our pupils ignore formative comments if there is a grade on the page?
- What are the best ways to provide time for pupils to consider and respond to written comments?
- How do we check that pupils understand all written comments and are purposefully engaged with them?
- What is the most effective way to check that pupils understand our marking?
- Do we set specific targets that can be immediately acted upon?
- Do pupils understand the targets we set them?

REFERENCES

Butler, R. (1988). Enhancing and undermining intrinsic motivation: the effects of task-involving and ego-involving evaluation on interest and performance. *British Journal of Educational Psychology*, 58, 1-14.

Elliott, V., Baird, J., Hopfenbeck, T.N., Ingram, J., Thompson, I., Usher, N., Zantout, M., Richardson, J., Coleman, R. (2016). *A marked improvement: a review of the evidence on written marking.*

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Hattie, J. & Timperley, H. (2007). The Power of Feedback. *Review of Educational Research*, 77 (1), 81-112. DOI: 10.3102/0034654307998487.

Kluger, A.N. & DeNisi, A. (1996). The effects of feedback interventions on performance: a historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin*, 119(2), 254-284.

Report of the Independent Teacher Workload Review Group (2014). Eliminating unnecessary workload around marking. Online: https://www.gov.uk/publications/eliminating-unnecessary-workload-around-marking-report-of-the-independent-teacher-workload-review-group-2014. Accessed 23rd December, 2019]

Appendix 10. Questionnaire Results

10.1 Pre-intervention staff questionnaire results

Table 1. Question Responses: Please indicate which IB subject group(s) you teach:

	Responses	
Group 1: Language and Literature	27.27%	6
Group 2: Language acquision	27.27%	6
Group 3: Individuals and Societies	22.73%	5
Group 4: Sciences	22.73%	5
Group 5: Mathematics	9.09%	2
Group 6: Arts	4.55%	1

Table 2. Question Responses: When I think of feedback, I think of the following practices: (tick all that apply)

	Responses	
Reports to students' parents	54.55%	12
Advice or comments that students give each other	54.55%	12
Information on the quality of work relative to standards, norms, or expectations	77.27%	17
Grades, scores, or marks on student work	68.18%	15
Suggestions or comments from other students	59.09%	13
Praising students for how hard they have worked	68.18%	15
Detailed written comments	81.82%	18
Spoken comments	86.36%	19
Ticks or crosses on student work	31.82%	7
Giving correct answers when students answer incorrectly	31.82%	7
Parent-teacher conferences	45.45%	10
Comments students give to themselves	40.91%	9
Instant responses to students' classroom work	68.18%	15
Hints, tips, and reminders written on student work	72.73%	16
Stickers, stamps, or smiley faces on student work	31.82%	7
Discussions with students about their work.	90.91%	20

Table 3. Question Responses: Please select which of the following definitions you think best defines feedback:

	Responses	
Information provided by an agent (e.g. teacher, peer, book, parent, self, experience) regarding some aspect of one's performance or understanding.	4.55%	1
Information communicated to the learner that is intended to modify his or her thinking or behaviour for the purpose of improving learning.	22.73%	5
All dialogue to support learning in both formal and informal situations.	27.27%	6
Information given to the learner or teacher about the learner's performance relative to learning goals or outcomes.	13.64%	3
Feedback is information about the gap between the actual level and the reference level, which is used to alter the gap in some way	9.09%	2
Provides information to learners about their performance and how to improve it.	22.73%	5

Table 4. Question Responses: How much, if at all, do you use the following feedback practices. None/Few/Some/Most/All of the pieces of work I mark:

Statement	None	Few	Some	Most	All
Putting a mark on work (e.g. 7/10)	0.00%	0.00%	52.38%	38.10%	9.52%
Indicating mistakes in pupils' work, but not correcting them	9.52%	23.81%	14.29%	47.62%	4.76%
Writing a qualitative/ descriptive comment about work as well as providing a written grade.	0.00%	4.76%	9.52%	47.62%	38.10%
Giving pupils time in class to write a response to previous marking comments	9.52%	9.52%	47.62%	28.57%	4.76%
Writing praise for pupils' achievement on work	0.00%	0.00%	23.81%	33.33%	42.86%
Writing targets for future work (e.g. even better if)	0.00%	4.76%	19.05%	33.33%	42.86%
Correcting mistakes in pupils' work	4.76%	33.33%	23.81%	23.81%	14.29%
Writing a qualitative/descriptive comment about work, without providing a written grade	4.76%	23.81%	42.86%	23.81%	4.76%
Writing praise for pupils' effort on work	0.00%	14.29%	9.52%	47.62%	28.57%
Referring to success or assessment criteria in your written comments	0.00%	0.00%	28.57%	57.14%	14.29%
Referring to the way work was planned and completed (as opposed to the end product) in your written comments.	0.00%	28.57%	47.62%	23.81%	0.00%

10.2 Pre-intervention student questionnaire results

Table 1. Question responses: Gender:

	Responses	
Female	54.29%	19
Male	45.71%	16

Table 2. Question responses: Year group:

Answer Choices	Responses	
Year 12	54.29%	19
Year 13	45.71%	16

Table 3. Question responses: Thinking about feedback you receive in your lessons, how much, if at all, do you get the following feedback:

	None	Few	Some	Most	All
Receiving a mark on work (e.g. 7/10)	0.00%	11.43%	40.00%	40.00%	8.57%
Mistakes are identified, but not corrected	2.86%	20.00%	57.14%	20.00%	0.00%
Written comment about your work	2.86%	25.71%	40.00%	31.43%	0.00%
A chance to respond to the feedback you are given	2.86%	28.57%	31.43%	34.29%	2.86%
Being given targets for future work	8.57%	20.00%	48.57%	22.86%	0.00%
Corrections made to mistakes in your work	0.00%	28.57%	37.14%	25.71%	8.57%
Only receiving a comment on your work, with no mark	25.71%	34.29%	25.71%	14.29%	0.00%
Reference to success or assessment criteria on your work	5.71%	14.29%	42.86%	28.57%	8.57%

Table 4. Question responses: Thinking about what type of feedback you find most useful, please indicate how useful you find each of these:

	Not useful	Somewhat useful	Very useful
A score for work (e.g. 90%)	5.71%	45.71%	48.57%
A score and a comment for work	0.00%	14.29%	85.71%
A comment only	8.57%	80.00%	11.43%
Targets for future work	5.71%	34.29%	60.00%
Having time to talk through feedback with your teacher	0.00%	22.86%	77.14%
Receiving feedback partway through a task before submitting it	8.57%	25.71%	65.71%

Table 5. Question responses: Please indicate how much you agree with each of the following statements from 1 (strongly disagree) to 5 (strongly agree). Please remember that this is across all of your lessons.

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
I receive useful feedback from my teachers	0.00%	0.00%	34.29%	62.86%	2.86%
I understand the feedback comments that I get	0.00%	2.86%	28.57%	51.43%	17.14%
I can use feedback comments to make progress with my learning.	0.00%	2.86%	25.71%	62.86%	8.57%
I think feedback comments from teachers are a waste of time	40.00%	45.71%	8.57%	2.86%	2.86%
I take time to think about the feedback I am given	0.00%	8.57%	28.57%	45.71%	17.14%
I find feedback comments unclear and confusing.	5.71%	37.14%	42.86%	11.43%	2.86%
Receiving feedback comments is important to me	0.00%	2.86%	5.71%	60.00%	31.43%
I do not pay attention to feedback comments I am given	25.71%	45.71%	25.71%	2.86%	0.00%
I think that feedback comments from teachers help me to do better on future tasks	0.00%	0.00%	14.29%	60.00%	25.71%
I feel confident asking my teachers to explain comments to me.	0.00%	17.14%	20.00%	54.29%	8.57%
Receiving grades is more important to me than receiving written comments	8.57%	14.29%	48.57%	22.86%	5.71%

10.3 Post-intervention staff questionnaire results

Table 1: Question Responses : Please indicate which IB subject group(s) you teach:

Teaching area	Responses	
Group 1: Language and Literature	29.41%	5
Group 2: Language acquision	35.29%	6
Group 3: Individuals and Societies	11.76%	2
Group 4: Sciences	17.65%	3
Group 5: Mathematics	11.76%	2
Group 6: Arts	5.88%	1

Table 2: Question Responses: How much, if at all, do you use the following feedback practices:

	None	Few	Some	Most	All
Putting a mark on work (e.g. 7/10)	0.00%	6.67%	53.33%	26.67%	13.33%
Indicating mistakes in pupils' work, but not correcting them	6.67%	13.33%	40.00%	33.33%	6.67%
Writing a qualitative/ descriptive comment about work as well as providing a written grade.	0.00%	0.00%	0.00%	66.67%	33.33%
Giving pupils time in class to write a response to previous marking comments	13.33%	33.33%	20.00%	20.00%	13.33%
Writing praise for pupils' achievement on work	0.00%	0.00%	13.33%	53.33%	33.33%
Writing targets for future work (e.g. even better if)	0.00%	0.00%	0.00%	80.00%	20.00%
Correcting mistakes in pupils' work	6.67%	26.67%	20.00%	33.33%	13.33%
Writing a qualitative/descriptive comment about work, without providing a written grade	0.00%	33.33%	40.00%	20.00%	6.67%
Writing praise for pupils' effort on work	0.00%	0.00%	46.67%	26.67%	26.67%
Referring to success or assessment criteria in your written comments	0.00%	13.33%	33.33%	33.33%	20.00%
Referring to the way work was planned and completed (as opposed to the end product) in your written comments.	6.67%	13.33%	40.00%	40.00%	0.00%

Table 3: Question responses: Please indicate how much you agree with each of the following statements from 1 (strongly disagree) to 5 (strongly agree).

	Strongly diagree	Disagree	Neither agree or disagree	Agree	Strongly agree
Students use the feedback comments given to improve their work	6.67%	6.67%	13.33%	60.00%	13.33%
I frequently have to write the same comments on pieces of work for the same student.	0.00%	20.00%	26.67%	33.33%	20.00%
Students take time to think about the feedback given	6.67%	13.33%	33.33%	46.67%	0.00%
Students perceive receiving grades as more important than receiving comments.	0.00%	13.33%	33.33%	33.33%	20.00%

Table 4: Question responses: Please indicate how much you agree with each of the following statements from 1 (strongly disagree) to 5 (strongly agree).

I was able to incorporate this into my feedback practice	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Comment only feedabck	0.00%	7.69%	23.08%	61.54%	7.69%
Use of assessment criteria	0.00%	7.69%	15.38%	23.08%	53.85%
Use of targets	0.00%	7.69%	30.77%	30.77%	30.77%
Opportunities for dialogue	0.00%	0.00%	15.38%	30.77%	53.85%
Focusing feedback on task, process and self-regulation	0.00%	7.69%	46.15%	38.46%	7.69%

Table 5: Question responses: Please indicate how much you agree with each of the following statements from 1 (strongly disagree) to 5 (strongly agree).

This had a positive impact on students work	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Comment only feedabck	0.00%	0.00%	53.85%	46.15%	0.00%
Use of assessment criteria	0.00%	0.00%	41.67%	25.00%	33.33%
Use of targets	0.00%	0.00%	53.85%	38.46%	7.69%
Opportunities for dialogue	0.00%	0.00%	15.38%	38.46%	46.15%
Focusing feedback on task, process and self-regulation	0.00%	0.00%	53.85%	38.46%	7.69%

Table 6: Question responses: Please indicate how much you agree with each of the following statements from 1 (strongly disagree) to 5 (strongly agree).

Implementing this required no change to my feedback practice	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Comment only feedabck	0.00%	30.77%	30.77%	30.77%	7.69%
Use of assessment criteria	0.00%	30.77%	15.38%	15.38%	38.46%
Use of targets	7.69%	15.38%	23.08%	38.46%	15.38%
Opportunities for dialogue	7.69%	15.38%	23.08%	38.46%	15.38%
Focusing feedback on task, process and self-regulation	0.00%	23.08%	46.15%	30.77%	0.00%

Table 7: Question responses: Please indicate how much you agree with each of the following statements from 1 (strongly disagree) to 5 (strongly agree).

Implementing this increased my workload	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Comment only feedabck	15.38%	38.46%	38.46%	7.69%	0.00%
Use of assessment criteria	23.08%	30.77%	30.77%	15.38%	0.00%
Use of targets	30.77%	30.77%	23.08%	15.38%	0.00%
Opportunities for dialogue	30.77%	38.46%	23.08%	7.69%	0.00%
Focusing feedback on task, process and self-regulation	0.00%	53.85%	38.46%	7.69%	0.00%

10.4 Post-intervention student results

Table 1. Question responses: gender:

	Responses	
Female	58.62%	17
Male	41.38%	12

Table 2. Question responses: year group:

	Responses	
Year 12	55.17%	16
Year 13	44.83%	13

Table 3. Question responses: Thinking about feedback you receive in your lessons this term, how much, if at all, do you get the following feedback:

	None	Few	Some	Most	All
Receiving a mark on work (e.g. 7/10)	0.00%	33.33%	22.22%	33.33%	11.11%
Mistakes are identified, but not corrected	0.00%	33.33%	25.93%	37.04%	3.70%
Written comment about your work	0.00%	22.22%	25.93%	48.15%	3.70%
A chance to respond to the feedback you are given	3.70%	11.11%	29.63%	25.93%	29.63%
Being given targets for future work	3.70%	25.93%	22.22%	40.74%	7.41%
Corrections made to mistakes in your work	3.70%	22.22%	18.52%	37.04%	18.52%
Only receiving a comment on your work, with no mark	14.81%	29.63%	37.04%	11.11%	7.41%
Reference to success or assessment criteria on your work	3.70%	11.11%	37.04%	37.04%	11.11%

Table 4. Question responses: Please indicate how much you agree with each of the following statements from 1 (strongly disagree) to 5 (strongly agree). Please remember that this is across all of your lessons this term.

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
I receive useful feedback from my teachers	0.00%	3.70%	25.93%	59.26%	11.11%
I understand the feedback comments that I get	0.00%	3.70%	14.81%	66.67%	14.81%
I can use feedback comments to make progress with my learning.	3.70%	11.11%	22.22%	44.44%	18.52%
I think feedback comments from teachers are a waste of time	44.44%	33.33%	7.41%	14.81%	0.00%
I take time to think about the feedback I am given	3.70%	0.00%	33.33%	51.85%	11.11%
I find feedback comments unclear and confusing.	18.52%	29.63%	29.63%	22.22%	0.00%
Receiving feedback comments is important to me	3.85%	3.85%	15.38%	23.08%	53.85%
I do not pay attention to feedback comments I am given	42.31%	30.77%	26.92%	0.00%	0.00%
I think that feedback comments from teachers help me to do better on future tasks	3.85%	0.00%	15.38%	53.85%	26.92%
I feel confident asking my teachers to explain comments to me.	0.00%	11.54%	19.23%	38.46%	30.77%
Receiving grades is more important to me than receiving written comments	3.85%	23.08%	30.77%	26.92%	15.38%

Table 5. Question responses: Following the changes to feedback this term please indicate how you feel feedback compares to last term.

Answer Choices	Responses	
Feedback is better than last term	28.00%	7
Feedback is the same as last term	68.00%	17
Feedback is less good than last term	4.00%	1

Appendix 11. Cross-Tabulation Tables

Pre-Intervention Comparison:

		Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree	Total
Female	Count	0	1	0	9	9	19
	% within gender	0.0%	5.3%	0.0%	47.4%	47.4%	100.0%
Male	Count	0	0	2	12	2	16
	% within gender	0.0%	0.0%	12.5%	75.0%	12.5%	100.0%
All	Count	0	1	2	21	11	35
	% within gender	0.0%	2.9%	5.7%	60.0%	31.4%	100.0%

Table 1: Cross tabulation table showing comparison of gender to the question: '*Receiving feedback comments is important to me*' (U = 97.000, ρ = 0.036).

Post-Intervention Comparison:

		Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree	Total
female	Count	0	0	2	3	12	17
	% within gender	0.0%	0.0%	11.8%	17.7%	70.6%	100.0%
Male	Count	1	1	2	3	2	9
	% within gender	11.1%	11.1%	22.2%	33.3%	22.2%	100.0%
All	Count	1	1	4	6	14	26
	% within gender	3.9%	3.9%	15.4%	23.1%	53.9%	100.0%

Table 2: Cross tabulation table showing comparison of gender to the question: '*Receiving feedback comments is important to me*' (U = 34.500, ρ = 0.013).

		Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree	Total
female	Count	0	0	4	10	3	17
	% within gender	0.0%	0.0%	23.5%	58.8%	17.7%	100.0%
Male	Count	1	0	5	4	0	10
	% within gender	10.0%	0.0%	50.0%	40.0%	0.0%	100.0%
All	Count	1	0	9	14	3	27
	% within gender	3.7%	0.0%	33.3%	51.9%	11.1%	100.0%

Table 3: Cross tabulation table showing comparison of gender to the question: '*I take time to think about the feedback I am given*' (U = 46.000, ρ = 0.031).

		Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree	Total
female	Count	10	5	1	1	0	17
	% within gender	58.8%	29.4%	5.9%	5.9%	0.0%	100.0%
Male	Count	2	4	1	3	0	10
	% within gender	20.0%	40.0%	10.0%	30.0%	0.0%	100.0%
All	Count	12	9	2	4	0	27
	% within gender	44.4%	33.3%	7.4%	14.8%	0.0%	100.0%

Table 4: Cross tabulation table showing comparison of gender to the question: '*I think feedback comments from teachers are a waste of time*' (U = 45.000, ρ = 0.032).

		Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree	Total
female	Count	9	6	2	0	0	17
	% within gender	52.9%	35.3%	11.8%	0.0%	0.0%	100.0%
Male	Count	2	2	5	0	0	9
	% within gender	22.2%	22.2%	55.6%	0.0%	0.0%	100.0%
All	Count	11	8	7	0	0	26
	% within gender	42.3%	30.8%	26.9%	0.0%	0.0%	100.0%

Table 5: Cross tabulation table showing comparison of gender to the question: '*I do not pay attention to feedback comments I am given*' (U = 40.000, ρ = 0.036).