

# Creating feedback with ImPACT: Improving consistency in feedback through the design of principles of good feedback and creating common QuickMarks

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## Abstract

Consistency in feedback is recognised as a crucial element for student assessment literacy and electronic feedback can facilitate this. The present project aimed to develop and refine common ways to communicate key feedback messages as part of transparency in assessment to enhance students' learning using QuickMarks (QMs; part of Turnitin) and support teachers' feedback literacy. Development of the QM sets required construction of good practice principles outlining what constituted good feedback: Improvement focus, Parsimony/Generality, Accessibility, Clarity and Consistency and Tone (acronym ImPACT). The project took place in two phases across two institutions. In both phases, psychology teaching staff were asked to provide either all or their perceived most important QMs. Content analyses identified topics fed back on, and these were used to develop QM sets using ImPACT. In phase 1, teaching staff reported use of common QMs facilitated marking efficiency and encouraged balance between positive and developmental feedback. Phase 2 used the same method to develop common QMs, but also aligned QMs to course learning outcomes in a different university. Student feedback was primarily positive and demonstrated acceptability and use of QMs, although students needed support to act on feedback. Our findings suggest common QMs can facilitate a continuing dialogue between teaching staff and students, improving transparency and supporting

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feedback literacy. Encouraging adherence to the use of the common set of QMs amongst teaching staff is still needed. Adopting ImPACT principles and common QMs could address challenges in education such as lack of transparency in feedback and enabling elements of personalisation in feedback.

#### KEYWORDS

assessment literacy, feedback consistency, feedback quality, QuickMarks

### Context and implications

**Rationale for this study:** The rationale for this study was to improve consistency in feedback thereby improving the transparency of the assessment process.

**Why the new findings matter:** The paper describes a set of good practice principles that clarify what good feedback consists of and that developing and using a common set of feedback according to these principles is useful and acceptable to teaching staff and students.

**Implications for educational researchers and policy makers:** This has implications to support teaching staff to develop their feedback literacy, and, in turn, support students to develop theirs. Led to the development of ImPACT principles, a set of guidelines that can be further tested to establish whether they describe effective feedback in Higher Education.

## INTRODUCTION

Learning in Higher Education arguably involves developing complex cognitive skills such as critical thinking and academic self-efficacy (Chen et al., 2019). As such, the approach to supporting the development of these skills is also complex and cannot rely solely on simple corrective feedback in the way that more simple, automatable skills (such as spellchecking) might (Chen et al., 2019). As Higher Education providers, we want students to be able to learn complex cognitive skills and to apply these with flexibility across different modules and assessment types. Ultimately, they will need to be able to apply these skills wherever they gain employment, which for Psychology graduates, as with some other disciplines, is potentially a wide field (JISC, 2025). One of the key approaches to supporting student learning is through assessment and feedback literacy. However, whilst the concept of student feedback literacy is well developed, as are ways of measuring it (Dawson et al., 2024), this is not the case for teaching staff. The first part of this introduction therefore considers this concept in students and teaching staff. The discussion then moves onto what constitutes good feedback in this context before clarifying the aims of this work.

### Assessment literacy and feedback literacy

The distinction between assessment literacy and feedback literacy is not clear (Nieminen & Carless, 2023), and providing clear disambiguation of these terms is beyond the scope

of this paper. However, a summary of how these concepts are considered currently in the literature is needed to provide context for this research.

Assessment literacy has been defined as being concerned with a student understanding what assessment is within their course, including the standards expected and their ability to produce work to these standards (Smith et al., 2013). Feedback literacy is arguably a sub-component of assessment literacy, defined as:

the understandings, capacities and dispositions needed to make sense of information and use it to enhance work or learning strategies. Students' feedback literacy involves an understanding of what feedback is and how it can be managed effectively; capacities and dispositions to make productive use of feedback; and appreciation of the roles of teachers and themselves in these processes.

(Carless & Boud, 2018, p.1316)

Four features have been identified; appreciating feedback, making judgements, managing affect and taking action (Carless & Boud, 2018).

Feedback literacy can also be viewed as individual skills and capabilities or acknowledging the social and cultural nature of feedback (Nieminen & Carless, 2023). This alternative view of feedback literacy encourages the consideration of not only individual skill development but also the socio-cultural situation in which the learner finds themselves. Responsibility for feedback literacy does not therefore lie only with the individual but also with the system in which they find themselves.

What feedback literacy entails is different in students and teaching staff because of their different roles in the feedback process (Boud & Dawson, 2023). For students, it has been defined by Boud and Dawson (2023) as 'what students need to know, and be able to do, to benefit both from the feedback practices to which they are exposed and those that they might initiate for themselves' p.159. The approach adopted in assessment and feedback therefore needs to support student feedback literacy.

Regarding teacher (note: although teacher is used for consistency in the context of this paper it also encompasses lecturers and tutors) feedback literacy, Boud and Dawson (2023) reviewed the starting point for understanding what feedback literate teachers do by analysing the practice of experienced teachers who demonstrate careful consideration of the role of feedback in Higher Education. This led to a framework that describes a range of different competencies across three levels: macro (programme level), meso (course level) and micro (assessment level). At the macro level relevant to this paper, the linking of feedback to key aspects, such as learning outcomes and support for the development of shared understanding of key feedback issues, at the meso level, the construction of feedback processes such as standardised comment banks, and at the micro level, the construction of specific feedback. On the construction of feedback, some characteristics are noted; these include how to improve the work, correction or confirmation, motivation and support for student understanding of their progress. Although these characteristics are useful, the framework does not focus on how to generate feedback. These elements were considered as well as assessment literacy within the projects described in this paper.

Although there is a lack of clear distinction between assessment literacy and feedback literacy, there is evidence of similarity in measurement tools for assessment literacy across different regions (Australia, New Zealand, Canada USA, UK and Europe) suggesting general agreement on the concept (DeLuca et al., 2016). Further testing and refinement of the teacher feedback literacy framework needs to be completed to identify the potential validity and impact of the different components on teacher and student and on learning outcomes. Understanding what good teacher feedback literacy entails is important in clarifying what

teachers do in relation to feedback processes in general and in terms of providing feedback to students.

To support student learning, this study therefore aims to support the development of both student and teacher feedback literacy as they are likely to be interdependent (Carless & Winstone, 2023). The discussion now turns to considering the outlining how feedback is used and perceived in Higher Education.

## Feedback in higher education

The last decade has seen a shift in theoretical perspectives reconceptualising feedback not as a one-off 'correction' but an ongoing dialogic process (e.g. Carless, 2015), which aligns with the learning of complex cognitive skills. This shift away from considering feedback as something that is 'given' or 'gifted' to students, to considering useful feedback as a dialogue between teacher and student is reflected in literature and practice. Viewing and engaging with feedback as a process moves away from the student being a passive recipient of feedback, towards them needing to be engaged in a process of learning together with their teacher (O'Donovan et al., 2021; Winstone et al., 2022). It has widened consideration of the factors that influence student achievement, namely the need for students to be active recipients of feedback. It is not enough that they are provided with feedback; they need to read it, make sense of it and make appropriate changes in response to benefit their learning (Winstone & Carless, 2020). Feedback should therefore not be considered in isolation from the wider context in which it is provided.

Considering feedback as part of a range of processes is described as part of the new paradigm approach to feedback (Boud & Molloy, 2013). Research describes ways in which feedback is part of a wider systemic approach to supporting learning in Higher Education, such as the work of Boud and Dawson (2023) on feedback literacy discussed above. Feedback is critical within this; for example Cross (1996) has likened learning without feedback to archery in the dark, and if the feedback is not illuminating the target in the correct place and in a way that the student can perceive, learning is unlikely to make progress in the right area(s). Therefore, understanding what feedback characteristics support students to make behavioural changes towards the learning outcomes is central. To understand what characteristics support students' behaviour change, there needs to be a degree of consistency in feedback to clarify standards of assessment.

At this point, it is useful to briefly consider the use of standards within assessment more broadly and how these have implications for transparency in assessment. Standards are widely used and allow teachers to judge how well a piece of work, or a programme meets or falls short of these standards (Ajjawi et al., 2021). Commonly used standards include marking rubrics, learning outcomes and grade descriptions. However, the way in which standards are conceptualised has important implications. Ajjawi et al. (2021) suggest that viewing standards through a socio-material perspective allows for interpretation in response to the social and cultural situation as well as the standards as written. This approach allows standards, which can be viewed as abstract concepts, to flex in response to changes in the context whilst still maintaining elements of stability. Designing common sets of feedback to enhance consistency offers an opportunity to clarify expectations related to key elements of standards in a manner, which is arguably easier to adapt than the standards themselves. For example, programme-level learning outcomes often reside behind a protective wall within Higher Education quality processes, requiring special processes should changes be required. Feedback comments are not protected in the same way, therefore, offering an avenue to allow response to changes in the socio-cultural environment including changing interpretations of standards aligning with the

socio-material perspective. Increasing consistency in feedback through common feedback can support teachers to collectively, rather than individually, clarify expectations of work in relation to benchmarked standards, that is to support the transparency of assessment criteria.

Clarification of standards has been noted in some of the earlier work that identified seven principles of good feedback practice to support student self-regulation (Nicol & Macfarlane-Dick, 2006). These included clarification of standards, supporting reflection and dialogue between the teacher and student's peers as well as delivering 'high quality information to students about their learning' p.208. The authors acknowledged that at that point, what constitutes good feedback was not agreed and suggested that: 'Good quality external feedback is information that helps students troubleshoot their own performance and self-correct: that is, it helps students take action to reduce the discrepancy between their intentions and the resulting effects'. p.208. They also called for more research to explore what contributes to good feedback. Williams (2024) also notes there is a need for clear standards for quality feedback in Higher Education.

Identification of the specific characteristics of effective feedback has been elusive, even though reviews have been conducted on the impact of feedback. Feedback does generally have a positive impact on achievement (e.g. Cai et al., 2023; Hattie, 2009; Wisniewski et al., 2020). Several meta-analyses have been carried out that demonstrate the impact of feedback (primarily in levels below Higher Education) with effect sizes ranging between 0.48 and 0.79; however, the specific characteristics of feedback that are most effective need further disambiguation (Wisniewski et al., 2020). It seems then that quality feedback is important to learning across all levels of education, but that guidelines to support teachers to provide quality feedback are not clear.

Playfoot et al. (2025) is one example of where the characteristics of feedback have been the focus in a more systematic manner. In their work, student participants were more likely to report intention to use the feedback if it was clear, constructive and helpful. However, their participants only reported intention to use in the laboratory study; actual use was not measured. Their findings may not represent actual changes in student action or attainment.

In addition to this, a systematic literature review identified seven papers that addressed the different aspects of feedback that resulted in shifts to learning strategies (Chan et al., 2024). These strategies included feedback related to engagement (e.g. attendance and use of online resources), performance (e.g. grades and class comparator) and learning advice (e.g. recommended study activities or resources). The authors also note a need to ascertain real-world impact on students (Chan et al., 2024). However, aligning with the recent shift towards the new paradigm and encouraging student agency and self-regulation, Chan et al. (2024) identified personalised and expert feedback supported changes in student learning strategies including the use of metacognition (understanding of one's own learning processes). Performance feedback, in particular, enables students to understand how they are currently performing in relation to their learning goal. Having clarity as to their progress towards programme-level learning outcomes could therefore be important to provide to support the use of metacognitive strategies such as self-monitoring (Schmitz & Wiese, 2006).

Lack of guidelines may be a product of the difficulty involved in complex cognitive skill learning, in that feedback may need to be nuanced and applied with skill. However, given the literature reviewed thus far emphasising the importance of the feedback provided to students within a wider context of feedback literacy, it would be pertinent to develop general guidelines that clarify what good feedback looks like. These guidelines should strengthen the existing literature given their current absence. The production of guidelines then offers a starting point for further testing and refinement.

## Student perceptions of feedback

The National Students Survey (Office for Students, 2025) collects data from final year students across the University sector in the United Kingdom and as such provides an opportunity for understanding how well specific elements of Higher Education are received. Although there is some debate around the use of such surveys, data such as that collected in the National Students Survey (NSS) offers a rare opportunity to gather cross-institutional, cross-discipline information on student perceptions. Whilst national-level surveys are not a universal practice in all countries, the UK is not unique in surveying the satisfaction of students and with the globalisation of Higher Education, Wong and Chapman (2023) suggest the focus on student satisfaction is key for the success of institutions.

Winstone et al. (2022) identified nine countries in addition to the UK that had student surveys with varying content and levels of use (which populations were sampled and when). They found that the language used in the majority of these surveys places feedback in a transaction, something that is 'provided' and thus the role of the student is passive, aligning with the old paradigm views (Nieminen & Carless, 2023). Data from these countries is not accessible in the same way as the NSS data for the UK, although such data is arguably incomplete in its measurement of the effectiveness of feedback (Winstone et al., 2022). However, previous research indicates that assessment and feedback literacy challenges are widespread and are a factor in student satisfaction. For example, Gan et al. (2021) explored how students from two Chinese universities used feedback and found that engagement in feedback predicted course satisfaction. Furthermore, Henderson et al. (2019) suggests that much of the research on feedback is driven by student dissatisfaction, as identified in the national surveys from the UK and Australia. Therefore, data from the NSS is used here for context as it is the only source of data of this breadth, but it is used with caution.

Research on the NSS as instrument for assessing the student experience has indicated that the NSS has good internal reliability (Satterthwaite & Vahid Roudsari, 2020) although evidence of the number of subscales identified statistically does not match the current NSS structure (Pollet & Shepherd, 2022). Whilst there have been some changes to the constitution of individual questions and themes in 2023, Assessment and Feedback has featured in the survey consistently and has been one of the most problematic areas of student experience. Assessment and Feedback rated in the lowest three performing themes (of seven) over the past five years (Office for Students, 2025). Table 1 provides data on the mean number of student responses that agreed or strongly agreed with the questions about the seven themes:

To further explore what elements of assessment and feedback were most challenging for students, the data from the individual questions contributing to the assessment and feedback theme are shown below, first from 2020 to 2022 (Table 2) and second from 2023 to 2024 (Table 3) where the questions were changed.

Of particular interest is that the new question; 'how often does feedback help you to improve your work', is the lowest performing both years it has been part of the survey. This new question is more aligned with a new paradigm approach to feedback, and less than ¼ students agreed that feedback enabled them to improve their work. The reasons behind this rating need further exploration, but it is conceivable that there may be a range of potential factors including but not limited to; poor quality feedback, lack of consistency in feedback, inconsistencies between teachers, poor engagement with feedback, poor understanding of feedback, lack of timely feedback, lack of feedback literacy of teachers and/or students or a combination of these factors (Harkin et al., 2022). The NSS ratings also align with the literature on feedback, Pitt and Quinlan (2022) note in their review that student dissatisfaction with feedback is a consistently occurring issue, and this is driving the efforts within the sector to improve assessment and feedback.

TABLE 1 Means of students agreeing or strongly agreeing with the questions about the seven themes and rank of theme from 2020 to 2024.

Year	2020		2021		2022		2023		2024	
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
Theme 1: Teaching on my course	83.58	2	79.27	1	79.66	2	84.9	2	85.4	3
Theme 2: Learning opportunities	82.79	3	78.56	2	79.2	3	81.4	4	82.4	4
Theme 3: Assessment and feedback	72.12	7	67.68	6	67.87	6	77.8	5	78.3	5
Theme 4: Academic support	79.23	4	72.81	3	73.45	4	83.5	3	85.5	2
Theme 5: Organisation and management	73.19	6	68.61	5	69.24	5	73.6	6	75.3	6
Theme 6: Learning resources	85.71	1	72.7	4	80.91	1	86.2	1	86.9	1
Theme 7: Student voice	74.07	5	66.73	7	67.14	7	71.9	7	74	7

Note: There were changes made to the questions contributing to these themes in 2023.

**TABLE 2** Means of students agreeing or strongly agreeing with the individual questions contributing to the Assessment and Feedback theme and rank of questions 2020–2022.

Year	2020		2021		2022	
	Mean	Rank	Mean	Rank	Mean	Rank
Assessment and feedback (England) total	72.12	–	67.68	–	67.87	–
I have received helpful comments on my work	72.76	1	68.51	2	68.3	3
Feedback on my work has been timely	72.44	2	65.73	4	65.7	4
Marking and assessment has been fair	71.69	3	67.76	3	68.5	2
The criteria used in marking have been clear in advance	71.66	4	68.83	1	69.07	1

**TABLE 3** Means of students agreeing or strongly agreeing with the individual questions contributing to the Assessment and Feedback theme and rank of questions 2023–2024.

Year	2023		2024	
	Mean	Rank	Mean	Rank
Assessment and feedback total	77.8	–	78.3	–
How clear were the marking criteria used to assess your work?	75.8	4	76	4
How fair has the marking and assessment been on your course?	80.6	2	81.2	2
How well have assessments allowed you to demonstrate what you have learned?	80.9	1	81.8	1
How often have you received assessment feedback on time?	79.5	3	79.9	3
How often does feedback help you to improve your work?	72.2	5	72.7	5

## The provision of written feedback in higher education

In a recent review of practice in Higher Education, it was concluded that the biggest change in assessment and feedback is the online submission of student work and the subsequent adoption of online marking (Knight & Ferrell, 2022). This digital transformation of the sector impacts both the assessment literacy of staff and students and their digital capability as digital tools are developed and adopted. Although often the research around digital innovation is focussed on student outcomes rather than the impact on those who teach them. For example, a recent review of current trends in assessment practice within the sector identified the rapid development of generative AI (genAI) tools as a challenge in how assessments are designed and how it impacts the academic integrity of student work (Walker, 2025) but not academic practice.

One such digital tool is Turnitin (2025), a service through which students can submit their work electronically and is used by 98% of universities in the UK, and globally, the Turnitin Feedback Studio (which contains a range of tools/options for marking online) is used by 15,000 institutions including 80 of the top 100 universities. Although Turnitin has been around over 20 years, its primary use is checking academic integrity of submitted work (for both students and staff) with feedback in the form of an Originality report. Whilst there are no global statistics provided by Turnitin, the use of it as a tool for other feedback differs across the sector and within institutions, often dependent on the digital literacy of an individual teacher, as Koch and Fehlmann (2025) note digital literacy is not the same as digital performance. One of the options of embedding feedback in online submissions within Turnitin is through the use of QuickMarks (QMs), drag-and-drop comments organised into generic academic skills with in-built sets ranging from 'Academic Integrity' that includes items related to appropriate use of citations etc., to 'Usage' which describe a range of grammar points. Turnitin also allows teachers to create their own bespoke sets of QMs that can be saved to a teacher's profile and used across different modules. QMs are also able to be exported and imported for sharing with other teachers facilitating a socio-material approach to transparency (Gonsalves & Lin, 2024).

Using the QM comments is appealing for teachers as once a set of QMs are developed, they can be added comparatively quickly. Research notes that teachers reported an increased marking efficiency as well as a 10–30% reduction in time spent providing feedback (Mayhew et al., 2022; van der Hulst et al., 2014). In addition, QMs have the potential to increase the quality of feedback as teachers may be more inclined to invest the time to design higher-quality feedback if it can be used in the future (van der Hulst et al., 2014).

Additional benefits to the use of QMs include being able to provide links to external resources and supporting teachers to be able to draw on a wide range of comments, potentially supporting new teaching staff and developing of their assessment literacy. Feedback crafted for QMs can also be agreed prior to assessment grading to support consistent content, use of language and tone whilst also ensuring linkage to overall discipline aims (Mayhew et al., 2022). However, the development of QMs is not without challenges, and a considerable time investment is needed to create appropriate comments that are agreed across teaching teams, which is a critical factor in the adoption of digital tools (Fernández-Batanero et al., 2021; Koch & Fehlmann, 2025). Therefore, it would be advisable not to create a set of QMs for each individual assessment, but to adopt a socio-material approach by developing QMs sets that apply to an assessment type and/or linked to programme-level learning outcomes. Designing feedback at the assessment type or programme level should also support students to be able to identify common skills across individual assessments and modules and support their self-monitoring (Schmitz & Wiese, 2006).

QuickMarks are not the only way to provide feedback in Turnitin. Teachers can also add free text and strike-through text on the script, as well as overall comments, and rubrics can be attached to the side of the script. There is little data on which functions are used most, but as consistency in feedback is recognised as one of the most important elements for student development (Nixon et al., 2017), many universities use standardised formats for feedback to enhance consistency. However, consistency within what is said and how it is communicated to students can vary substantially, and what constitutes the 'best' feedback in both content and form is likely to differ across the teaching team (Evans, 2013), making the assessment process less transparent. QMs therefore offer an opportunity to support the consistency in feedback provided to students.

In order to develop consistency in the use of QMs sets across teaching teams, an understanding of how they are used is needed. Research on the use of QMs is limited and somewhat varied, and use of QMs by teachers suggests that they are not as well used as free text comments. Mann (2016) reviewed a range of essays across modules and found that 56% of

comments were free text rather than QMs, suggesting that the standard QM sets in Turnitin were not meeting the needs of teachers. Mann also noted that teachers acknowledged they did not fully understand the available functions, although some did create their own bespoke QMs. Mayhew et al. (2022) found that the use and reuse of QMs was identified as one of the benefits of marking online, with 85% of the teaching staff they surveyed reporting they used QMs, although they did note concerns around 'efficiency and quality' of feedback. Although only 47 members of teaching staff responded to the survey in Mayhew et al., the responses did highlight other benefits in the use of QMs such as the ability to embed hyperlinks and the ability to online resources to provide additional support for students. Mayhew et al. (2022) also noted the use of a discipline-specific QM set in one department, and another case where teaching staff had met beforehand to consider the use of language and tone to provide a consistent assessment process for both teaching staff and students.

Given the evidence presented here, development of a common set of QMs can be advantageous and good practice. Consideration then is needed as to the best way to design such a feedback resource and how teaching staff can be supported in the implementation of this (Ellis et al., 2024). Furthermore, Ellis et al. (2024) suggest that co-developing QMs with students can also help develop and facilitate their feedback literacy. They developed a set of QMs to use with first-year nursing students using previous assessment submissions and free-text comments as source material. As part of the process, students fed back on some of the QMs. This standardised set has been used for calibration with markers in preparation for subsequent marking. Although Ellis et al. have not reported data to support the implementation of the QM set, they do note the intention to conduct a content analysis of feedback across the programme of study as part of their future research.

## Feedback with ImPACT: Designing good feedback principles

The review of literature thus far suggests that feedback to students has the potential to be a powerful tool for learning as an important element of feedback literacy. There is also evidence that consistency in feedback is poor. It must be acknowledged that literature also supports the idea that feedback in assessment cannot be seen in isolation from the social, cultural and material aspects (e.g. Ajjawi et al., 2021). Teachers therefore need to clarify parameters of good feedback whilst ensuring that these are used in a way that adheres to the principles of the new paradigm approach (Boud & Molloy, 2013). Such uses do not exclude feedback comments on students' work but should not *only* be used as such. For example, designing activities that encourage students to use the feedback themselves through formative activities, or to become part of the continual development and refinement of feedback comments, facilitates a two-way dialogue and demonstrable clarification of assessment standards, that is supporting transparency in assessment.

The first step suggested here to enhancing transparency in assessment through creating common feedback sets is to clarify what the characteristics of 'good' feedback are. The principles described here were compiled using a systematic approach to combining relevant literature. Relevant literature was identified through literature searches identifying and discussing feedback characteristics. The literature identified is discussed in the preceding sections. The ImPACT principles are designed to provide a starting point to describe, evaluate and subsequently refine what makes good feedback regardless of education level or system. Given that consistency and transparency in assessment are also important, these guidelines were developed with the design of a common set of QMs in mind.

These principles describe good feedback by the acronym ImPACT: Improvement focus, Parsimony/Generality, Accessibility, Clarity and Consistency and Tone. Each of these

components will be explained with reference to how they relate to assessment and feedback literacy and relevant previous research.

## Improvement focus

To facilitate clear exposition of assessment aims, that is transparency, feedback should identify strengths and weaknesses in student work. Supporting the student to be able to understand how their work fits with the assessment standards maps to an element of assessment literacy. Clear identification of how well the student achieved related to the task, process and potentially self-regulation has been found to be important (Wisniewski et al., 2020).

Errors should be identified *as well as* suggesting action that the student could take to improve next time (Boud & Dawson, 2023; Wisniewski et al., 2020). Clearly identifying strategies or actions aimed at future improvement should increase the likelihood of the student engaging in metacognitive processes to support their learning (Chan et al., 2024).

## Parsimony/generality

A student's work will often contain much that could be fed back on. However, to provide timely feedback to potentially large cohorts, teachers cannot comment on every point. To do so is also likely to overwhelm a student and leave them unsure on which elements to address in their (also limited) time. To focus on the most important elements such as higher-order skills a student could work on to improve is suggested (Boud & Dawson, 2023). This should have the additional benefit that it would improve the likelihood that similar issues are identified across a student's work. For example, instead of 'you haven't included [a specific paper]', the QM could note that 'appropriate evidence is needed to support your point', which is transferrable across assessments (the meso level). The marker can then personalise the statement (the micro level) to the specific assessment by noting in the comment if there was a specific paper that should have been included.

Assessment strategies in the institution should then encourage reflection and identification of appropriate action (the macro level). For teaching staff, their time could be used during marking to give personalised feedback in addition to the QM as to how that particular point was illustrated in the specific assessment, something also valued by students (Huxham, 2007).

## Accessibility

There is growing recognition in the Higher Education sector around the diversity of student populations. The phrasing of feedback should be unambiguous to ensure clarity for all (Huxham, 2007) including those who may have learning challenges such as English as a second language or neurodiversity such as Autism. Again, this aligns with supporting the transparency of meaning such that students are able to understand their feedback and therefore support their feedback literacy.

## Clarity and consistency

Clarity and consistency relate to students being able to understand feedback from any marker and to make productive use of feedback as part of feedback literacy. Clarity and

consistency in feedback may be particularly important to enhancing transparency in assessment (Bearman & Ajjawi, 2021). Teaching teams should be able to clearly articulate the standards and expectations for assessment and therefore be able to identify where student work meets or falls short of these standards. Feedback that is clear and consistent should support the student to also understand how their work compares to these standards. Each QM should therefore have a clear short title and a description of the identified issue. It should be clear whether this was positive feedback or a point for development and also direct students to consistent resources that meet the needs of the programme.

## Tone

Through experience in marking and internal and external moderation, the tone of feedback can be seen to differ. As well as this, developmental feedback can elicit strong emotional reactions that may reduce the likelihood of students acting on it. To reduce this risk, the tone being supportive is important (e.g. Yang et al., 2023). To increase the likelihood that students could approach their feedback, QMs should be written from an underlying assumption of a growth mindset, that is change was possible, and encouraging the student to take responsibility for their own development (Dweck, 2006). Previous research also suggests that having a balance of identifying things done well as well as points for improvement is beneficial (e.g. Boud & Dawson, 2023).

The principles outlined above under the acronym of ImPACT are theoretically supportive of the development of assessment and feedback literacy. The studies described in this paper aimed to test the feasibility, acceptability and use of these to design common sets of QMs.

## Research context

The research took place in two post-1992 universities in the UK, both of which adhere to the widening participation agenda. As such, they are able to accept students with a wide range of previous qualifications and experience. Psychology was the discipline being taught to students. The study of psychology generally adheres to the scientific method and includes a variety of methods to understand human and non-human behaviour. Different empirical stances are taken, and it makes use of theory and its application in real-world contexts such as physical and mental health, forensic settings and education (Goodson et al., 2023). The types of assessments typical in this discipline include research reports, essays and case studies.

## Aims

This project aimed to support both student and teaching staff's feedback literacy and consistency in feedback as these have been identified by many as areas in need of enhancement (e.g. Boud & Dawson, 2023; Office for Students, 2025). The approach taken to work towards this aim was to test the use of the ImPACT principles to develop and refine common ways to communicate key messages in feedback. This should enhance transparency in assessment, students' assessment and feedback literacy and ultimately their learning.

To enhance teaching staff's feedback literacy, this project explicitly targets the macro (designing course level feedback practice), meso (aligning feedback to standards and learning outcomes) and micro (ways of phrasing specific feedback comments) level (Boud

& Dawson, 2023). Based on previous literature that perceived consistency can relate to confidence in grading, engaging with feedback and relationship with teaching staff (Nixon et al., 2017), developing a common set of QMs that the programme teaching team use would be advantageous.

The overall aims for the development of a common set of QMs were therefore multifaceted. Firstly, initial testing of the feasibility, acceptability and use of ImPACT principles for describing the characteristics of good feedback when designing common QMs. Secondly, to gain feedback on the QMs from teaching staff, support staff and students. For teaching staff, by engaging with the common QMs designed according to principles outlined above, teaching staff may release time during marking to provide more personalised feedback (micro level) that applies the common QMs to the particular assessment. This process may also facilitate calibration, ensuring consistency between markers and supports new markers in developing their own assessment literacy.

This paper describes two pedagogical phases to test the feasibility, acceptability and use of designing common QMs using the ImPACT principles:

Phase (1) the initial design of a common set of QMs for all those in the Psychology team to use in Institution One. This phase began by addressing the research question of what teaching staff were feeding back on. Common QMs were then designed according to the ImPACT principles to test whether this was feasible. Feedback was gathered from teaching staff on the acceptability and use of this process.

Phase (2) designing a common set of QMs that align with module and course learning outcomes at Institution Two, including feedback from students as key partners and co-creators. This second phase began as with phase one, by analysing what teaching staff were feeding back on. Common QMs were then designed using the ImPACT principles and additionally, mapping these to programme learning outcomes. Students were brought into the process to provide feedback on the QMs and to lead in their refinement. Including mapping to learning outcomes and involvement of students in the refinement aimed to further support the transparency of assessment standards.

## **MATERIALS & METHODS PHASE 1: DESIGNING A COMMON SET OF QMs**

Methods and findings are presented for each phase in turn so that the design of the QMs can be more easily explained.

Phase 1 took place within the psychology department of a medium-sized university (5001–10,000 students in the University). The psychology programme consisted of several undergraduate courses with some modules distinct to a specific course, and some modules shared across two or more courses (programme-level modules). The teaching staff followed a similar pattern where they may be a teacher on a course-specific module or a programme-level module. Modules were usually team taught, so the majority of modules had at least two teachers – for larger programme-level modules this could be as many as six different teachers who also acted as markers, hence the need for a consistent approach to student feedback. The whole Psychology teaching team consisted of 14 members of teaching staff with varying levels of experience.

The aim of phase 1 was to design a common set of QMs for all those in the psychology team to use in Institution One and to use feedback from teaching staff to establish acceptability and use. The lead author began this work whilst in employment at this University in response to student feedback concerns around consistency in feedback and perceived

inconsistencies between teachers. The research question in this sub-phase was: what are teaching staff feeding back on.

The project was introduced and explained during a psychology team meeting where colleagues could ask questions and volunteer to be involved. A follow-up email was sent to the psychology team asking them to export their personal QM sets and email them to the lead researcher (author). All teaching staff who had previously developed their own bespoke set of QMs (i.e. not those supplied by Turnitin) supplied the requested data in the form of a .qms file. Eleven bespoke QM sets were collected, four of these contained all the teacher's QMs in one set whilst the remaining seven consisted of sets that were specific to particular assessment types, for example qualitative research. These files can only be read within Turnitin so they were then added to the researcher's Turnitin profile for collation purposes. All provided QMs, including those used by the researcher, were then downloaded and entered into an excel document for analysis.

## RESULTS: PHASE 1

### Data analysis

The aim for the analysis was to identify what teaching staff were commonly feeding back on, based on the assumption that if they had made a QM, it was likely to be something that was repeated within and/or between assessments. The first step was therefore to collate and code the content of the QMs taking a systematic approach. A content analysis was conducted following the principles outlined by (Bengtsson, 2016). This analysis was conducted in four stages:

#### Stage 1 Decontextualisation

Familiarising and understanding the data to identify 'meaning units'- smallest unit of analysis that goes towards addressing the research question. These meaning units were then given a code. Create a 'coding list' which defines and clarifies the codes. In this case, codes were developed inductively. The lead author conducted this first stage.

#### Stage 2 Recontextualisation

A checking phase where the researcher and the group of wider teaching staff volunteers ascertained whether the content of the data has been fully captured by the codes in relation to the research question.

#### Stage 3 categorisation

Meaning units are first made as concise as possible. These are then sorted into sub-categories, for example 'Critique skills'. Categories were checked such that they were internally consistent and that categories did not overlap, that is they were identifying important distinctions in the development of skills. This part of the process formed part of group discussions with the team of volunteer teaching staff and the lead author.

## Stage 4 compilation

In the description of this phase, the aim is described as finding the essence of the data. However, given the aim of this research was to create a common bank of feedback comments to be used during marking, the compilation was kept closer to the categorisation level whilst also bearing in mind the ImPACT principles, which align with the element of checking how the findings relate to previous literature.

The final stage that was implemented in this project was to confirm the wording for each individual QM. All teaching staff volunteers and the lead author debated the wording for each QM.

Data was analysed at the manifest level, where the feedback statements are categorised according to surface-level elements such as comments related to citations. To begin, each QM and its description was inductively coded to identify what the teaching staff were feeding back on. Three hundred and eighty-four different QMs were collected from teaching staff (overall approximately 14 teaching staff, not all of whom used QMs). Sixty-seven initial codes were identified, with the top 10 most frequently identified codes in [Table 4](#) below.

The valence of the QMs was also noted. 42 (10.94%) noted things done well, 335 (87.24%) noted things needing improvement, three (0.01%) mentioned both something done well and something needing improvement, and four (0.01%) noted neither (these statements indicated that the script had been part of the sample that had been moderated so were an indication of the assessment process rather than feedback on the assessment itself).

Of note was the 79 different ways of expressing comments about use of APA formatting; this represented 21% of QMs. Given that adherence to formatting was only a small part of the overall learning outcomes, this contradicts the parsimony principle. Indeed, much of the anecdotal evidence suggests that students were overly focused on APA formatting (which could be understandable as there were so many QMs dedicated to it); therefore, it was necessary to reduce the number of comments on formatting to mirror the overall importance of formatting in learning outcomes.

The final stage of initial development was to develop the QMs themselves. To do this, a working group of a subset of the psychology team volunteered to contribute to this part of the development. At the start of the process, we agreed on common principles for the QMs. The discussion presented the ImPACT principles constructed from the literature review above and colleagues agreed these as a starting point for designing the QMs. These were the ImPACT principles described above and summarised in [Table 5](#).

The development of the first draft tested out these principles as well as the practicality of designing common sets of QMs that could be used across all types of written assessments. The common set of QMs therefore needed to meet the needs of the teaching staff whereby they addressed commonly identified issues and needed to support the students in developing their understanding of where and how they might improve their work, that is improving part of their feedback literacy and adhering to the ImPACT principles.

Once the goals for the QM set had been agreed, the individual QMs were constructed. The final set was developed by in-person group discussion between four members of teaching staff. For example, given the finding that so many comments related to the use of APA formatting style this violated the parsimony principle. Often these comments were specific to one instance and not focused on the higher-order skills. Reducing the number and variety of QMs in this area would highlight the higher-order skill for the student. After some discussion, we agreed to only include four QMs on APA style, given that formatting did feature in learning outcomes for all assessments across all levels of the programme, but only one per core error area (i.e. citations, references, tables & figures and general) that noted improvement was needed with links to internal and external resources for support.

TABLE 4 Name, definition, number of occurrences and examples of the ten most frequently used codes.

Code name and definition	Number of occurrences	Example QMs (title in bold; explanation not bold)
Name: Section content Definition: Refers to content of a particular section of an assessment	96	<b>Abstract good.</b> Appropriately structured abstract with all main points included <b>Conclusion.</b> Your conclusion should pull together the most important parts of your argument for addressing the question. As such, it should contain the 'take-home message'. You should not introduce new literature here <b>Disc[ussion] HA.</b> start with hypotheses- reiterate, then accept or reject each hypothesis
Name: Use of APA Definition: Describes correct or incorrect use of APA guidelines	79	<b>2 decimal places.</b> Report figures to 2 decimal places <b>Full stop reference.</b> The reference should always appear as part of the sentence to which it refers. Do not put the names after the full stop <b>'&amp;' versus 'and'.</b> In the text, use '&' when in brackets and 'and' outside brackets
Name: Writing style Definition: Makes reference to the way the assessment is written	34	<b>Be more concise.</b> be more concise- this section is rather long <b>Be more concise.</b> be more concise- you could have said the same thing with fewer words <b>Link paragraphs.</b> Link paragraphs
Name: Grammar Definition: Refers to grammar use	14	<b>Grammar!</b> Grammatical mistake <b>Incomplete sentence.</b> This sentence is not complete <b>Starting a sentence.</b> Don't start the sentence like this
Name: Use of research Definition: Makes reference to how previous research or evidence has been used	12	<b>Good links to research.</b> Very clear links to previous research made <b>Good use of research.</b> Good use of literature <b>More up to date research needed.</b> This research is old and you should look to see if these ideas are still supported in more recent work
Name: Good Definition: Refers to something done well, without direct reference to what	8	<b>Good.</b> good point <b>Good!</b> Good! <b>Well done!</b> Well done!
Name: Feedback Definition: Describes how or where student can access their feedback	7	<b>Feedback for this assessment...</b> Your feedback for this assessment can be found in... <b>General comments.</b> Click on the General comments. If you are unsure how to access this, please see the VLE pages
Name: Critique Definition: Provides comment on how the student has or has not demonstrated critical thinking	6	<b>Clear analysis.</b> Good attempt to describe and analyse what was written <b>Critical thinking needed.</b> Tell the reader how this addresses the question at hand
Name: Inappropriate source Definition: Comments on the inappropriateness of a source	6	<b>Inappropriate source.</b> This is not an authoritative source for use in a Psychology essay at this level <b>Not an academic source.</b> Not a suitable academic source
Name: Word choice Definition: Refers to the use inappropriate use of a particular word	6	<b>'Participant'.</b> use 'participant' (BPS) <b>Use of prove/proof/true etc.</b> Don't use prove. Evidence is not conclusive or definitive. We use a <i>p</i> value to demonstrate probability, not certainty

**TABLE 5** ImPACT principles for good quality feedback.

Improvement focus	For QMs that indicate something needs to be improved, they should explain what was wrong and suggest action that student could take to improve next time (Boud & Dawson, 2023), not merely to point out an error. This should increase the likelihood of the student engaging in metacognitive processes to support their learning (Chan et al., 2024)
Parsimony/Generality	To focus on the most important elements such as higher-order skills a student could work on to improve (Boud & Dawson, 2023). This should have the additional benefit that it would improve the likelihood that similar issues are identified across a students' work. For example, instead of you haven't included a specific paper, the QM could note that appropriate evidence is needed to support your point, the marker can then personalise the statement to the specific assessment by noting in the comment if there was a specific paper that should have been included To achieve parsimony in the QM set as a whole, QMs need to focus on higher-order skills. Benefit to students: to begin to notice patterns of strength and weaknesses across their work which they can reflect on and identify appropriate action. Benefit for teaching staff, their time could be used during marking to give personalised feedback in addition to the QM as to how that particular point was illustrated in the specific assessment (Huxham, 2007)
Accessibility	The phrasing should be unambiguous to ensure clarity for all (Huxham, 2007) and also for those who may have learning challenges such as English as a second language or neurodiversity such as Autism
Clarity & Consistency	Each QM needed to have a clear short title and a description of the identified issue. It should be clear whether this was positive feedback or a point for development and also direct students to consistent resources that meet the needs of the programme
Tone	It became clear that the phrasing across the teaching staff team was different. To increase the likelihood that students could approach their feedback, QMs should be writing from an underlying assumption of a growth mindset, that is change was possible, and encouraging the student to take responsibility for their own development (Dweck, 2006) Previous research also suggests that having a balance of identifying things done well as well as points for improvement is beneficial (e.g. Boud & Dawson, 2023). Feedback can also elicit strong emotional reactions that may reduce the likelihood of students acting on it. To reduce this risk, the tone being supportive is important (e.g. Yang et al., 2023)

The parsimony principle was an issue throughout the process of trying to construct this set of QMs, and it was noted that there were numerous comments being generated. In this iteration of the project our solution was to create different QMs, grouped deductively to what type of assessment they related to, such as 'essays', 'research report' or 'all'. This latter category included general issues with writing and/or formatting that were likely to be important across all types of assessments. Three common QM sets were identified for development that reflected the most common assessment types used in this Psychology department that were submitted via Turnitin: (1) Written work (i.e. essays, critical reviews), (2) Quantitative Research report and (3) Qualitative Research report. All three sets contained the same 41 general issues QMs plus items specific to each mode of assessment. The reasoning for the different sets was that when marking, teaching staff could only select one set of QMs at a time and including all the QMs teaching staff needed in the same set would be unwieldy and result in additional time resources spent scrolling through to find the relevant QM statement. Switching between different sets of QMs would also incur additional time costs. Therefore, a QM set appropriate to the assessment containing the most relevant QMs to choose from would, hopefully, ease marking pressures.

Table 6 below notes the total numbers of QMs in each of the three final sets contained along with the percentage of positive QMs.

**TABLE 6** Summary data for QM sets designed in the small University.

QM set name	Total number of QMs	% positive QMs
Psychology written work	49	14%
Psychology Qualitative report	65	11%
Psychology Quantitative report	58	12%

Note: 41 of the QMs were common to all sets.

**TABLE 7** Summary of positive and negative teaching staff feedback on QMs.

Helpful elements	Points for development
Helps create uniformity, with tutors using same phrasing for problems	These work best when there is a clear instruction on how to improve (e.g. 'see [internal resource]'). Some can be quite vague with little explanation about what students need to do next Seems to be inconsistency in how much staff use them- Some marking I have seen can be sparse, with tutors opting to provide more general comments instead May be more useful to have just one set for psychology written work Not everyone uses them Students don't always look at them
Speeds up process (especially for common errors)	
Pinpoints where the issue is happening in the text, making it easier for students to understand	
Useful they are specific to psychology	
Quick!	
Improves consistency of marking on a module and across the course	
Helps marker focus on what is meaningful to the student	
Useful to be able to record suggested amendments after having experience in using them	
Helpful for newer staff to see the sorts of elements they should be feeding back on	

Whilst the balance of positive to developmental QMs was not even in these sets, the positive QMs were general and could be applied in a variety of different instances. For example: *Title: Good – all points mentioned; Description: Good – you've mentioned all of the major points you would expect in a section like this.*

Another example QM from the Qualitative and Quantitative report sets was: *Title: More research needed in Intro. Description: There is not enough background information here to provide a rationale for your study. You need to include more about the previous research in the area.* This QM addressed a higher-order skill in that students needed to provide appropriate support for their study to underpin the rationale.

Once completed, the QM sets were distributed to the Psychology team along with instructions on how to import the sets and use them in marking. A file was also made available to all team members where teaching staff could record any suggested amendments to the QMs. These were reviewed on an annual basis; this was the only feedback collected at this institution regarding the QMs.

Feedback from teaching staff was collected and organised into helpful elements and developmental feedback as shown in [Table 7](#).

The feedback provided by teaching staff mirrors that found elsewhere for efficiency (Mayhew et al., 2022; van der Hulst et al., 2014). In addition, the overall aims of the QMs were perceived by some, that is increasing consistency in feedback, focusing on important elements for the student and their use in teaching staff development. Problems identified also map to previous research in that not all teaching staff made use of them, that students do not always engage with them and that some need improvement to specify more detail about what the student can do to improve. This final point suggests that in the first version, not all individual QMs fully adhered to the ImPACT principles.

Amendments to the QMs were made in response to feedback collected from teaching staff; however, these were not documented therefore cannot be reported here. It was noted

in the feedback provided by teaching staff; however, that they valued this opportunity to feed into the process.

## Phase 1 summary

Phase 1 set out to test the feasibility, acceptability and use of designing a common set of QMs for use across the Psychology department. The findings showed that it is feasible and indeed useful lessons were learned in the process, especially in specifying the IMPACT principles. Some teaching staff adopted the QMs into their practice relatively easily and appreciated their impact on efficiency and focusing role for their feedback. All teaching staff did not universally use the QMs; however, there was a suggestion that having one set rather than three might be beneficial.

## METHODS & MATERIALS PHASE 2: DESIGNING A COMMON SET OF QMs ALIGNED WITH LEARNING OUTCOMES (LOs)

Phase 2 took place with the Psychology department of a larger university (<25,000 students in the University). The Psychology Programme consisted of several undergraduate courses with a similar pattern of shared and distinct modules as institution 1. Modules were also team taught and often assessment marked by those who taught on the modules, as well as additional teaching staff from the portfolio in order to enable timely feedback to the larger number of students. There were approximately 70 members of teaching staff who contributed varying amounts to the marking across the undergraduate portfolio; therefore, consistent approaches were also needed here.

The aim of phase 2 was to design a common set of QMs that align with module and course learning outcomes which was used in Institution Two and to seek feedback from students as key partners and co-creators. The setting for this second phase was opportunistic as the lead author had moved employment to this University and similar student feedback was noted on issues with consistency in feedback.

The procedure used matched that in phase 1 apart from staff being asked to record their most used and/or perceived most important QMs in a shared excel document. It is worth noting here that the QM sets developed for phase 1 were not included to avoid potential confirmation bias.

## RESULTS: PHASE 2

### Data analysis

As with the first phase, QMs were collated and coded using content analysis as outlined by Bengtsson (2016) as described above. The research question for this phase was twofold; what do teaching staff feedback on, and what skills do students need to develop. Data was analysed at the manifest level. To begin, each QM and its description was inductively coded to identify the topic of the feedback by the lead author. One hundred and twenty-six initial QMs were collected from 16 members of teaching staff (of approximately 70 members of teaching staff). Fifteen initial codes were identified; the most frequently cited nine (that had  $\geq 3$  instances) are below in Table 8 along with examples.

The valence of the QMs was that 23 (18.25%) noted things done well, 102 (80.95%) noted things needing improvement, and one (0.01%) mentioned both something done well and

TABLE 8 Name, definition, number of occurrences and examples of the 10 most frequently used codes.

Code name and definition	Number of occurrences	Example QMs (title in bold; explanation not bold)
Name: Writing style Definition: Makes reference to the way the assessment is written	37	<b>New paragraph.</b> A new paragraph should be started if there is a change in topic <b>Poor transition.</b> Transition between sentences or paragraphs not logical <b>Casual tone.</b> This is quite a subjective, casual tone. Try to adopt a more scientific, professional tone that is used in published peer-reviewed journal articles
Name: Use of research/evidence Definition: Makes reference to how previous research or appropriate evidence has been used	25	<b>Good study description.</b> this study is described clearly and in detail to support the point you were making <b>Speculation.</b> Try to avoid speculation without providing supporting evidence <b>Unsupported statement.</b> Statements such as these need to be supported by citations from relevant studies
Name: Use of APA Definition: Describes correct or incorrect use of APA guidelines	19	<b>APA style table.</b> APA style tables do not have vertical lines (unless necessary). The table number should be in bold and the title should be in italics <b>Incorrectly formatted citation.</b> You have included a citation but it is not formatted in APA style. Citations should include only surname(s) and date (plus a page number if the citation is for a direct quote in speech marks) <b>Avoid starting sentences with numbers.</b> Avoid starting sentences with numbers, as per APA guidelines. If you still choose to do so, write the number out instead of using numerals
Name: Section content Definition: Refers to content of a particular section of an assessment	18	<b>Good conclusion.</b> This conclusion is well written, concise and integrates the points you have made from the essay in a clear set of summary 'take-home' points <b>Questionnaire details.</b> The Materials section should have a detailed description of each questionnaire used, including: name of the questionnaire, in-text reference for the questionnaire, number of items, example items, scale used, scale endpoints, calculation of sum/mean score, indication of what a high score represents. If available, the reliability of the questionnaire or subscales being used could be reported using Cronbach's alpha (either if you have the full dataset, or if it is reported in the original study that developed the questionnaire) <b>Future directions missing.</b> Missed opportunity to suggest a future direction for research on the basis of current gaps in literature
Name: Critique Definition: Provides comment on how the student has or has not demonstrated critical thinking	7	<b>Critical analysis needed.</b> This paragraph is descriptive, without a clear critical analysis of the study described or a clear link to the main essay topic <b>Deeper critical analysis needed.</b> there is some evidence of critical analysis but you could have considered the study/ point in more depth - for example consider different potential interpretations of the results <b>Multiple perspectives.</b> Well done for considering multiple perspectives to examine this issue!

TABLE 8 (Continued)

Code name and definition	Number of occurrences	Example QMs (title in bold; explanation not bold)
Name: Paraphrasing Definition: Points out poor paraphrasing	5	<b>High similarity.</b> This section was identified by Turnitin for high similarity <b>Poor paraphrasing.</b> Turn-it-in indicates this has been poorly paraphrased from an existing source. Ensure you are consistently writing out work in your own words to avoid referrals for plagiarism. If the content is a technical definition that you would struggle to re-word, consider using quotes. Quotes, however, should be used sparingly
Name: Explain Definition: Notes that more detail is needed to demonstrate understanding	4	<b>Greater detail needed.</b> Would have been good to provide more detail when describing this study (e.g. sample size, study methodology, study groups, relevant statistics) as this shows the reader/marker that you are able to build a well-reasoned argument <b>Need for elaboration.</b> You should elaborate on the points you make in this paragraph
Name: Relevance Definition: Comments on the relevance of material presented	4	<b>Unfocused.</b> It is not clear how this material relates to the essay question <b>Minutiae.</b> This is a level of detail that is too trivial and not directly relevant to your variables of interest
Name: Inappropriate source Definition: Comments on the inappropriateness of a source	3	<b>Outdated reference.</b> A study from this year cannot be considered recent. If this this is a landmark paper, indicate this, but supplement it with more recent research <b>Use reliable sources.</b> Use peer-reviewed publications and textbooks to support your argument

something needing improvement. Comments regarding the use of APA were also common in this institution and represented 15.10% of QMs.

Once this first step was completed, a different approach to that used at the small university was taken based on the teaching staff feedback from phase 1. Here, the next step involved mapping the collated QMs onto the programme-level learning outcomes to further strengthen the transparency aspect of assessment feedback. For each learning outcome, there was at least one QM that commended the student on what they had done well and one developmental QM that pointed out what needed improvement. Where no QM addressed the learning outcome, new QMs were designed. This strategy aligned with Chan et al. (2024) suggestion that feedback should enable students to understand the quality of their work. The same IMPACT principles were used as above to refine or design the QMs. Table 9 below shows an example-learning outcome and its corresponding positive and developmental QM.

This phase of development was completed with the support of a subset of five volunteers from the Psychology teaching team. An initial draft table produced by the lead author mapping learning outcomes and positive and developmental QMs was circulated to the volunteers. Staff were able to read the suggested QMs prior to the meeting and to review their construction and relation to the learning outcomes. There then followed a synchronous online meeting where the volunteers reviewed each QM and any potential problems, such as issues with clarity; these were discussed and solutions identified. The initial set of QMs consisted of 19 positive and 20 developmental QMs aligned with 8 Learning Outcomes. To explicitly seek feedback on the accessibility of the QMs, a meeting was held with a member of staff from student support services with expertise in supporting students with a range of educational backgrounds and learning needs. Feedback was very positive and no issues with accessibility were identified.

TABLE 9 Example of mapping learning outcome to positive and developmental QM.

Programme learning outcome	Positive QM		Developmental QM	
	Title	Explanation	Title	Explanation
Develop the ability to critically evaluate theory and research findings and apply them to life and employment situations	Good critical evaluation	Well done, you have demonstrated some good critical evaluation here	More critical evaluation needed	Your demonstration of critical evaluation could be improved here. For more support on critical evaluation, see this link to book into in person or online support: [link to University library support pages] In addition, you could explore this book on critical thinking about psychology research which is available as an ebook in our library: [Link to: Meltzoff, J., & Cooper, H. (2018). Critical thinking about research: Psychology and related fields (2nd ed.). American Psychological Association. <a href="https://doi.org/10.1037/0000052-000">https://doi.org/10.1037/0000052-000</a> ]
	Good application	Well done, you have applied your work to real life situations here	Needs to discuss the application	You could improve your work if you applied this point to real life situations. For example, if a new psychological treatment is at least as effective as medication, this new treatment could be recommended, or a new advancement in theory suggests a new technique might be helpful in Sports Psychology

This initial QM set was added into Turnitin by the lead researcher and subsequently exported in a format that could be directly imported into Turnitin by other teaching staff members. The Psychology team was updated via a team meeting and follow-up email on the progress of the project and availability of the QM set. A word document with step-by-step instructions for importing the QM set was also made available along with the QM file to support teaching staff less familiar with Turnitin.

Adherence to use of QMs was monitored by IT during moderation and whilst marking. It was noted that not all teaching staff were using the common QMs and those that were did not use the full range of comments. Therefore, the term following the initial roll out, a good practice online session on assessment feedback, including the use of the QMs was run for all teaching staff. Eighteen teaching staff were able to attend on the day (not including author). It was designed to remind existing teaching staff and to inform new teaching staff with a summary of University Assessment and Feedback policy along with information on the aims and design process for the QMs and how to use them. It included a live follow-along of how to locate the QM file and upload it to their personal Turnitin profile. The session was recorded and made available to all teaching staff after the event. In addition, a flow chart collating the University procedures for assessment and feedback practices, including the QMs, was provided. However, it is not clear what the uptake on these resources has been as usage data is not available.

## Feedback on QM set from phase 2 with students

The second phase of development involved seeking student collaboration to check student perceptions related to understanding, tone and motivational value as well as any other feedback. The research question for this element of the project was: what are student perceptions of the acceptability and use of the QMs.

### Design

A qualitative study to gather student feedback using focus groups. The feedback provided by the students was analysed using content analysis as previously described by Bengtsson (2016). A student researcher (author) was also recruited to analyse the data and to support the research team to amend the QMs in line with student comments.

### Participants

All undergraduate students from the Psychology department were invited to participate via email and SONA systems and directed to Qualtrics (online survey software) to review the information sheet and complete the consent form if they were interested in participation. Ten students expressed an interest in the study and two in-person focus groups were arranged. The final focus groups consisted of: seven participants; four in the first and three participants in the second from across the undergraduate portfolio in Psychology.

Students were offered SONA 'points' in return for their participation as an incentive. Inclusion criteria were that students were currently studying one of the psychology courses. At the point of recruitment, all year groups had received at least one assessment with feedback. Exclusion criteria included being under the age of 18.

One student who participated in a focus group expressed an interest in being involved in the analysis of the data. On consideration of the importance of participatory research

where those who may be influenced by the research are involved with the research itself (Cornwall & Jewkes, 1995), the student was co-opted on to the project as a student researcher and co-creator. Having a student join the research team also contributes to co-developing student and teacher feedback literacy, as advocated by Nieminen and Carless (2023).

## Materials

Participants were provided with printed copies of the QM sets developed in phase 2, as described above. These were presented in a tabular form with the title of the QM, the explanation and a box to add comments. These were presented in accordance with any accessibility requests from the participants, for example large font.

## Procedure

Ethical approval was granted by the University Research ethics panel at the University of Greenwich. Student participants were welcomed to the focus group and reminded of what would happen and how their participation would be used. An introduction to the focus group and ground rules addressed the aim of the study which was to try and improve the feedback that students receive. The potential power imbalance between the researcher (author) and the students was minimised by the approach taken during the research that student input was invaluable to the project. In addition, students were reassured that their participation would be anonymous and that participation in the study would in no way impact their treatment at the University. The emotional challenge of receiving feedback was acknowledged to demonstrate empathy with the students. In each focus group, participants were provided with printed copies of the QM sets, asked to read each QM then to share their views on them including any positives and suggest ways in which they could be improved. These views and suggestions were recorded on the printed QM sets. Key points were recorded on paper to ensure transparency in the process. The focus groups lasted one hour each. By the end of each focus group, all comments were returned to the researcher.

## Results

The comments were coded using content analysis as outlined by Bengtsson (2016). Stage 1 (Decontextualisation) involved IT creating a coding list, stage 2 (recontextualisation) the student researcher was asked if they felt the codes captured the data in relation to the research question, stage 3 (categorisation) as the aim of this stage was to make improvements to the QMs; these were categorised into positive and negative feedback. The negative feedback then captured the student requests. Stage 4 (compilation) involved finalising comments related to each QM so that improvements could be made. Four of the seven participants provided general comments about the QM sets unbidden. They identified that they want feedback focused on how they can improve their work and that the tone was important to them in that they noted personalised comments and a friendly, encouraging approach. These additional comments were noted here because the authors believe that these comments were something that the students felt needed to be communicated and therefore should be considered. In discussions during the focus groups, participants also noted that some of their peers did not know that if the QMs are clicked on when accessing the feedback

on their work in Turnitin, the explanation becomes visible. They may therefore be missing out on important elaboration and personalisation of the feedback.

Not all QM attracted specific comments and many received ticks, which indicated the participant was happy with the QM. The majority of comments provided by participants were point for development (54 purely developmental; 21 purely positive and three both positive and developmental). The codes that were generated are illustrated in [Table 10](#) below. Each response could be coded more than once.

The majority of comments received related to a desire for more information on what the error was and how to improve it either in that specific assessment or in future. There was a large overlap between wanting more information and a desire for personalisation of the feedback. A number of responses indicated that students wanted the QMs to be specifically related to the work being fed back on, as is intended, strengthening the importance of ensuring that markers add to comments, which mirrors the suggestion from Huxham (2007) concerning detailed explanation in addition to personalisation in feedback.

In response to this feedback, changes were made to both the QMs and to the instructions for markers. Example changes to the QMs include the following as described in [Table 11](#). These changes were made in consultation with the student researcher.

Instructions for teaching staff emphasise the importance of adding to the QMs to make the comments specific to that particular assessment, including both the standard QM along with relevant personalisation (Huxham, 2007).

Further to the example provided above, the same QM sometimes attracted both positive and developmental feedback, which illustrates individual differences in student perceptions of the QMs. For example, see [Table 12](#).

Comments regarding the tone of the feedback primarily concerned a perception that the comment was too personal, as above. It seems that students welcome personalised but not personal comments. A supportive relationship between teacher and students may support the students to interpret feedback in the manner it was intended, that is to be supportive of learning. This relational aspect to feedback has been explored and promoted by Winstone and Carless (2020). Therefore, reinforcing the repeated suggestion that feedback cannot be viewed in isolation from the wider approach to feedback (Boud & Molloy, 2013).

**TABLE 10** Codes generated and number of times mentioned in student feedback.

Code	Definition	Times identified	
More description/explanation needed	Request for more description or explanation	31	
Personalisation needed	Notes desire for specific comments related to the particular assessment and or student's skills	19	
Tone	Tone used perceived to be inappropriate	10	
? understandability	Reference to lack of clear	5	
Source use	Positive	Notes appreciation of the sources provided	7
	Requested	Requests more sources of support	1
	Inappropriate	Suggests that provided sources are not appropriate, for example too many or not helpful	1
Understandable/helpful	Noted that they found the comment helpful and clear	5	
Useful for the future	Noted that the comment could be applied to future work and/or skill development	2	

**TABLE 11** Example of feedback provided by student participants to an individual QM and change agreed with student researcher.

Title	Original description	Student feedback	Updated description
Evidence Needed	<p>Remember to support all of your claims with appropriate evidence. This evidence should come from an appropriate source (e.g. a peer-reviewed journal) and be cited and referenced. For more support with finding appropriate evidence, see <a href="#">this link to book into in person or online support</a>: [<a href="#">link to University library support</a>]. Or see <a href="#">this link for a range of articles and 'How to... ' guides on academic skills</a>: [<a href="#">link to University academic skills guide</a>]</p>	<ol style="list-style-type: none"> <li>1. This makes sense.</li> <li>2. This is encouraging, it is clear and easy to understand.</li> <li>7. Advantages:               <ol style="list-style-type: none"> <li>a. Highlights the importance at references and citation.</li> <li>b. Providing the source of finding the appropriate evidence.</li> </ol> </li> <li>Disadvantages:               <ol style="list-style-type: none"> <li>a. Highlight the importance of properly corrected citations in lectures so students can provide a clear and concise reference list in work and also provide sources in seminars and highlight that importance and why for the assessment.</li> <li>b. Needs more elaboration</li> <li>c. Not enough</li> <li>d. Student may find it difficult to extract information</li> </ol> </li> </ol>	<p>Remember to support all of your claims with appropriate evidence <i>This is important because if we do not support our claims with evidence, we may be making assumptions which does not fit with the rigorous approach needed in scientific writing</i></p> <p>This evidence should come from an appropriate source (e.g. a peer-reviewed journal) and be cited and referenced Where you can go for more support: To build your skills in finding appropriate evidence, see <a href="#">this link to book into in person or online support</a>: [<a href="#">link to University library support</a>] Or see <a href="#">this link for a range of articles and 'How to... ' guides on academic skills</a>: [<a href="#">link to University academic skills guide</a>]</p>

*Note:* Italicised content is added to the original to address the request for more elaboration.

TABLE 12 Example of mixed feedback provided by students.

QM title	QM explanation	Student feedback on developments
Needs to discuss the application	You could improve your work if you applied this point to real life situations. For example, if a new psychological treatment is at least as effective as medication, this new treatment could be recommended, or a new advancement in theory suggests a new technique might be helpful in Sports Psychology	<ol style="list-style-type: none"> <li>1. This is good</li> <li>3. Now this is more like it. It is good because the student will know what and how to correct this mistake/feedback.</li> <li>5. Felt personal.</li> <li>7. Helpful to the student</li> </ol>

### Phase 2 summary

Phase 2 set out to test the feasibility, acceptability and use of designing a common set of QMs for use across the Psychology department. The findings showed that it is feasible and indeed useful lessons were learned in the process, especially in specifying and using the ImPACT principles. Some teaching staff adopted the QMs into their practice easily and appreciated their impact on efficiency and focusing role for their feedback. The QMs were not universally used by all teaching staff; however, there was a suggestion that having more types of assessment reflected might be beneficial.

## DISCUSSION

The pedagogical research described in this paper set out to explore the feasibility, acceptability and usefulness of increasing consistency in feedback through the design and implementation of common QMs. In both institutions involved, sets of common QMs were successfully developed confirming that it is feasible. Feedback collected from teaching staff and students confirmed that they were positively received, demonstrating acceptability and perception of use. The process used to design these was illuminating in terms of identifying some helpful and unhelpful elements of feedback practice by teaching staff as well as exploring perceptions of this feedback in the student body. The feasibility of adherence to the ImPACT principles was also explored and can be used to work towards a better understanding of what makes good feedback. This discussion reflects on lessons learned, limitations and further research and the potential impact on transparency in assessment and teaching staff and student feedback literacy.

When collating QMs from teaching staff in both institutions, it was evident that teaching staff's feedback included multiple comments on easily identified characteristics of the students' work, such as use of formatting rules. Whilst these are often part of learning outcomes and an important element of scientific writing, they are arguably relatively simple skills to develop (as there is a correct and incorrect format) and do not support the development of the more complex cognitive skills students need to demonstrate the higher grades in Higher Education. Identification of the correct or incorrect use of these concrete skills may be easier for markers to provide comments on but does not provide information on higher-level skills, and likewise may be easier for students to focus on. Limiting the options available for feedback on these lower-order skills and supporting teaching staff to focus on the higher-order skills should support students to understand the relative importance of lower and higher-order skills, that is support the development of assessment and feedback literacy in teaching staff and students.

## Barriers to teaching staffs' use of QMs

Both phase 1 and phase 2 showed that the use of QMs as part of feedback by teaching staff was not universal practice, compromising the consistency in feedback. As teaching staff behaviour change was needed to implement and maintain use of the QMs, elements of the design of the project addressed some of the capabilities, opportunities and motivations for behaviour as described by Michie et al. (2011). These included supporting teaching staff buy in with the approach by introducing the project including discussing evidence and using a collaborative approach. Anecdotal conversations suggested that in some cases, a lack of confidence with technology was a key reason for not using QMs, which is also reflected in previous research (e.g. Mayhew et al., 2022). To address this, support for teaching staff was offered in the form of a good practice event run online. Further targeted research is needed to identify barriers and facilitators to their use. Once these are established, an intervention could be designed to support teaching staff behaviour change, using principles such as those described by Michie et al. (2011) to a fuller extent.

## Barriers to student use of QMs

Student comments during this research suggested that not all students are fully competent at using Turnitin to access all their feedback. Previous research suggests that not all students find Turnitin easy to use and want more instruction on its use (Watkins et al., 2014). Understanding more about student level of competence with the Turnitin system and how to use it is therefore needed. In addition, use of the system could be added into the teaching curriculum as part of a University approach to feedback literacy and enhancing transparency in assessment. Seeking data pertaining to student access and use of QMs would be an important next step. In addition, despite evidence that feedback can be important to learning (e.g. Cai et al., 2023; Hattie, 2009; Wisniewski et al., 2020), others suggest that feedback in itself does not necessarily result in learning (e.g. Sadler, 2010). Therefore, despite developing the ImPACT principles and using these to design the common QMs, the literature also suggests that these are likely to have limited use if students do not respond appropriately to it (Winstone et al., 2017).

## Student views

Student feedback suggested that views about the QMs as a whole were positive. Students appreciated explanations of what the feedback meant and requested personalisation to the specific assessment, supporting the work of Huxham (2007). To improve the likelihood that these personalised comments are good, when crafting comments markers could use the ImPACT principles. Further to this, Watkins et al. (2014) found that QMs are more useful when they align with the rubric. Thus far, this paper has not discussed rubrics at length, but these should also align with learning outcomes to enhance transparency in assessment (e.g. Tobajas et al., 2019). To further build the usefulness of QMs for student learning, teachers should add some personalisation to the QMs where appropriate and also link rubrics to QMs, and both should link to learning outcomes.

Students can be very invested in their feedback and want it to provide enough clear explanation to enable it to be applied in future. They also requested for it to be personalised but not personal. The content of feedback needs to support their learning, but students also need to be aware that feedback is necessary but not sufficient for learning. It is what they

do with feedback that is critical, that is supporting student feedback literacy, as researchers espouse (e.g. Winstone & Carless, 2020).

Students requested access to QM sets independent of their assessments, a similar finding to Watkins et al. (2014). Providing QM sets could be beneficial to supporting their learning of what is expected in Higher Education, including supporting students to self-monitor their own progress by assessing their own work using the QMs. The common QMs could therefore be incorporated into a wider new paradigm approach to feedback to support student assessment literacy and learning (Boud & Molloy, 2013). Such an approach should include supporting students to understand their own role in the feedback dialogue and empower them to seek and enact feedback, that is increase their feedback literacy.

## Alignment with the new paradigm approach and teacher feedback literacy

Caution is needed when using the ImPACT principles to design common QMs as these cannot be used in isolation. As identified repeatedly in the literature (e.g. Boud & Molloy, 2013) the wider context in which assessment and feedback is situated is of utmost importance. As part of this, the student needs to take an active role in their learning and to make appropriate changes in response to the feedback. The new paradigm approach to feedback rightly emphasises a more systemic approach to feedback and places less focus on the simple provision of feedback (Boud & Molloy, 2013). However, previous literature lacks clarity on what constitutes good feedback.

One of the aims of this paper was to develop an understanding of what good feedback itself looks like. To learn complex cognitive skills effectively, students need feedback that provides sufficient detail on the skills demonstrated and information on how to improve as well as empowering the student to take action. Feedback would only partially be fulfilling these needs if students were only provided with a numerical grade and rubric feedback. Provision of tailored feedback comments is the vehicle by which information is delivered to students, and researchers have noted the importance of the feedback itself (e.g. O'Donovan et al., 2021). If feedback is viewed as a metaphorical vehicle, a student does need to learn to drive the vehicle [take action with the feedback]; however, the vehicle does need to be in working order [feedback needs to be good quality] for them to be able to drive. The ImPACT principles outline a potential test by which to judge the roadworthiness of the feedback by describing a more systematic way to consider the quality of the content, phrasing and emphasis of feedback that is provided to students. The ImPACT principles described here were successfully used to guide the development of common sets of QMs.

In their competency framework, Boud and Dawson (2023) described three levels of activity of feedback literate teachers. Utilising the ImPACT principles to design and use a common set of QMs enables competencies from all three levels to be enacted by teaching teams. For example, at the macro level teaching teams were able to plan feedback at a programme rather than assessment level and to take advantage of the available technological resources (i.e. QMs in Turnitin). At the meso level, the second research phase explicitly framed the feedback in regard to programme-level learning outcomes. At the micro level, the primary focus was to design the feedback inputs and extend previous literature by specifying the ImPACT principles to describe what good feedback is. Therefore, using the ImPACT principles and the design of common QMs should enhance transparency in assessment, teacher feedback literacy for their own professional development and potentially support student learning.

## Limitations and suggestions for further research

The selection of Universities involved in this research was opportunistic, both are new Universities and adhere to widening participation. The composition of the student body therefore may be similar, although student characteristics were not measured. As staff were likely to develop QMs in response to commonly made student mistakes, the student body could have impacted on the content of QMs. Equally, the samples involved in each element of the work represented staff and students from only undergraduate psychology courses. The focus of feedback comments has been shown to differ by discipline (Neupane Bastola & Hu, 2021); therefore, the content of QM sets is likely to differ by discipline.

It is possible that there are limits to the applicability of the findings due to individual differences such as personality traits, culture and gender. Whilst rare, some research has explored potential differences in feedback provided by teachers in that teachers provided different feedback to males versus females (Guo & Zhou, 2021). As many higher education institutions use anonymous marking, this study points to the potential that teachers may provide different feedback according to known or perceived differences in students. Teacher perceptions may have impacted on the QMs collated from teachers and may need attention in further research.

Individual differences in students may also have implications for the impact of the feedback. For example, Shu and Lam (2016) identified that students from North America were more motivated by positive feedback whilst students from China were more motivated by developmental feedback. Others have noted gender differences in response to feedback (Guo, 2024; Vanderhasselt et al., 2018).

Therefore, replication in a more diverse population of universities, disciplines and student groups would enable greater reflection on the challenges faced by students and teaching staff across the sector and the feasibility, acceptability and usefulness of the ImPACT principles and a common set of QMs.

Likewise, all teaching staff and students involved were from psychology courses; therefore, representation from those from different disciplines would strengthen the generalisability of findings. The inclusion of students in the research as participants and as co-researchers can be both an asset and drawback. Van Heerden and Bharuthram (2024) identify that students perceive what is useful in feedback differently to teachers. Similarly, qualitative data from undergraduates in China revealed a lack of attention to the skills needed to enact feedback (Zhan, 2023). The validity of student and/or teacher judgements may therefore be lacking in terms of relation to actual use of feedback. Another factor affecting the generalisability of findings was the small sample sizes involved in each phase. Application of the ImPACT principles would therefore benefit from expanded testing across a wider diversity of Universities and courses.

The student researcher was involved relatively late in the project; future research would benefit from student co-researchers from an earlier stage in the research process (Vaughn & Jacquez, 2020). Continuing involvement from students would also be beneficial to revise the feedback to ensure that it continues to meet the needs of the students. This could contribute to dialogue between teaching staff and students as recommended in accordance with the new paradigm approach.

The utility of each of the different components of the ImPACT principles would benefit from more rigorous testing, that is are all necessary and sufficient to support learning. If the feedback principles that contribute to student learning are clarified and supported with research, this could feedback into evidenced-based curriculum, assessment and feedback design. Further research should test the impact on variables such as student engagement, agency, assessment performance and learning, that is feedback literacy. In addition to supporting student learning, the ImPACT principles could be tested as part of continuing professional

development for teaching staff as part of a wider systemic approach to supporting feedback processes in Higher Education.

Further data on the use of the QMs between and across teaching staff over time would facilitate a more in-depth evaluation of their use to student learning. For example, collection of baseline data on student learning trajectories could be calculated, followed by development and implementation of common QMs designed using ImPACT principles and subsequent evaluation of adherence to their use along with re-evaluation of student learning trajectories. This could test whether consistency in feedback can and should be improved, as previous research suggests that consistency might not be possible or always beneficial (e.g. Bloxham et al., 2015). These data could be used to more fully test the acceptability and use of the ImPACT principles of good feedback through the design of common sets of QMs.

Whilst developing a common set of QMs might have its advantages as discussed above, the acceptability of feedback to individuals is likely to vary. Some of the parameters by which its impact may vary are known, for example, students have been found to notice or seek out feedback that fits with their current self-perceptions (Hattie & Timperley, 2007) whilst others note students vary in what they perceive as 'good' feedback (O'Donovan et al., 2021). The use of a common set of QMs must be embedded within a dialogue between students and teaching staff, facilitating the new paradigm approach and enabling students and teaching staff to work together to support learning.

The process used to design the common set of QMs is summarised in [Figure 1](#) to enable others to replicate the process in their own setting to enable further research to build on this study.

## Use of QMs as part of feedback dialogue

Whilst there is debate over the use of learning outcomes (e.g. Erikson & Erikson, 2019), in terms of enabling students to receive feedback that is consistent across modules, learning outcomes are helpful. When (re)designing curricula, explicitly considering how programme-level learning outcomes align to module and assessment learning outcomes will facilitate student progress. Designing a common set of QMs enables teaching teams to reflect on how well learning outcomes carry through from assessment to module, to programme, that is coherence from the macro to micro level. Having information regarding their progress towards higher-order skills, which should be captured in learning outcomes would benefit students and support their agency for learning. Previous research has identified that students often struggle to apply feedback across modules (Jessop & Tomas, 2017), but providing feedback that is clearly linked to programme-level learning outcomes should minimise this issue but needs testing.

## Supporting students' feedback literacy

To support students' engagement with their feedback literacy and their own development, providing access to the QM set in its entirety to students, as requested by participants in the focus group, may be beneficial. However, simply providing the QM sets is likely to result in limited engagement and is more aligned with the old paradigm approach to learning where feedback is delivered. Designing parts of the curriculum around the use of them to mark their own or peers' work could support the agency of students for their own action and learning, conforming more with the new paradigm of feedback (Winstone & Carless, 2020).

- (Ensure that learning outcomes broadly align between all modules and programme)
- Discuss with key partners within the department to agree potential use
- Discuss with whole team
- Identify any University or department requirements in terms of foci etc
- Collate currently used QMs
  - In smaller teams this could involve collecting entire QM sets from all teaching staff
  - In larger teams, you may want to reduce the amount of QMs collected by requesting favourite/ most used QMs
- Carry out a content analysis identifying QMs that point out what has been done well and what needs improvement. This could be done individually, paired or small group.
- Map these positive and negative aspects to each of the programme level learning outcomes (see table 9 for example)
- Identify any gaps where QMs are missing
- Design initial QM set using the ImPACT principles
- Review phase 1
  - Discuss with volunteer team members the content, tone, understandability of each QM. It is recommended that this group includes more than just those involved in the initial draft. Revise QMs as necessary
  - Seek input from appropriate professional services on the appropriateness of each QM for those with additional learning needs, e.g. dyslexia, autism. Revise QMs as necessary
  - Seek input from students. This could be via focus groups, or potentially online. Revise as necessary.
- Identify how the common QMs could be incorporated into existing policies and practice.
- Present findings to team with opportunities for feedback

FIGURE 1 Guidelines for developing a common set of QMs.

## Supporting teachers' feedback literacy

Through monitoring the use of the QMs, teachers can gain useful information on their teaching and student learning. For example, if a particular skill is frequently commented on, this should prompt the teacher to reflect on the reason for this and to put in place appropriate action. Engaging in this practice would go some way to feedback not being something that is simply given to students, but part of an ongoing dialogue between student and teacher to support transparency. Teaching staff would thereby be creating opportunities for developing their own assessment and feedback literacy, which would subsequently have the potential to increase student assessment and feedback literacy.

## Continuing digital innovation in feedback consistency

As the adoption of digital assessment tools continues (Walker, 2025), there is a need for University digital policy to rapidly adapt to the evolving role of genAI and other digital tools in all aspects of the assessment process including feedback (Skelton, 2023). This also implies that a flexible approach is needed that can adapt to the emerging digital tools such as the ImPACT principles proposed.

Just recently (Feb 2025) UK Universities (representing 141 institutions) announced a partnership with Studiosity to facilitate the adoption of this online AI tool. Studiosity provides rapid formative feedback on drafts of student assignments and is already used in 20 UK universities and over 250 institutions worldwide. The main advantage for students is that they can submit and receive feedback on their academic writing in a timely manner, which can then help them be used to develop and enhance their summative (final) submission. Feedback is currently limited to students' use of academic writing skills rather than the content, but evidence so far suggests that its usage improves students' confidence in their writing (i.e. Brodie et al., 2021; Pike, 2024), although this does not necessarily translate into competence (Brodie et al., 2021). Pike (2024) also indicates a mismatch between students' assumptions about the feedback provided by Studiosity and its use. Perhaps these observations are reflective of the tendency for students to latch onto concrete lower-order skills, suggesting a more nuanced approach is needed when considering automated feedback. Indeed, Vanacore et al. (2025) arrived at a similar conclusion when they found automated feedback could also hinder student learning in some instances.

Although some academics and researchers have started exploring the role of genAI in automating feedback, this has also highlighted other potential issues. For example, Dai et al. (2023) investigated the feasibility of using ChatGPT to provide feedback for students on their assignments. Whilst they found that the feedback produced by ChatGPT was more readable and consistent than teacher-produced feedback, it could not reliably assess student performance and to do so would require more input from teaching staff, such as model answers to train the system, arguably negating the benefits of using automated feedback in the first place. Although AI is currently no substitute for academic rigour and judgement, there are other ways in which teachers can harness the AI tools to support the feedback process.

In much, the same way as ChatGPT can act as a personal tutor for students (Xu et al., 2024), it could also support teaching staff in developing their own assessment literacy. AI can be used to summarise pre-existing QMs using ImPACT principles and help generate potential QM statements. Hattie et al. (2021) highlighted how well-constructed QMs can direct students (both in Higher Education and High School) in how to use feedback, thus supporting their skill development and assessment literacy. The caveat with using ChatGPT to help create QM statements is that whilst it may help with reducing ambiguity, human input is still needed to moderate the tone and ensure the ImPACT principles are adhered to for successful feedback.

The ImPACT principles therefore could be of use not only for feedback provided by teaching staff but also form parameters for AI feedback. Whether AI can at present adhere to these principles needs to be tested, as it does in teaching staff. Although it is clear from our own research and that of others (e.g. Koch & Fehlmann, 2025) that both staff and students need support when digital tools are adopted to develop their competencies. This is an ongoing challenge given the rapid digital transformation of the education sector and emerging digital tools (Walker, 2025).

## CONCLUSION

Recent developments in understanding of student and teacher feedback literacy agree that the feedback 'input' itself cannot be viewed in isolation (e.g. Boud & Dawson, 2023; Carless & Boud, 2018). However, consistency in feedback has long been acknowledged as a potential problem. Students and teaching staff alike want it but achieving it is challenging. This paper outlines one way in which consistency in feedback might be improved via two different methods to compile a common set of QMs for all teaching staff within a department to use. One of the key challenges faced was that what constitutes good feedback has been a conundrum in Higher Education, one that many have approached but as yet, no agreement has been reached. In the process of designing the QMs, ImPACT principles outlining what good feedback might look like were designed and implemented. The process used to develop these corresponds to multiple categories described across all three levels of teacher feedback competency as well as enhancing the transparency of assessment standards and therefore may support feedback literacy in teacher and student (Boud & Dawson, 2023; Carless & Winstone, 2023). Whilst further testing is required, these principles offer a potential lens through which to focus feedback. Common QMs designed according to these principles were generally supported by teaching staff and students, and although further refinement and research would be beneficial, initial feasibility, acceptability and use have been demonstrated.

## AUTHOR CONTRIBUTIONS

**Imogen Tijou:** Conceptualization; investigation; methodology; writing – original draft; writing – review and editing; formal analysis; project administration; data curation; supervision; validation. **Lara Webber:** Writing – original draft; writing – review and editing; validation. **Ava Sun:** Methodology; data curation.

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## CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

## DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

## ETHICS STATEMENT

Ethics approval provided from University of Greenwich University Research Ethics Board (UREB): 24.2.5.23.

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