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Exploring the ‘wicked’ problem of student dissatisfaction with assessment and feedback in higher education

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ABSTRACT
Student dissatisfaction with assessment and feedback is a significant challenge for most UK Higher Education Institutions according to a key national survey. This paper explores the meaning, challenges and potential opportunities for enhancement in assessment and feedback within the authors' own institution as illustrative of approaches that can be taken elsewhere. Using a qualitative design, a review of assessment and feedback, which included an exploration of students' perceptions, was made in one College of the University. The findings highlighted variations in assessment and feedback practice across the College with dissatisfaction typically being due to misunderstanding or miscommunication between staff and students. Drawing on the review, we assert in this paper that students' dissatisfaction with assessment and feedback is not a 'tame' problem for which a straightforward solution exists. Instead, it is a 'wicked' problem that requires a complex approach with multiple interventions.

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Assessment and feedback; higher education; student dissatisfaction; 'wicked' problem

Introduction
Widespread student dissatisfaction with assessment and feedback practices in higher education, as evidenced by the National Student Survey (NSS), presents a complex and multi-faceted, ‘wicked’ problem (Grint, 2008). This reflects not only a phenomenon occurring in research-intensive universities, but also more widely in the UK and internationally. In a funded research study undertaken between March 2016 and February 2017, our aim was to investigate the complex challenges surrounding assessment and feedback practice in a research-intensive university with a view to implementing effective and sustainable change. The focus was on the College of Social Sciences, which is one of the four Colleges at the University and comprises five Schools and approximately 9,000 students, of whom 5,000 are undergraduates. The College offers twelve main undergraduate degree programmes, the largest of which is...
the MA Social Sciences degree. Typical of Scottish four-year general degrees, the MA Social Sciences offers breadth of study in years 1 and 2 that exposes students to several disciplines and enables them to take a variety of subject combinations within their degrees. On this degree programme, there are almost 2,400 students enrolled in 75 different single and joint honours pathways; many of the latter are offered in collaboration with the College of Arts or College of Science and Engineering. There are 11 other degree programmes that are mostly professionally oriented degrees in Education, Law and Accounting which have fewer cross-College pathways. Within this one College, it was clear from our existing disciplinary reviews, NSS results, student feedback and other sources of information that student satisfaction with assessment and feedback varied within and between subject disciplines and that some areas need to make improvements. The research reported in this paper was undertaken as a part of College-specific efforts to improve assessment and feedback practices, and within the context of institution-wide initiatives to improve assessment and feedback practices.

We begin with a scrutiny of selected literature that is followed by an outline of how the investigation was conducted. In this paper, we focus on undergraduate students’ perceptions in the context of an overview of assessment and feedback practice in the College. We report on our findings and recommend several strategic and holistic approaches to alleviating student dissatisfaction with assessment and feedback from the viewpoint that this is a ‘wicked’ problem. Being a ‘wicked’ problem infers that social relationships and interactions are central to the issue and that there is no single elegant solution. Consequently, the approaches we propose ‘signify the importance of the collective’ (Grint, 2008, p. 13) which involve concerted action at different levels of the hierarchical structures within the University. We advocate an engaged community of staff and students approach which could be adopted for use across the University and indeed further afield to the benefit of other higher education institutions. Poignantly, we consider student dissatisfaction with assessment and feedback to be a symptom, rather than the cause, of a problem.

Assessment and feedback

Assessment is a necessary requirement for the award of a degree and a vital requirement to enable accreditation, assuring professional competencies are met. This summative type of assessment is usually regarded as being firmly located within the power and domain of staff. Interestingly, Price, Rust, O’Donovan, Handley, and Bryant (2012, p. 18) contend that where ‘summative marks are given, there is (and will always need to be) a clear divide between assessor and assessed.’ The implication of this prevailing orthodox stance is that students are passive recipients of assessment, rather than being actively engaged in its processes (author 1, 2015).

Another function of assessment is to help students learn and improve their academic performance. These characteristics are typically attributed to formative assessment, which does not normally contribute per se to students’ grades. However, the difference between formative and summative assessment can be a misleading dichotomy (Boud, Cohen, & Sampson, 1999) because summative assessment may also provide rich learning opportunities for students if constructive feedback is provided. Feedback on summative examinations, which are commonly used and often heavily weighted in terms of
course credit, can be particularly helpful as examination performance tends to be lower than in coursework (Rust, 2007).

The concept of assessment for learning (McDowell, Wakelin, Montgomery, & King, 2011; Sambell, McDowell, & Montgomery, 2013) could be applied more widely and utilised in all assessment (Taras, 2002). To aid learning, it is vital that feedback is used effectively. As Sadler (1989) asserts, it is important that feedback helps to close the gap between students’ actual performance and what constitutes a potentially better performance. In a broader context, assessment for learning and learning from assessment and feedback processes can help students in their independent learning, attributes and skills development, employment and lifelong learning (author 1, 2014; Brown, 2015). Consequently, there are two relevant issues here; firstly: meeting the aims of assessment and feedback effectively and secondly, engaging students in active learning in assessment and feedback.

**Dissatisfaction with assessment and feedback**

Since 2005, students in their final year of undergraduate study in the UK are invited annually to participate in the NSS. The survey is reported in terms of the percentage of students who agree or strongly agree in response to 27 questions concerning teaching, course organisation, assessment and feedback, learning resources, student voice, community and development. Not only are the results reported nationally, but they also contribute to a range of league tables, and more recently to the new Teaching Excellence Framework (TEF) and as such, are a key focus for most universities. What is clear is that across the UK sector, and regardless of overall satisfaction trends, students typically demonstrate much less satisfaction with assessment and feedback than with other measures. Student dissatisfaction with assessment and feedback across the UK (Author 1 et al., 2017) is thus sharpening the focus on assessment and feedback as a priority concern across higher education institutions (Boud, 2007). Assessment consumes much time and effort by students and staff. Feedback also eats into staff time, for example, when lengthy periods may be spent providing written comments on students’ assignments. Moreover, staff may perceive their efforts as wasted if their feedback is not collected, read or heeded by students. Sadler (2010, p. 535) affirms that, ‘for many students, feedback seems to have little or no impact, despite the considerable time and effort put into its production’. This suggests there is a mismatch between staff and students’ understanding of feedback, especially if students consider it to be of little use or value to them (Lunt & Curran, 2010). A contributory factor to feedback being of value is its timing because its relevance can be lost if it is given too late, for example, after a course has been completed, as various studies have shown (Hattie & Timperley, 2007; Jonsson, 2012; O’Donovan, Rust, & Price, 2015). Understanding the academic language and concepts typically used in feedback can present a problem for students (Lea & Street, 1998; Stefani, 1998), but staff may assume that they will grasp its meaning and understand how to apply it to improve their future performance in assessment (Blair & McGinty, 2013; Sadler, 2010). In other words, the understanding and expectations of assessment and feedback can differ between students and staff and as a consequence, significant differences can emerge between what students want and what staff provide (Adcroft, 2011; Carless, 2006). The source of
this discord may reside in conventions and assumptions about assessment and feedback. Challenging these assumptions may be a starting point for addressing such dissonance.

**Addressing problematic areas of assessment and feedback**

It would be useful then for staff to clarify to students the purpose of assessment and feedback so there is mutual understanding. Linking these processes explicitly to the aims and intended learning outcomes of courses and programmes, or what Biggs and Tang (2011, p. 95) refer to as ‘constructive alignment’, can contribute to students’ understanding. It is also important that students are aware of what they must do to attain the required standards, for example, in terms of being aware of how to meet course aims, intended learning outcomes and marking criteria (Bloxham & West, 2004; Price, Handley, & Millar, 2010). Problematically, there may be an assumption that students clearly understand the academic language, and terms unique to subject disciplines, that describe course aims, outcomes and criteria. To address this potential problem, and to help students develop metacognitive skills, overt explanations and clear communication between staff and students is essential (Biggs & Tang, 2011; Nicol & Macfarlane-Dick, 2006; Weaver, 2006). This involves assessment and feedback literacies (Smith, Worsfold, Davies, Fisher, & McPhail, 2013; Sutton, 2012) which can be embedded in academic courses to nurture students’ active participation in assessment and feedback processes (Author 1 et al., 2017; Higher Education Academy, 2012; O’Donovan et al., 2015; Price et al., 2012). However, this necessitates dialogue and social interaction between staff and students, heralding a shift away from students’ conventional passive role. Evidence suggests that this transition enhances students’ learning (Higher Education Academy, 2014) and affirms an engaged learning approach that differs from conventional didactic pedagogy.

Part of this approach may include dialogic feedback (Adcroft, 2011; Carless, 2015; Carless, Salter, Yang, & Lam, 2011; O’Donovan et al., 2015; Yang & Carless, 2013), which can involve a shared construction of assessment (Author 1 et al., 2017) and feedback (Boud & Molloy, 2013). This co-design approach serves to mitigate any mismatch between staff and students in their understanding or expectations of feedback. Students’ metacognitive skills development in appraisal and making evaluative judgements of performance contribute to their critical thinking and independent learning, both of which are valuable for their future employment and lifelong learning. To facilitate students’ skills development, self- and peer review are useful exercises and can be utilised as assessment methods. Such co-operative activities offer a vast array of opportunities for student learning (Boud & Falchikov, 2006; Mulder, Pearce, & Baik, 2014). Co-assessment, for example, self-assessment combined with the assessment by staff, is likely to encourage students’ deep learning (author 1, 2014), which facilitates longer term understanding.

Assessment and feedback are interrelated processes central to student learning, especially when formative assessment is used (Nicol & Macfarlane-Dick, 2006). It would be advantageous to integrate and align these processes harmoniously within accredited programmes of study. For example, rather than been planned in isolation within the domains of single courses, assessment and feedback would be more effective if they are structured, using a variety of methods (Evans, 2013), as part of the overall aims and intended learning outcomes of a degree programme. Curriculum mapping
The study

This study draws from a College review that investigated students’ perspectives of assessment and feedback with a view to addressing causes of student dissatisfaction. One of the aims was to gain an overview of the existing assessment and feedback practices in the College across its five Schools. Another aim was to gain insight into the student experience through an in-depth exploration of their perceptions of how and in what ways assessment and feedback impacted on their learning, and whether they felt engaged and motivated. The review also involved gleaning additional data from written course documentation, teaching awards, periodic subject disciplinary reviews, and other assessment and feedback innovations and projects across the University, in addition to seeking the views of a small selection of staff. The objectives of the College review were to:

- Identify the varieties and types of assessment and feedback used across the College’s undergraduate programmes;
- Identify examples of good and innovative assessment and feedback practice that might be adopted more widely across the Schools in the College;
- Investigate the rationale for using specific assessment and feedback methods;
- Explore the students’ perceptions of the effects of assessment and feedback methods on their learning;
- Examine the findings of the study in light of the literature on assessment and feedback;
- Make recommendations for enhancing assessment and feedback practice.

Research methods

The review was conducted by a team of three academics, two research assistants, a senior administrator, and included all five Schools in the College of Social Sciences. With help from administrative staff, information was gathered from relevant University policies and documentation, for example, ‘Feedback following Summative Examinations’ guidance; Periodic Subject Reviews and ‘Summary of Good Practice 2014-15’; course documentation for the relevant programmes; and the College’s ‘Action Plan’ in response to the NSS results.

Qualitative research methods were chosen to explore the students’ perceptions of the effects of assessment and feedback methods on their learning. Qualitative methods are useful for obtaining authentic and nuanced accounts of the ‘Who, What, Where and Why’ of the experience of interest (Neergaard, Olesen, Andersen, & Sondergaard, 2009, p. 54). In education research, qualitative methods have been instrumental in generating novel recommendations in applied settings (Johnson & Christensen, 2008). A qualitative descriptive design was used (Sandelowski, 2010). Qualitative description
is a useful technique for obtaining in-depth, multi-faceted and contextualised accounts of complex, multi-determined phenomena (Sandelowski, 2010).

Qualitative research methods were used by conducting focus groups and interviews with students from each of the Schools within the College. To extend the data collection, an online questionnaire was used to capture students’ views. The aim was to garner their perspectives of assessment and feedback by asking them about:

- Formative and summative assessment methods;
- The purposes of assessment and feedback
- The effects of assessment and feedback on their learning
- Using technology in assessment and feedback
- Innovative assessment and feedback
- The language used in assessment and feedback
- Self-assessment
- Peer assessment
- Co-assessment
- Good practice in assessment and feedback
- Clarity of feedback
- Timeliness of feedback
- How they used feedback to improve their learning.

**Participants**

The undergraduate students were chosen through a process of purposive and convenience sampling and recruited through the Students’ Representative Council (SRC), course forums and social media. Care was taken to ensure that each of the five Schools in the College of Social Sciences was represented in some way. Altogether, 44 students participated in the review, which includes the questionnaire responses. In two of the Schools, two focus groups were conducted with twelve students, with six in each focus group. Each group represented a mix of single and joint, junior and senior Honours students. There was also one pre-honours student in one of the focus groups. In a third School, three students were interviewed individually as the lack of response made organising a focus group impossible. In a fourth School, representation was made through a discussion group of ten students. The group consisted of class representatives from the School, and the interviewer joined their discussion to gather group responses related to assessment and feedback. However, the small data set from this discussion was omitted from the overall review as it was obtained under different conditions from the focus groups. Finally, representation from the remaining fifth School was achieved through information available from a written report on an investigation made previously into assessment and feedback by staff in that School.

**Data analysis**

The individual interview and focus group data were analysed using content analysis and qualitative description (Sandelowski, 2010). Content analysis has been deemed the analytic technique of choice for qualitative studies aiming to generate detailed, rich descriptive accounts that remain firmly grounded in the original text (Kim, Sefcik, &
Bradway, 2017; Sandelowski, 2000). The data were collected and analysed sequentially. The interview and focus group recordings were transcribed verbatim and coded according to the research objectives, as referred to earlier. The approach to coding reflected the researchers’ aim to represent the participants’ accounts authentically while aiming to yield contextualised generalisations (Neergaard et al., 2009). Each transcript was read independently by two members of the research team and then re-read while listening to the audio recording in order to capture the full nuances of the participants’ responses. All the transcripts were then highlighted for recurring ideas and similar response patterns, which were then categorised according to the research questions. One of the researchers categorised the data within tables, while the other researcher used concept maps (Hay & Kinchin, 2006) as a method of categorising the data. The researchers then used these two methods to cross reference the findings. This led to further scrutiny and revision of the categories for internal consistency, distinctiveness and significance (Sandelowski, 2000). This process allowed the emerging themes to become visible. The results were reviewed and validated by the research team, ensuring greater reliability and minimising any potential bias (Neergaard et al., 2009). The overarching themes reflect the objectives of the study in that they relate to a) students’ understanding of the functions of assessment, b) their attitude to feedback, c) their views of the perceived problems of assessment and feedback, and d) what students believe constitutes good practice.

**Ethics**

The University requires all non-clinical research involving human subjects to be scrutinised by the appropriate ethics committee. Each College has trained ethical reviewers who follow guidance that is consistent with the requirements of the Research Funding Councils and the Vitae Research Concordat (https://www.vitae.ac.uk/policy/concordat-to-support-the-career-development-of-researchers). Each College Committee is overseen by a University Committee which ensures consistency of approach, delivers training for reviewers, and updates the process in light of sector guidelines and best practice. Applicants are required to identify and mitigate against risks to researchers and participants, and to submit all documentation that would be used in relation to consent, data usage, data storage, and dissemination. In keeping with those requirements, the research team identified that there were potential ethical risks in this project in that some of the student participants were in a dependent relationship with the review team. To mitigate this risk, postgraduate students were employed as research assistants to conduct the focus groups and interviews. The participants were assured of confidentiality, as far as is possible within a focus group, and that their taking part in the project would not affect their coursework, grades, or outcome of their degree. For the purpose of analysis of the findings, individual participants remained anonymous to the rest of the review team. Participants were assured that their involvement was entirely voluntary and that they did not need to answer any question they did not wish to, and that they could withdraw from the study at any time and without question or consequence. To ensure anonymity of the participants, all references to them were feminised. All the participants gave their informed consent and the study was approved by the College of Social Sciences Ethics Committee.
Limitations

It was difficult to recruit large numbers of student participation for this study. Whether this was due to our ill-timing for students with assessment deadlines taking precedence, a lack of incentives, or a disinterest in the topic, is difficult to ascertain. Our study therefore focused mainly on students in their two final years of study (Honours). Thus, we capture perhaps more mature reflections on assessment and feedback as the study does not include the views of students new to the University and the expectations they bring. Participation in the online questionnaire was limited and although it provided useful qualitative data, it was insufficient for us to undertake rigorous quantitative analysis. With the limited time and resources available to the project team, we were unable to conduct a full mapping of assessment and feedback practices in the College. The assessment and feedback documentation alone across all 12 degrees amounted to 500 pages which was too extensive for a project of this scale.

Other limitations pertaining to the data analytic process must also be noted. First, the possibility of investigator bias could not be eliminated since all analysts, including the researchers who designed and conducted the focus groups, were part of the Review Team for this project. Second, due to lack of time informants’ validation was not conducted, thus missing the opportunity to further enhance the authenticity and credibility of the findings (Neergaard et al., 2009). Third, since the analytic method of choice was qualitative description through the use of content analysis, the data analysis was limited to the coding and theming of manifest content only, thus potentially omitting insights from any latent content as offered, for instance, by grounded theory and phenomenological approaches.

Findings

Summary of assessment methods used in the college of social sciences

The overview of current assessment practice began by extracting information from the University’s ‘Course Catalogue’ which contains the minimum required course information. This template-driven documentation identifies pre-designated types of summative assessment as follows: a written examination, essay, report, dissertation, portfolio, project, oral assessment and presentation, practical skills assessment or other set exercise. Specific details about the assessment strategies are provided in supplementary narrative text but vary in form, length, specificity and rationale. Because more detailed accounts of assessment are typically located in course handbooks on Moodle (the University’s Virtual Learning Environment), there was limited granularity in the data available to the project team. Nonetheless, it was clear that written summative examinations and written summative assignments, such as essays, were found to be the most commonly adopted and heavily weighted assessment methods across all five Schools in the College. Indeed, written examinations and essays accounted an average of 80.41% of the course grade, ranging from 67.85% to 88.79%. Variety in assessment (Evans, 2013) was not in evidence and where alternative assessments existed, they typically represented a low percentage of the overall course grade. It was also apparent that formative assessment practices differed from School to School.
Students' perspectives on assessment

Overall, students believed that the main purpose of assessment was to test disciplinary knowledge. Indicative of the conventional use of written examinations, one student asserted that they were used ‘basically to see how much knowledge you can regurgitate at a single point’. So, examinations were perceived as little more than memory tests, as expressed by one student who considered that it was ‘a very narrow or limited pool that you need to study’. This encouraged students to take a strategic and surface approach to learning, yet they generally agreed that assessment ought to involve an opportunity to demonstrate their understanding of the subject material and ‘to engage with it critically’. Some students went on to say that assessment should give them a chance to be creative and to demonstrate innovative thinking, as one student explained, ‘I want to write a piece of assessment that brings something new to (the marker’s) eyes and surprises them’. Similarly, another student believed that ‘it should be the thought process that is assessed, not the conclusions’.

Formative assessment, on the other hand, was generally regarded by students as being less important than summative assessment because it did not contribute directly to their course grade. However, most of the students we spoke to considered it would be useful to receive staff feedback on written drafts of their work before it was finally submitted. This suggests that formative learning and practising different types of assessment are valuable exercises that can help students in their learning as well as in building their confidence. Also, some students gave examples where formative assessment was ‘particularly beneficial to their learning’, such as self-assessment, peer assessment, and ‘practical work’. Shrewdly, several students measured the value of assessment in terms of its relevance to their potential future employment. They perceived work experience, such as internships or placements, to be of value because they increased their employability. Moreover, assessment could also provide them with transferable skills and help them to develop attributes that would also be useful in the workplace. For example, time management was a skill that students developed in having to meet assessment deadlines. More importantly, assessment was useful if it involved ‘actual skills that are required in a future professional life … actually applying theory to a problem and bringing it into real life’. Here, examples were given of the Moot (in Law) which a student explained as, ‘solving a fictional court case’ and elsewhere, ‘making a business case competition mandatory’ (in Business). One student added that ‘variation supports the development of multiple skills, for example, portfolio work prepares students for their teaching career through planning, research and application skills’. Assessed group presentations were also noted as being useful in developing communication and leadership skills. As a student explained, ‘that’s basically (what) every single employer wants.’

However, they were acutely aware of the associated problems with group assessment, as there could be varying levels of individual contributions to them. A student remarked, ‘I can see the value of (group assessment) if everyone pulls their weight and does their part of the work’, but overall, group assessment was perceived as challenging and not entirely satisfactory for all students.

Nevertheless, it was clear that students appreciated opportunities to develop their skills through diverse assessment methods. They shared the view that having multiple pieces of coursework ‘improves different kinds of skills’, such as writing, time management, presentation and organisational skills. Traditional types of assessment, such as
essays and examinations, were not generally perceived as providing useful employability skills, although they conceded that critical thinking skills could be developed through these conventional methods. One student suggested that ‘there could be different forms of exams – maybe you could make them longer or just one question so you can really develop and plan your argument rather than having to scribble down really fast and . . . just facts and kinda . . . . spill them out on a paper without having the chance to really polish it.’ There is no doubt that the students favoured different and innovative assessment methods but were clear that any new assessment method should be explained to them first. It is interesting to note here that students’ concerns were about understanding the purpose of the assessment, as well as about approaching the task itself.

Some students were enthusiastic about being more actively involved in assessment, for example, having more choice in their essay topic. One student explained that she would be ‘way more engaged because they could actually do something they were more interested in.’ Strikingly, students expressed their dismay at having several examinations clustered at the end of a semester, saying they preferred continuous assessment instead.

**Students’ perceptions of problems with assessment practice**

Overall, there were two closely linked themes relating to the perceived problems with assessment. Overwhelmingly important to students was fairness in assessment and transparency in its processes. In terms of fairness, the marking criteria for different assignments in some cases were unclear. An example of this was what students saw as ambiguity or vagueness in terms such as ‘critical thinking’, which is invariably part of the marking criteria for pieces of coursework such as essays. In addition, the extent of how critical a piece of written work should be, did not seem to be understood by the students or clearly and consistently communicated by staff. If and how criteria were explained depended on individual staff, which led students to allude to ‘serendipity’, asserting that many students ‘would just say that it depends on how lucky you are’. What they perceived as a lack of consistency in assessment practices was indicative of a mismatch between the students’ interpretations of marking criteria and the way criteria were applied by staff in marking students’ assignments. Some students believed that their work had to conform to the markers’ beliefs and expectations rather than being assessed on its own merit. Students’ perceptions of inconsistency in marking were a prevalent issue as students were concerned that there was insufficient transparency in marking and grading across the different courses. This was most notable in examination marking where students rarely saw their marked scripts afterwards (although they could ask to see the scripts), prompting one student to comment that she had ‘generally learned the most (by) writing papers for classes rather than written exams’.

**Students’ perspectives on feedback**

The functions and rationale of feedback were clear to most students. They shared the belief that feedback is important, firstly, to enable them to identify the strengths and weaknesses of their work. Secondly, students believed that feedback should provide them with specific advice they can apply to subsequent assessments. Certainly, the feedback that helped students in their future assessments appeared to have the most
impact on them. They noted that feedback worked well ‘when it helped you understand where you went wrong and how to improve’. The rationale underpinning feedback, they believed, is that it contributes to a continuous process of learning and improving performance. Several students said that completing an assessment, having it marked and returned relatively early in a course was very important to them. It meant that they could have the opportunity of using the feedback to improve their next assessment. Students placed a considerable emphasis on being able to compare past feedback with feedback on subsequent assessments. They saw this as a vital indicator of their progress. In this respect, timely and analogous feedback is imperative.

Several students identified individual written feedback as the most beneficial to their learning, but it was acknowledged that other forms of feedback were also beneficial such as ‘feedback on formative assessment from peers’. They explained that working together through peer review was beneficial because ‘it challenges your beliefs’. Additionally, students acknowledged that there were benefits to receiving ‘whole-group’ or ‘generic’ feedback. Although generic feedback served various functions, for example, informing students of the grade distribution within a class and offering them general advice on how standards could be improved, it was regarded as less effective than individualised feedback. Effective feedback was described by students as containing detailed comments about their work and an explanation for its grade. They also wanted advice about how to improve their work in future assessments. Therefore, feedback was of limited value if it was too specific to the one current piece of work. They regarded markers’ comments as constructive if they contained concrete points and clear explanations because these were useful in understanding exactly how their written work could be improved. Additionally, students admitted to becoming highly motivated if they perceived a tone of encouragement from the marker. They valued supportive staff who provided comprehensive and constructive feedback and who were accessible and approachable for advice or further feedback. One student averred that the best feedback they received was when it involved an individual discussion with a member of staff. It appears that effective feedback is not just about content, but also about how it is conveyed. Despite this positive view, some problems with feedback were uncovered.

**Students’ perceptions of problems with feedback**

Dishearteningly, a few students commented that feedback had little or no impact on their learning. Barriers to effective feedback were identified as inconsistency, lack of detail, late return, and negative comments in the feedback. A commonly held belief was that examinations do not enable useful, if any, feedback to be given. Despite the University’s policy on giving feedback on summative examinations in a timely manner, this belief prevailed because most examinations are held at the end of courses. If this feedback cannot be used to improve students’ future work, then it becomes redundant and futile. Similarly, late feedback from assessments held during the course was perceived by students as a significant problem as it hindered any potential positive learning or improved performance. Poignantly, a student explained this as ‘a Catch-22. I mean—if you are getting feedback after you’ve completed your course, then it is again too late. I have a course where we handed in an essay two weeks ago, which has not been marked. Now we don’t have class any more. By the time it comes out, we will have sat our exams.’
As well as a paucity of feedback on examinations, students noted the lack of consistency in the way feedback was given by different staff on other assessment. One student explained, ‘I have no way of understanding what I have actually done wrong and I have no way of improving. It’s always about rolling the dice and trying to figure out what the (marker) is looking for’. This implies that it is not the amount of feedback that is important, but its quality. Students defined low-quality feedback as containing ‘just … ticks’, and they pointed out that ‘some markers (do) not even (do) that’. Students were acutely aware of the mismatch between their expectations of feedback and what they received. They were also clear about what they wanted from feedback, which was an understanding of how they could improve their work in future and observed that brief feedback rarely explained this to them. Another problem that students highlighted was receiving negative comments from staff if they requested clarification of their feedback or wanted additional feedback. Some students thought that this may be due to some staff interpreting the requests as challenging their academic expertise or authority.

Discussion

Drawing from the College review, the findings in this paper are time-specific and relate to the data that were collected from a relatively small group of students and the findings that emerged are therefore not fully representative of all assessment and feedback activities within the College or the wider University. Nevertheless, the findings are significant in that they resonate with previously published studies. It is also the case that the study examined areas that need to be improved and so this paper does not offer an equivalent account of the successes, strengths of approach in the College, or areas students recognise as good practice.

The role of assessment

It is clear from this project that students in the College perceived assessment to be important for different reasons. These reasons include assessment to gain academic coursework credit and professional accreditation. The main purpose of assessment was perceived as testing students’ knowledge and understanding academic course material. However, assessment was also seen to be important for gaining more than subject-specific knowledge, as students recognised that the acquisition of transferable skills could also be made through assessment and students appreciated that this was valuable for their future employability. Students asserted that developing their critical thinking skills was paramount and that this could be achieved through assessment. They believed that critical thinking could lead to being creative and innovative, which would also be highly valued by prospective employers.

Although summative assessment was a strategic concern and focus for students in terms of passing courses, gaining academic credit, and ultimately obtaining a degree, it was also seen by many as an opportunity to learn. Students acknowledged the potential for summative assessment to function also as assessment for learning and were aware of the value of their active engagement in assessment. This resonates with findings from the literature that indicate assessment as a tool for learning (Carless, 2006; McDowell et al., 2011; Pitt &
which encourages student engagement (Higher Education Academy, 2012, 2014). Interestingly, some students claimed they felt actively engaged when they were involved in assessment. Such engagement may give rise to deep learning, as referred to in the literature (author 1, 2014). Students referred to their engagement in learning as curiosity, a desire to learn, and ‘intellectual hunger’. Given the right circumstances, it seems that assessment can inspire intrinsic motivation. Assessment can capture an inherent desire to learn if students believe that it allows them to express a personal interest in, or passion for, a topic. The co-design of the curriculum and/or assessment between staff and students may be ways to facilitate this (Author 1 et al., 2017; Bovill & Bulley, 2011).

Towards a shared understanding of assessment and its processes

It is helpful to students to understand the purpose of assessment, which implies that clear communication from staff about its rationale is essential. And if new methods are introduced, students need to know in advance what is entailed, preferably with a chance to practice beforehand, through formative assessment. Students also noted that clear marking criteria, transparency and fairness in assessment and feedback processes are also vital to their learning and good performance in assessment. This can be facilitated through co-design as mentioned above, or by embedding assessment and feedback literacies into coursework (Author 1 et al., 2017; Higher Education Academy, 2012; Lea & Street, 1998; O’Donovan et al., 2015; Price et al., 2012; Smith et al., 2013).

Students did not believe that there was always a consistency in the marking and sometimes perceived it to be a matter of luck as to who marked their coursework. Given the rigour around second marking and moderation of marks, this points to a wider, and more complex ‘wicked’, problem where perceptions of fairness and consistency of marking are misaligned between students and staff. Naturally, different staff may adopt various styles of giving feedback and some may assume that students understand the academic discourse used in feedback. This reinforces the need for clear communication, understanding, and agreement of expectations between staff and students. It also reflects a potential dilemma in reconciling what students want and what staff provide, which is a tension highlighted by Carless (2006) and Adcroft (2011). Again, this suggests that student dissatisfaction is not an individual problem but one that belongs to a system, in other words, a ‘wicked’ problem for which ‘no-one has the solution in isolation’ (Grint, 2008, p. 11).

Positive aspects of assessment and feedback

The positive aspects of assessment and feedback raised by our participants resonate with previous studies (Biggs & Tang, 2011; Bloxham & West, 2004; Nicol & Macfarlane-Dick, 2006; Price et al., 2010; Weaver, 2006). Crucial for students’ good performance is their clear understanding of what is expected in assessment and this was apparent in the study. As stated in the literature, an effective way of helping students to understand what is expected of them is by embedding assessment and feedback literacies within the curriculum (Author 1 et al., 2017; Higher Education Academy, 2012; Lea & Street, 1998;
O’Donovan et al., 2015; Price et al., 2012; Smith et al., 2013; Sutton, 2012) in addition to authentic assurance from staff that stringent moderation or second marking policies and procedures are in place.

Students in the study believed that diverse assessment would lead to students’ increased motivation. Diversification necessitates a more flexible approach and includes innovative assessment methods, in addition to students being actively involved in making choices about their assessment. The issue of student dissatisfaction must therefore be contextualised as a ‘wicked’ problem that reaches beyond individual teaching staff and is a function of a range of factors including, but not limited to, the assessment methods across a programme of study, the consistency of dialogue around assessment and feedback, disciplinary influences, and institutional custom and practice. This is not to say that students like, or are receptive to, all kinds of alternative forms of assessment. Indeed, some may be resistant (author 1, 2018) and prefer more conventional modes of assessment such as essays and examinations. Although many students in the study did not favour group assessment, such as presentations, some clearly did. Inevitably, there can be problems with uneven contributions to group presentations, but there are ways in which this can be managed, for example, by requiring each student to produce written evidence of their contribution to the presentation. Another alternative to conventional end of course examinations is to introduce continuous assessment, which is recommended by Smith, Pearson, and Hennes (2016). Students believed that continuous assessment would counteract the stressful demand of sitting several examinations close together at the end of courses. Continuous assessment may also be more conducive to introducing exercises for students that develop their employability skills and attributes.

Problems of feedback

For learning to occur through assessment, it was clear that all participants felt that effective feedback is essential. However, effective feedback may present a conundrum. As referred to earlier, staff may spend a large amount of time writing comments on students’ work, yet this feedback often remains a source of dissatisfaction for students. This discord can arise if feedback does not provide detailed and clear scaffolded support to students (Sadler, 2013). Examples of low-quality feedback included merely ticking a student’s essay without any accompanying comments, or negative comments written on coursework. Students claimed that this depersonalised manner of feedback demotivated them and made them feel disengaged. A sense of their work and efforts being valued by staff is important for building and maintaining students’ confidence and further engagement. Perhaps it is not surprising that audio-visual-recorded feedback, even on anonymised coursework and examination scripts, is favoured by many students as it is more personalised (Kerr, Dudau, Deeley, Kominis, & Song, 2016), as referred to below.

Use of technology

Although there is limited information gathered in this study about the extent and diversity of uses of technology in assessment and feedback within the College, there is no doubt that technology is and can be used in a variety of ways. For example, there is
ample scope for further exploration of the use of technology in assessment and feedback (Hepplestone & Chikwa, 2016; Parkin, Hepplestone, Holden, Irwin, & Thorpe, 2012), especially given the opportunities offered by innovative technology enhanced active learning spaces. Technology can help to deliver feedback quite quickly and, of course, timeliness of feedback is an important factor. Returning marked work to students within a short time period can lead to increasing tension for staff and dissatisfaction for students if it is not returned on time. End of course assessments allow little time for providing feedback, especially in large classes, and can add stressful demands on staff. Moreover, feedback that is given after students have finished an academic course may render the feedback redundant as it may lose its relevance (Jonsson, 2012) and thus lead to student dissatisfaction. This is inextricably bound to a structural institutional system and is part of the ‘wicked’ problem.

**Effective feedback**

Nevertheless, students heartily agreed that effective feedback can be a means to improving their work, or, in other words, it is ‘a useful learning tool’ (Pitt & Norton, 2016, p. 1). They appreciated receiving regular feedback, such as comments on drafts of their work in progress. Unfortunately, this can be problematic if not impossible, to sustain if there is a large student cohort, although peer review may assist in some ways here. But students were adamant that helpful feedback was something they could use to improve their work. They explained this as containing specific and constructive comments on their work, as justifying the mark that was awarded, and being returned to them within a few weeks. These factors mirror the findings of Smith et al. (2016, p. 4) who reported succinctly that students described effective feedback as ‘timely, detailed and actionable’. It also echoes good feedback practice advocated by others (Hattie & Timperley, 2007; Jonsson, 2012; Nicol & Macfarlane-Dick, 2006; O’Donovan et al., 2015; Sadler, 2010).

**Personalisation**

Significantly, from this study it appears that students respond positively to staff who are approachable, and willing to offer help, support and encouragement (Pitt & Norton, 2016). Moreover, students may be more inclined to act on their feedback if they perceive it to be individualised. As mentioned above, the effects of one-to-one feedback can be perceived through online audio-visual feedback (Kerr et al., 2016). This personal approach to feedback reiterates what Sutton (2012, p. 39) refers to as an ‘ethos of care’ which, he asserts, is conducive to enhancing student learning. As with learning and teaching, feedback can be most effective if it is part of a social process that actively engages students in dialogue (Ajjawi & Boud, 2017; Carless et al., 2011; O’Donovan et al., 2015). The idea that dialogue and collaborative support can also be achieved through peer review was recognised by students as effectively developing their learning, which is echoed by Hamer, Purchase, Luxton-Reilly, and Denny (2015). We should not assume that students inherently know how to review, assess and give feedback effectively, but working with staff in partnership can help to develop students’ skills, improve their work and become self-regulated learners. Indeed, there was little information from students in the study about the process by which they apply feedback to
their future assignments. This ‘feedback loop’ signposts ways in which students can improve their work (QAA, 2006, p. 10–11) and creates a space for dialogic feedback (Boud & Molloy, 2013; Boud & Soler, 2016; Carless et al., 2011; Yang & Carless, 2013). However, using metaphor to refer to a more sustainable approach to learning through dialogic feedback beyond the limits of a particular course of study, a feedback coil may be more apt as this infers infinite development, rather than being confined to a finite loop.

**Summary**

In sum, this study reveals students’ perceptions of assessment and feedback, which interestingly resonate clearly with previous studies. From our study, it is evident that examples of excellent practice in assessment and feedback exist within the College that also reflect recommendations made in the literature. In seeking the views of students, our College-wide overview has allowed us to gain an insight into individuals’ views in combination with an institutional perspective. Student dissatisfaction with assessment and feedback is a multi-faceted issue based within and inextricably bound to a specific context of an institution and its culture. This issue is not a simple or ‘tame’ problem, with a simple or ‘elegant’ solution. On the contrary, student dissatisfaction is a ‘wicked’ problem that is complex and, being contiguous with the multifarious activities within the university, cannot be addressed in isolation with a ‘one size fits all’, quick fix, or definitive solution. In research-intensive universities, where learning and teaching frequently struggles to compete with research in terms of resources, time, and esteem, tackling this ‘wicked’ problem initially calls for an acknowledgement and acceptance that responsibility for potential solutions lie collaboratively within the institutional structures, culture, and communities of practice. Far from being elegant, approaches to ‘wicked’ problems are complex and holistic.

**Holistic approaches to the ‘wicked’ problem of student dissatisfaction with assessment and feedback**

The work reported here was undertaken as one of the several initiatives within the University that are designed to: encourage discussion about assessment and feedback, challenge existing practice, support new approaches, emphasise the value of peer assessment, and share practices across subject disciplines. At the same time as introducing changes, however, and as this research reinforced, there is a need to ensure consistent and authentic approach to assessment and feedback and a need to make changes in dialogue with students so that the rationale for policy and practice is transparent. Where this can be achieved, these factors may engender higher levels of student engagement, learning, and may ultimately contribute to student satisfaction.

From this study, and the literature reviewed here, there are several interventions that we recommend. They are interconnected, do not present a list of priorities, and have been subdivided in terms of the structural levels from which they might be approached. Like many UK Higher Education Institutions, the University in this study is already engaged in College-specific and cross-institutional dialogues about many of these interventions and they feature in early career development programmes, continuing
professional development and working group activities. However, given the current NSS results across the sector, many universities still have some way to go in terms of successfully implementing these kinds of interventions.

We assert that a strategy is necessary which involves an engaged community of staff and students, facilitated and supported by institutional leadership, and informed by empirical evidence from the literature. The outcome is potentially transformative, but it requires concerted and related initiatives at all levels and fuller engagement within communities of practice. We recommend holistic approaches to the ‘wicked’ problem of student dissatisfaction through multiple interventions. These interventions range from broad approaches such as curriculum mapping, integrating assessment and feedback literacies into courses and supporting the use of technology in assessment and feedback, to localised interventions such as facilitating students’ active participation, enabling more effective communication between staff and students, and providing opportunities to cultivate staff–student partnerships. Ultimately, by using this multifaceted strategy of enhancing communities of practice, the ‘wicked’ problem of assessment and feedback can be transformed into a source of student learning, engagement and motivation. These interventions are noted below.

University/college level interventions to:
- Explicitly align assessment and feedback with the aims and intended learning outcomes of degree programmes and courses (e.g. curriculum mapping);
- Encourage and support more flexible, diverse and innovative approaches to assessment and feedback (e.g. opportunities for continuous assessment, self- and peer assessment), to complement extant conventional methods;
- Explore further and share widely the use of technology in assessment and feedback;
- Ensure that course documentation is accurately completed, sufficiently detailed, and up to date.

School/subject discipline level interventions to:
- Design assessment and feedback practices that are more relevant to the real world where feasible;
- Integrate metacognitive skills into learning outcomes and assessments within courses;
- Introduce assessment and feedback literacies into courses;
- Offer opportunities for students’ active engagement and choices in assessment and feedback where appropriate;
- Optimise the timing of assessments and feedback provision (e.g. using assessment and feedback calendars for planning as well as for reporting).

Programme/course level interventions to:
- Ensure communication about assessment and feedback between staff and students is clear, timely and regular;
- Ensure that the rationale for using the assessment and feedback methods is explicit and transparent to students;
- Clarify at a very early stage, the assessment criteria and where possible, allow students to identify areas on which they would welcome feedback;
• Make opportunities for learning through assessment explicit to students (e.g. focus on critical thinking skills; employability);
• Ensure that feedback is timely and adequate;
• Give students opportunities to engage in dialogic feedback;
• Nurture an ethos of care through staff approachability and support for students.

Conclusion

Despite the limitations to this study, the data gathered from the qualitative research methods provide ample material with which to paint with some depth and perspective, a picture of assessment and feedback within one College of a research-intensive university. The contours of this assessment and feedback landscape depict terrain that is familiar and resonates with the literature. Clearly, there are areas of excellent practice in the College which are recognised by students, but equally there are areas of assessment and feedback that can be improved. What emerges is that engaged staff and students’ active engagement are key motivating factors that can lead to students’ satisfaction. In any institution, poor assessment and feedback practice tends to disengage and demotivate students, which inevitably leads to their dissatisfaction and means that any excellent learning outcomes may be achieved despite current practice, rather than because of it. Overall, the study revealed many sources of students’ satisfaction as well as dissatisfaction with the assessment and feedback processes they had experienced. While these issues may or may not be indicative of a wider consensus among students in general, the students’ responses still offer us insight into how assessment and feedback practice can be improved.

The data representing the students’ views concur with findings from the literature, prompting a series of suggestions to improve practice. These are not solutions per se, but rather, complex and multi-faceted approaches, requiring effort and action at different structural levels and an engagement of different ‘communities of practice’ within the institution. Implementation of the recommendations therefore depend largely on a genuine thirst and sustained commitment among institutional leaders and staff to effect change. Only then will we, and other universities be able to measure the success of a concerted attempt to solve the ‘wicked’ problem of student dissatisfaction with assessment and feedback. Where changes are piecemeal, this can only actually serve to be counterproductive – highlighting disparities in the eyes of students and further embedding dissatisfaction. The challenge we face in the sector is to introduce a raft of integrated, mutually reinforcing approaches to support staff and students, and to engage in the cultural change that often underpins such developments. This is a long-term commitment that requires sustained leadership and authentic dialogue. This study suggests that efforts directed towards enhancing assessment and feedback practices, whilst they demand considerable investment in people, systems and processes will ultimately reflect brightly on the student experience.

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