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Tionscnamh Ollscoil Mhá Nuad um Aiseolas Mac Léinn agus Mheasúnú Teagaisc: Léirbhreithniú ar an Litríocht

Maynooth University Student Feedback and Teaching Evaluation Initiative: Literature Review

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Maynooth University Student Feedback and Teaching Evaluation Initiative

The Maynooth University Student Feedback and Teaching Evaluation Initiative is funded by the HEA in partnership with the National Forum for the Enhancement of Teaching and Learning under the Strategic Alignment of Teaching and Learning Enhancement Funding in Higher Education 2019 (SATLE). It is an interdisciplinary project that examines how qualitative and quantitative student feedback and evaluation of teaching methods, at module and programme level, can help to enhance student learning and contribute to the continuing professional development of staff who teach.

Fostering genuine student partnership is at the heart of the project and student involvement is a necessary requirement at all stages. The Initiative partners are the Centre for Teaching and Learning (Lead), the Institutional Research Office, Maynooth Students' Union, and three academic departments representative of the three Faculties and chosen following a call for expressions of interest: Applied Social Studies, Chemistry, and Music. By working closely together, the Initiative partners have established project priorities that reflect both specific disciplinary interests and matters of concern across the University. Applied Social Studies, Chemistry, and Music have documented and shared information on their existing feedback practices, and from September 2020 each department will pilot a variety of new feedback approaches. By assessing the value of different feedback and evaluation methods in a variety of disciplinary contexts, the Initiative will provide a detailed insight into what is successful in different circumstances and why. Given the recent changes to teaching and learning required as a response to Covid-19, the project will also give attention to methods for seeking feedback on remote and blended teaching and learning.

This literature review was produced to ensure that the Initiative's outputs are informed by the latest scholarly research. The review focuses on student feedback; a companion piece on teaching evaluation will also be produced as part of the initiative outputs. We hope that the review will also prove to be a useful resource for those working in related fields.

Other project outputs will include a series 'how to' guides. These guides will provide practical advice on a range of feedback approaches to staff and students. They will be informed by this literature review, practices used at other Higher Education institutions, and by the practice-wisdom and expertise of the project partners. The guides will be employed in the feedback pilots that each discipline will undertake.

The Initiative partners are also making connections beyond the project in order to learn from and support others working in the same space, while avoiding unnecessary replication of existing work. We also hope this will ensure that the Initiative promotes accessibility, authentic student partnership, and a supportive approach to the professional development of staff who teach.

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Executive Summary

This review provides an analysis of the recent Higher Education (HE) literature about student feedback on teaching and learning. It has been conducted to inform Maynooth University's Enhancing Teaching and Learning through Programme and Module Evaluation Initiative. The review defines feedback as information, formal or informal, that is provided by students on their experiences of teaching and learning.

Reflections on the Philosophies and Practices of Student Feedback

Recent trends in student feedback are situated in the wider philosophical and ethical debates on the topic. These include concerns that a focus on economic matters is encouraging universities to gather superficial feedback from students via quantitative surveys. A desire to counter these trends has fueled a range of student partnership activities at HE institutions which has encouraged the use of more qualitative feedback methods. In turn, both quantitative and qualitative approaches to student feedback have been used for quality assurance and teaching enhancement. These processes have different objectives. The necessity for clarity around these objectives reinforces the need to know what feedback will be used for, in order to know what questions to ask students. Knowing *what* questions to ask will be most effective if we also know *how* to approach student feedback especially in the context of teaching evaluation. While some teaching evaluation methods have encouraged an adversarial 'rate the teacher' and 'blame the student' culture, the development of more supportive evaluation processes is recommended.

Overview of Approaches to Student Feedback

A wide range of approaches have been used to seek feedback from students. These include quantitative surveys, as well as more qualitative forms of feedback such as focus groups, reflective essays, dialogue days, and the employment of students as quality monitors.

Quantitative Approaches

Within the literature the pros and cons, as well as many instances of application, of the various quantitative approaches abound; quantitative feedback surveys in particular have been heavily studied. Two themes which persist across the research into quantitative surveys are the issues of bias and of response rate. With regards the former, the extent to which teaching evaluation surveys are subject to various biases has been frequently investigated. However, these studies do not give consistent answers about the existence of such biases, which raises questions about the use of quantitative surveys in processes with pay and promotions implications. With regards to response rates, researchers have indicated that surveys used for quality monitoring purposes may require higher response rates than those achieved by online instruments. Survey fatigue also reduces response rates. The scholarship provides recommendations with regards to quantitative approaches which include the following points:

- the results of quantitative surveys must be used with caution, especially if they are to inform HR policies.
- adding open-ended questions to quantitative surveys may be valuable.
- using a portfolio of methods including but not limited to quantitative surveys will provide broader perspectives on student views of teaching and learning.

- more needs to be learned about how students perceive feedback processes.

Qualitative Forms of Feedback

Specific qualitative approaches have received attention in the literature, with many articles championing their value.

Group methods employed to gather feedback include focus groups and nominal groups. These two approaches, which are usually only designed to accommodate a small number of participants, are seen as providing rich data and ranked priorities respectively as a result of the group's response to predetermined questions. The methods also allow participants to raise topics that might not have been considered by the organisers.

An alternative qualitative approach which features in the literature is *Reflective Feedback*. Under this heading, a 'one question' feedback method where students write an anonymous essay-style answer to a broad question about their experiences of teaching and learning, has been promoted by some authors. They argue that the freedom of the process produces nuanced answers with actionable recommendations. Other 'creative' methods such as asking students to produce drawings, have also been used to gather feedback. These methods often require significant interpretation, but they may help to make feedback a less judgmental process. The extent to which they are transferable between disciplines needs to be investigated.

Other qualitative approaches can be grouped under the broad heading of *Dialogue and Partnership*. There have been several attempts to make feedback part of a dialogue rather than a one-off, one-way process. These include inviting staff and students to discuss academic issues at 'dialogue days' managed by neutral facilitators, as well as the employment of students as advisors on HE teaching and learning processes. These initiatives are intended to break down barriers between staff and students and provide a greater amount of time for students to express their views, than allowed by traditional feedback methods. Although they are becoming increasingly popular, student partnership processes have not been universally welcomed. Some authors claim partnership excludes some students by privileging verbal forms of communication over other kinds of engagement.

Inclusion and Diversity

A key theme in the literature is that of inclusion and diversity. There are potential tensions between processes designed to foster deep participation and those that encourage the broadest possible involvement. It has been argued that student partnership schemes often attract only 'elite' students who are already involved in many university activities.

Recommendations for improving inclusion and diversity include:

- maintaining flexible schedules for partnership activities to ensure those with outside commitments can take part.
- providing payment to participants of student partnership schemes.

- connecting student partnership activities with other projects designed to promote diversity.
- ensuring that some feedback takes the form of anonymous written comment.
- providing students with training about the feedback process to boost their confidence.

Technology, Online Environments, and Remote Teaching

An increasing number of electronic technologies are becoming available that help us gather feedback in faster and more convenient ways.

As with other quantitative methods, response rates are a concern for online surveys as rates are often considerably lower than those achieved by their paper counterparts. One potential solution offered in the literature to address this problem is to set aside class time to allow completion of electronic surveys.

Given the particular circumstances at the time of compiling this review, reflection on how feedback on online teaching should be collected was also considered. When assessing the literature in this space we must remember that most of it relates to courses that were purposely designed to be online. The recommendations include:

- setting specific questions on technical matters, as this helps to clarify issues around the role of instructor/tutor/lecturer.
- acknowledging issues related to students' broader lives, such as caring responsibilities, and asking students how the university might better support them when learning at home.
- if adapting an existing feedback method, ensure that all of the questions are relevant to online classes.
- asking students if they find the methods introduced to mimic the perceived positives of classroom-based environments, such as discussion boards, valuable.

Discipline Specific Considerations

While there are some generic approaches with broad parameters which are applicable across disciplines, there is also value in identifying discipline specific considerations:

Feedback questions should be relevant to the programmes that students study. Providing students with generic surveys that contain questions about class or assessment types not used in their programmes, is likely to promote survey fatigue.

Reflecting more on how the methods used for assessment and communication in a particular discipline affect the feedback gathered is beneficial, as some approaches may not have the desired complementarity with the discipline.

The setting in which student feedback is gathered may also influence the feedback obtained. Different kinds of class environment can be associated with different kinds of anxieties such as those related to practical work, performance, or discussion. The ways in which these different kinds of anxieties affect student confidence may need to be addressed to promote inclusive feedback environments in different class types.

Care must be taken when making comparisons in evaluation results across disciplines and between modules. Some subjects consistently achieve low 'teaching evaluation ratings' despite providing the necessary foundations for advanced modules which are more favourably received.

Student Perceptions of Feedback Processes and Closing the Feedback Loop

Although an increasing number of authors have argued that we need to know more about how students view requests for feedback, there have been few in-depth studies of this topic.

The information that we have indicates that time pressures and a belief that feedback would not result in improvements are the main reasons that students say they do not participate in feedback processes. Some students have noted their frustration at not receiving responses to the ideas they put forward, especially if they are, at the same time, being frequently asked for their opinion on different topics. The research also indicates that students were willing to give their opinions when they felt that they had the expertise to do so and that their views would be listened to.

This research topic and its associated findings link directly with the idea of 'closing the feedback loop' – that is, meaningfully responding to student feedback. This concept is at the heart of much of the literature discussed above, and several specific recommendations have been made to achieve it including:

- provide training to assist students in giving constructive feedback.
- ensure feedback is gathered early enough in the semester to allow staff to respond to it.
- ensure feedback is responded to and encourage dialogue-based forms of feedback.

Key Themes

Taking the literature review as a whole, recurrent themes may be identified. A few which are revisited time and again and thus merit particular mention, are noted here:

- The value of using a portfolio of feedback methods.
- The advantages of feedback processes that encourage course enhancement.
- The importance of providing training about feedback for students.

- The necessity of closing the feedback loop and responding constructively to feedback.
- The importance of making feedback part of an ongoing process of dialogue between students and staff, and the need to hear more about how students perceive requests for feedback.
- The need to be aware of the biases that can affect feedback processes and to combat factors that exclude some students' voices.
- The necessity of seeing student feedback as a central part of a university's academic activities, not an optional extra. The gathering and use of student feedback should be embedded in processes designed to improve teaching and learning.

Introduction

This review provides an analysis of the recent literature about student feedback on teaching and learning to inform Maynooth University's Enhancing Teaching and Learning through Programme and Module Evaluation Initiative ('the project'). It defines feedback as information, formal or informal, that is provided by students on their experiences of teaching and learning. It gives particular attention to discussions about the many different methods and approaches used to gather students' views, but it also reflects on wider debates about the place of students in Higher Education (HE) and how these discussions inform feedback processes. A vast number of articles have been written on the subject of student feedback, and this review can only examine a portion of them. In order to target the research to best support the project, the review focuses on the most recent general HE literature and responds to the following questions that were developed through meetings with the project team:

Questions

Inclusion and Representation: Which feedback methods encourage in-depth student engagement and high rates of student participation, from a broad range of students?

Variation in Class and Module Type/Promoting Cross-Departmental Approaches: Which methods work well for cross-departmental approaches to feedback? Which are suitable for a wide range of teaching environments?

Technology and Feedback: What forms of technology enhance the gathering and analysis of student feedback?

Responding to Feedback and Closing the Feedback Loop: Which methods best allow staff to respond to and implement student feedback? What are the best ways for closing the feedback loop?

Current Circumstances - Feedback on Remote Teaching and Learning: Which methods would work best for gathering feedback on the remote teaching and learning that is happening at the moment in response to Covid-19?

Attitudes to Feedback Mechanisms. Do/did students/graduates consider feedback mechanisms to be adequate? If students do not respond to feedback requests, why not? Do they suspect that feedback will be ignored, or even used against them? What about instructors? Do instructors consider feedback to be worth engaging with? How can these attitudes be examined?

Methodology

The review focused on articles from several prominent general HE journals published between 2015 and 2020 (see appendix). Relevant articles from these were identified using a combination of keyword searches via the journals' online platforms (keywords: 'Student Feedback' 'Closing Feedback Loop' 'Teaching Evaluation' 'Inclusive'), and an issue-by-issue search of titles/abstracts in the same journals. This combination ensured articles on a range of themes were found. This search was complemented with a small number of articles from before 2015 that were identified as 'key studies' in the literature or were recommended by colleagues, and by the consultation of a

small number of disciplinary specific journals from between 2015 and 2020 (see appendix).

Structure and Approach

The review begins by considering the broader context of ideas in which debates on student feedback take place, and then examines the literature on quantitative and qualitative approaches to feedback. It then discusses what the literature reveals about the project's key questions and priorities, such as inclusion and student partnership, closing the feedback loop, and disciplinary specific concerns. The review often uses a discussion of key articles to examine recurring themes in the literature, rather than listing every relevant article available on a topic, as this enables a closer insight into the issues examined. The bibliography contains a list of all of the material that informed this review.

1. Reflections on the Philosophies and Practices of Student Feedback

The literature on student feedback and related matters is vast and diverse and this review only examines a portion of the most recent and relevant research. In order to be properly prepared to critique even this small fraction, we must give some consideration to the broader contexts in which it is situated. Commenting briefly on recent philosophical and ethical reflections on the place of student feedback in the HE landscape, will help to highlight the broader issues at stake when we consider more 'practical' studies.

The most frequent recent criticisms of feedback processes are part of a wider comment on the impact of neoliberalism on HE and specifically, concerns that students are increasingly perceived as consumers. It is argued that many current feedback processes are designed to seek (and therefore will seek) very thin forms of feedback, with quantitative surveys in particular perceived as encouraging this. Gathering feedback with the aim of using it for marketing purposes draws criticism, as does England's Teaching Excellence Framework (TEF). Although TEF scores are partly based on student feedback as they incorporate some results from the National Student Survey (NSS), it is argued that the process provides only a superficial method of assessing teaching quality. The fact that institutions that received satisfactory TEF scores were allowed to raise their fees, has fuelled further anxieties that student feedback processes are closely connected with and enhance the idea that HE is simply a product paid for and enjoyed by the individual student/graduate (Arthur, 2020; Raaper, 2020; Chilvers *et al.*, 2019; Cameron and Billington, 2017).

This largely economic interpretation of HE is related to the fear that if students are consumers then they will be passive, exercising little control over their own lives and learning, and unable to play an active role in shaping the university community. In a European context, this concern is particularly strong in the UK, especially England, although there is some evidence to suggest the distinctions between England and other European countries may not be as extreme as many studies assume. In a small-scale comparison of student attitudes in a German and an English university, Budd (2017) found that higher fees had not led English students to see their studies in purely economic terms. He noted that an economic motivation was just one of several

reasons cited by students at both universities for choosing their programmes. The idea that students are becoming more like consumers nevertheless persists, and to counter this, some articles have championed the idea of student partnership, where students are active participants in their own learning, working alongside teaching staff to shape the wider university (Huxham *et al.*, 2017). Student partnership is sometimes presented as a way of countering HE bureaucracy and neoliberalism by strengthening connections between students and academic staff, though not all critics of current trends in HE policy see partnership in positive terms (see the Section 4 for more discussion of the topic of student as partner and its relationship with student feedback processes).

Other criticisms of quantitative survey-based feedback include fears that it promotes an adversarial 'rate my teacher' culture in which bald numerical evaluations of the complex process of teaching are dispensed without diplomacy by students. This can destroy staff confidence, and lead to a defensive 'blame the student' response and to claims that students do not have sufficient expertise to judge teaching quality. Such concerns are particularly strong when teaching evaluation scores are used to decide promotions (Edström, 2008; Huxham *et al.*, 2017). Drawing on the work of Foucault, Hou *et al.* (2017) presented current feedback processes as a form of discipline that not only exerts control over teaching staff, but by specifying that only particular forms of feedback are acceptable, over students and administrators as well. The authors, however, do not solely focus on criticising existing processes, but rather consider ways of making the feedback process more supportive, such as by providing training for students to assist them in giving constructive feedback. Indeed, the provision of training has been suggested as a solution to a variety of issues in relation to feedback and will be discussed in more detail in this review.

Many articles have criticised the gathering of feedback on teaching and learning from students as part of a wider 'tick-box' bureaucratic culture that they perceive as growing in HE. Others argue that student feedback and student participation more generally, have key roles to play in HE quality assurance (Shah *et al.*, 2017, Isaeva, *et al.*, 2020). In either case, we are faced with questions about the purposes of gathering feedback on teaching and learning; is it intended to advertise past achievements, monitor quality, or assist improvements? Is it to guide promotions' processes based on past performance or to aid educational innovation?

In a classic article, Edström (2008) examined potential tensions between feedback undertaken to maintain standards, and feedback gathered to develop and improve modules and teaching. She noted that if feedback is merely given a 'fire alarm' function then it is unlikely to be used to improve courses. She also indicated that the idea of a feedback process focused on development was welcomed by staff and students, as it was perceived as making feedback a less adversarial activity (p.96). Indeed, she noted that perceptions of feedback processes are particularly important. In the HE institution under discussion in her article, both staff and students saw the evaluation of teaching as an assessment of the actions of the lecturer/instructor in class, rather than an examination of how student learning was/was not supported (pp.97-98).

It is therefore important to acknowledge that a feedback process that seeks to assess whether teaching is of sufficient standard might need to be carried out in a different way to one that aims to improve teaching. The outcomes of such processes might also

be very different. For example, Carbone *et al.* (2015) discussed a course designed to assist staff at Australian HE institutions to develop their teaching. They noted that although some staff chose to take this course voluntarily, others were 'invited' to complete it because they had failed to achieve a minimum numerical score in a teaching evaluation (Carbone *et al.*, 2015, p. 168). Such a quality assurance focus may unintentionally promote the idea that feedback is connected with punishment for 'underperformance' rather than something that could stimulate innovation in teaching across the university.

Other broad trends in the literature on feedback include an increasing attention to the use of technology, especially online methods, in the gathering and analysis of feedback. This is part of wider discussions of the use of technology in HE more generally. The growing body of literature on distance and online learning has become increasingly relevant in recent weeks with the move to remote teaching and learning necessitated by Covid-19. Care, however, must be taken when assessing online methods that were not developed specifically deal with this emergency scenario (see Section 7 below).

2. Overview of Approaches to Student Feedback

A wide range of resources have been used to seek feedback on students' experiences of teaching and learning. These include quantitative surveys delivered via a paper or online format. Such surveys usually consist of a series of questions with a Likert scale of answers to which numerical scores are attached. In some cases, such scores are added together and averaged and one numerical score is given to the relevant member(s) of teaching staff for each of their modules. Adaptions have been made to these surveys to add depth to the feedback gathered, such as including a few open-ended questions to the survey to allow students to do more than give a response to pre-determined questions. More qualitative forms of feedback have also been used and these include focus groups, nominal groups, interviews, as well as methods incorporating reflective essays, dialogue days, storytelling, and drawings. In practice articles often employ a combination of methods - frequently a combination of a quantitative survey and a qualitative method such as a focus group, but they sometimes involve combining two similar forms of feedback such as in (Varga-Atkins *et al.*, 2017) whose authors combined elements of the focus group and the nominal group to develop a new 'Nominal Focus Group' method (see Section 4).

3. Surveys and Statistical Matters

Quantitative surveys have attracted significant criticism in the literature, though this is partly because they have been subject to more intense analysis than other feedback methods. Hence critiques of quantitative surveys highlight many of the broader matters that we need to reflect on when thinking about feedback. The literature on assessing and refining quantitative feedback methodologies is vast. Aspects assessed include the validity of the instrument - *does the survey actually measure what it is designed to measure*, and the reliability of the instrument - *does the survey give consistent results?* The latter reminds us that understanding something about the psychology of responses to such instruments is necessary and some studies have analysed these issues in detail. For example, Valencia (2019) examined the impact of

individuals' answering styles such as acquiesce (or a tendency to agree) on the value of survey instruments.

Discussing statistical explorations of quantitative surveys highlights the many factors that can affect teaching evaluation scores and the many efforts that have been made to detect and potentially control for them. Fraile and Bosch-Morell (2015), for example, attempted to control for class size by calculating an average evaluation score for each student's response to the survey's questions, rather than calculating an average per question. They argued that this helped to ensure that lecturers with smaller classes were not at a disadvantage. They also recommended that tracking evaluation scores for more than one year should be considered, especially if these scores are to be used for HR purposes, as this would take into account the effects of previous teaching experience on such scores (Fraile and Bosch-Morell, 2015, pp.68-69). The impact of factors completely unrelated to teaching quality on survey results has also received some attention. There have been several studies of whether a lecturer/instructor's gender, 'race', or other personal characteristics affect teaching evaluation scores. This is a very serious consideration, which raises questions about the continued use of surveys, especially for promotions. Studies so far have given mixed results with some suggesting evidence of bias related to a teacher's gender and others arguing that the instructors' gender does not affect evaluation results (Wang and Williamson, 2020, pp.5-12; Valencia, 2019). This inconsistency in assessing biases in quantitative instruments is itself a significant issue and its implications are revealed through a discussion of Wang and Williamson (2020).

Although Wang and Williamson addressed their recommendations to a US context, their analysis drew on both US and non-US studies, and the issues that they considered have a much broader relevance. In order to reflect on the validity of course evaluation instruments (CEIs) generally, Wang and Williamson considered the 'leniency hypothesis' - the claim that good scores in teaching evaluations correlate with high grades and that therefore CEIs provide a measure of grading leniency rather than teaching quality; that is, that teaching staff provide good grades in order to 'buy' high scores. Wang and Williamson analysed twenty-eight articles, published between 1972 and 2017, that investigated potential correlations between teaching evaluation scores and grades (or expected grades). They noted that most but not all of these studies detected a positive correlation. Reflecting on the details of these studies, however, did not encourage Wang and Williamson to conclude that the leniency hypothesis is true, but rather to highlight the complex range of factors that affect teaching evaluations and to urge caution when taking a ready-made survey instrument 'off the shelf'. Their discussion of the variation in conclusions reached by different peer reviewed articles, indicated the value of understanding the context in which evaluation takes place; and there may be an interaction between grades and evaluation in some contexts and not in others.

Considering the many potential factors involved, Wang and Williamson also indicated that, as will be examined below, getting a high response rate to a survey should not foster complacency about the value or accuracy of its results (p.15). Similarly, by discussing a wide range of different studies of roughly the same issue, they re-emphasised the perennially important point that correlation is not causation. They noted how some authors have argued that detecting a relationship between grades and teaching evaluation does not support the leniency hypothesis, but rather that high

grades and good teaching happen to be correlated, and the surveys are measuring teaching quality as intended. Wang and Williamson highlighted how this reminds us about the need to formulate and examine mechanisms for explaining how teaching evaluations and bias related to them work, when assessing such matters (pp.10-11).

Based on this Wang and Williamson made a range of suggestions to improve the validity of feedback such as: including a set of questions that focus on the instructor and another set that focus on the course, within the same survey. They argued that this would encourage students to evaluate the quality of the instructor's teaching, rather than use the survey to respond to other issues. They urged caution in applying standard quantitative teaching surveys for promotion or other HR purposes. They strongly recommended developing a portfolio of feedback approaches to apply together in order to get an insight into different aspects of teaching. Indeed, they noted that quantitative surveys using Likert scales rarely provide the kind of detail that helps to improve or develop teaching. They recommended using more qualitative forms of feedback including open-ended questions in surveys, and focus groups (though they did not comment on the limitations of these methods). They also noted the importance of seeking students' views on feedback processes (pp. 16-20).

Response Rates

Wang and Williamson's arguments reflect those emerging from the literature on another heavily studied matter - survey response rates. As well as many analyses of the factors affecting response rates and attempts to boost response rates, there has been significant discussion about what value qualifies as a 'good' response rate, and even, why we should (or should not) bother to focus on response rates at all.

Nulty (2008) examined a large number of studies of teaching evaluation response rates, and like Wang and Williamson (2020), discussing this article provides a good way of assessing the wider subject and recommendations that apply more generally. Nulty noted that, at first glance at least, online surveys have significantly lower response rates than paper-based surveys. He wondered whether the convenience of online surveys was encouraging the use of such methods without sufficient consideration of whether they achieve adequate response rates. With this in mind the paper also attempted to discover what 'response rate may be considered large enough for the survey data to provide adequate evidence for accountability and improvement purposes' (p.301).

The article discussed previous analyses of survey response rates, including efforts to boost online responses. Nulty found one case where a small (0.25%) grade increase successfully boosted response rates, and that more frequently used methods, including sending repeat emails to non-respondents, or entering participants in a random lottery also achieved an effect. Nulty argued that it would be valuable to use such incentives (or a combination of them) to boost response rates though he suggested that a more effective but potentially more challenging action, would be to ensure that students believe that their responses will be used (p. 303, p.306).

Nulty noted that in order to decide on what an accurate response rate is, one should reflect on the purposes of the survey. If the purpose is to improve teaching, then in principle recommendations from just one respondent could be valuable, provided that these recommendations are not wildly unrepresentative. He argued, however, that if

the surveys are being used in 'the context of a summative appraisal of the performance of the teacher' a significantly greater level of response would be required. He claimed that because, in practice surveys are rarely used for developmental purposes alone, securing an adequate response rate should remain a central goal (p.306).

He noted that researchers and HE institutions have cited a variety of response rates as desirable (e.g. at least 60%, at least 70%) without providing any theoretical justification for their figures. He attempted to develop a more systematic and statistically sound basis for calculating a minimum and in the process, usefully reminded us that sample bias will occur if non-respondents would have responded differently to the survey questions than the respondents. Achieving a high response rate is one way of attempting to diminish such bias but it does not guarantee its reduction. He also noted that in general the smaller the number of students being surveyed, the higher the response rate required. He came to the uncomfortable conclusion that, if applying a standard 3% sampling error and 95% confidence level, a 20% response rate (which was the level achieved by one of the universities he studied), would not be good enough even for a class of 2000 students (pp.307-309).

Nulty also reminded us that we should not focus solely on the response rate, but should give some attention to the nature of the biases involved. For example, an online survey might be most likely to be completed by students who are very familiar with online technologies and these may respond more positively to questions about online teaching, than other students. If the same questions were asked in a paper survey we might get a higher response rate, but the views would be more representative of a different group of students. Information from both surveys could yield useful insights in spite of their different response rates, if we know something about the biases involved (p.311). Similarly, in a paper which will be considered in more detail in Section 7, Treischl and Wolbring noted that, although they got higher response rates for paper-based evaluations compared with those completed online, they could not simply conclude that paper-based surveys are the 'gold standard'. They noted that some important information, such as the views of those who had stopped attending class could only have been gathered via their online surveys (Treischl and Wolbring, 2017).

Other authors have similarly reminded us that we should evaluate survey methods by considering more than the response rate achieved. Standish and Umbach (2019) studied non-response bias in a way that allowed them to detect statistically significant differences between their whole population and those who responded to their survey. Their survey related to the use of sports facilities, and data about this was also available from administrative records such as the card check-in system required to access these facilities (p.343). Comparison between this information and the survey data, revealed differences between the respondent and non-respondent groups. These differences had an impact on responses gathered for 11 of the 13 survey questions. Among other things, they found that students that used the sports facilities more regularly were more likely to complete the survey. This again suggests a need to get information on how the characteristics of those who respond to a survey compare with the overall target population (pp.350-351).

Fosnacht *et al.* (2017) investigated similar issues in an article that turned the response rate question on its head by asking: 'How important are high response rates for college surveys?'. They simulated a variety of different response rates by taking samples of

the survey responses they received. For example, for a survey of 100 they looked at the first five responses to mimic a 5% response rate (p.251). While they generally found, as expected, a larger simulated response rate produced a more accurate result, they noted some examples where relatively low simulated response rates approximated the mean. They suggest that in some cases, especially where a large population is being surveyed, administrators could reasonably reduce their efforts to marginally increase the response rate, and that this would free 'time and monetary resources that could be better spent improving the survey instrument, analyzing the data or on other important projects' (p.258). They argued that efforts to secure high response rates should be reserved for the most important questions, including teaching evaluations that have pay or promotions implications, whereas lower response rates might be sufficient for surveys on other parts of the student experience, such as the quality of campus food. They also emphasised the necessity of ensuring representativeness as well as high response rates, and the need to avoid survey fatigue. They indicated the latter might be reduced by seeking opinions on some subjects from samples of students (with appropriate statistical safeguards) and that institutional-wide surveys should focus primarily on the most important aspects of teaching and learning (p.260).

Much of this literature therefore echoes recommendations for improving evaluation made by Nulty and by Wang and Williamson, such as the need to draw on several different evaluation methods to provide a well-informed picture.

Longitudinal Studies and Long-Term Trends

Discussions of survey fatigue highlight the need to see surveys and evaluations as activities that happen over time and as part of longer processes of seeking and responding (or not responding) to feedback, rather than isolated events. Yet there are few in-depth studies of the impact of students' longer-term experiences of feedback surveys. Blaney *et al.* (2019) examined the effects of different kinds of incentives on how students respond to a series of consecutive surveys. For example, they assessed how winning/losing in a raffle affected whether that survey's respondents responded to subsequent surveys. They found that those who had won a prize in the first survey were more likely to participate in later surveys (even when these surveys had guaranteed incentives) (pp.589-592). It reminds us that seeking feedback always takes place in a particular context and that it is shaped by previous attempts to gather feedback as well as other matters. It also emphasises the need to give attention to longer trends. Indeed, Fraile and Bosch-Morell's (2015) attempt to control for the effect of 'teaching history' in teaching evaluations reminds us that longer term issues affecting teaching staff and others, also influence feedback.

Taking into account change over time also makes us more aware of potential differences between different year groups as they move through their programme, something that will be considered again in Section 4. It also raises questions about how time affects the feedback that alumni give on their programmes. Koenig-Lewis *et al.* (2016) examined the effects of time on how alumni remember their university experiences. They analysed the views of alumni who graduated in different years. They found that alumni's academic experiences were more likely to shape their sense of connection with their undergraduate institution, than their social experiences, but this sense of connection weakens over time and diminishes significantly for those who have gone on to do further study elsewhere (Koenig-Lewis *et al.*, 2016, pp.73-77).

Quantitative surveys have attracted significant criticism, but this seems to be partly because they are so widely used, especially where no other feedback data is accessible. This review will now assess qualitative feedback approaches. These have often been promoted as more valuable than quantitative surveys, but when we consider them we should bear in mind the advantages of quantitative surveys, including their ability to help gather, analyse, and process large amounts of data quickly, and their ability to incorporate significant safeguards for anonymity.

4. Qualitative Forms of Feedback

As noted repeatedly in the literature, while quantitative surveys can be useful for evaluating quality and for highlighting problems, they rarely provide suggestions for how things can be improved, and qualitative methods are usually recommended to address this. Qualitative approaches have received significant attention in the literature, with many articles championing the value of a particular method. Fewer detailed critiques of the advantages and disadvantages of such approaches more generally, however, have been produced.

Focus Groups and Nominal Groups

Focus groups usually involve open discussion of a number of questions by a relatively small group of students. A neutral facilitator is often appointed to ask the questions and manage the time available. The ways in which the rich data produced is analysed varies, but there is often an attempt to protect participant anonymity by removing references to identifying characteristics. Detailed reflection on the use of the focus group in gathering student feedback on teaching and learning is rare, but Cochran *et al.* (2016) whose work will be considered in more detail in Section 7, provided a succinct discussion of its advantages and disadvantages. Cochran *et al.* noted, for example, that unlike individual interviews, focus groups often produce a group rather than an individual response, as participants' comments are shaped and directed by the broader views of the group. The authors also noted that one of the great advantages of focus groups is that they can foster discussions that raise issues that the focus group organisers had not considered in advance. Such discussion has the potential to produce much nuanced data on a variety of factors but this also presents data analysis challenges, especially in terms of the time required for processing (Cochran *et al.*, 2016, p.152).

The nominal group has also been used to gather feedback. Described by Varga-Atkins *et al.* (2017), as a structured face-to-face group method designed to achieve consensus, it was developed originally by Delbecq and colleagues in the 1970s. The nominal group is generally more structured than the focus group, and is comprised of five stages some of which involve individual work and some involve group work. The facilitator starts with broad questions about what students would like to see changed or continued in the module or programme under discussion, and participants write their individual responses on post-it notes. These notes are then shared with the group to foster discussion. The group puts these responses into different categories and then individual participants each select their top five items ranked in order of priority with point scores assigned to each. The facilitator uses these to draw up a ranked list of the group's five priorities. According to Varga-Atkins *et al.* this process is valuable for shy or reserved participants who have more difficulty making their voices heard in

focus groups (Varga-Atkins *et al.*, 2017, pp.290-293). Varga-Atkins *et al.* noted that proponents of nominal groups argue that the active role given to participants in classifying and ranking data makes them feel that they have a greater stake in the data generated and also potentially reduces bias associated with the researcher (p.291).

Varga-Atkins *et al.* also argued the nominal groups provide a feasible way of combining the views of various stakeholders, as each group produces a succinct list. They noted however that unlike focus groups, nominal groups generally only allow one or two questions to be explored. In order to overcome this limitation and to try to combine the benefits of both nominal and focus groups, they proposed a hybrid method 'the Nominal Focus Group'. The Nominal Focus Group starts with focus-group type stage of open discussion in response to a series of questions. This is followed by a nominal-group technique where students individually answer one or two questions to produce a list of priorities. The technique therefore results in a ranked list similar to a nominal group output and a report similar to a focus-group output (pp.291-293).

Interestingly, when trying to evaluate the success of their hybrid technique, Varga-Atkins *et al.* found that participants of focus groups rarely receive the opportunity to provide feedback on the process, and to counter this trend, they surveyed their participants. They also interviewed two staff members to assess the value of the ideas that emerged from the Nominal Focus Groups in relation to curriculum development (p.294). Their findings indicated that the focus-group stage of the process helped students to formulate their thoughts for the nominal-group stage, while the latter helped to keep the process 'scalable'. The Nominal Focus Group results were well-received by staff who commented that the data was richer than normally gained through evaluation surveys while still providing some prioritisation of issues that could guide their responses. Varga-Atkins *et al.* also claimed that 'there was some indication that programme teams and wider department members from science disciplines found the quantitative output of the Nominal Focus Group more convincing' than a standard descriptive focus group report (p.296).

They also highlighted an important side effect of their process: that students thought the Nominal Focus Group demonstrated that the university valued their opinion. The authors argued: 'It seemed clear from the student and programme team evaluations that the combined process produced data that was both 'owned' by students and was readily actionable by programme teams. The prioritised list that showed student decisions also added some empowerment to the student voice beyond more straightforward participatory methods' (p.298).

Single Question Essays, Narratives, Drawings

Group discussions have the potential to produce nuanced forms of feedback and raise issues that had not occurred to those who designed the questions asked. Introducing a nominal group element can aid analysis of the data or at least translate some of it into actionable points. A limitation of these processes, however, is that they frequently cannot provide opportunities for all students to give their views, especially for larger classes. Various methods have been developed to allow whole classes to provide more qualitative forms of feedback than can be gained through a standard survey instrument. While we have noted one response to this issue has been to add open-ended questions to the survey, Erikson *et al.* (2018) took this much further. They

sought feedback by asking just one question: 'What could have been done in order to support your learning?'.

They adopted an in-class method: after being told that participation was voluntary and submissions would be anonymous, the students were given a sheet of paper with just the question being asked at the top, and told to write their response to it and to place it on a table when leaving so that individual responses could not be identified (pp.971-972). The responses were then analysed using a 'bottom-up approach' whereby two of the authors each independently assigned codes to the statements made in the responses, these were then grouped into subthemes and major themes.

The authors noted that this approach yielded rich data with actionable recommendations, which they thought compared favourably with quantitative approaches. They indicated that the question asked encouraged students to provide a sort of 'holistic' reflection on their learning in which they (students) discussed their own responsibilities in the learning process and the aspects of this which they themselves could improve upon, as well as highlighting problems with teaching (p.975). Erikson *et al.* noted that this also made feedback appear a less judgemental process compared with some teaching evaluations where the implication is that teaching staff were responsible for everything that was wrong (or right) with the module.

Erikson *et al.*'s study also sheds light on several other important aspects in relation to feedback. They carried out the exercise in a first year class and a third year class, they analysed the results of each class separately and by making comparisons between them, they were able to highlight differences between the feedback each class gave. First year students, for example, wanted opportunities to ask staff questions to assess their own understanding, whereas third year students tended to ask for more feedback on their assignments (p.975). This suggests that it may be necessary to design feedback processes so that they can capture differences between different year groups.

Erikson *et al.* were also trying to assess the value of their approach for different disciplines. It had previously been used with psychology students, and the authors wondered if it was particularly successful with them because they were used to analysing experiences in their studies. They found, however, that it was equally valuable for public administration students (p.971, p.976). This reminds us of the need to consider whether our methods are applicable to all disciplines. In fact, a further assessment of whether this method would prove valuable for disciplines more disparate than psychology and public administration would be useful. Would students respond differently to a request to write a reflective essay, if essay writing was not a typical assignment type in their programme?

Erikson *et al.*'s study was carried out with 41 (out of a possible 67) first years and 28 (out of a possible 41) third years (p.972). The relatively small size of the classes would have made analysis of the qualitative responses significantly easier than would be the case for a large class. The study used a handwritten format in a class environment; this had the disadvantage of excluding students who were not in class that day, and though the method went some way towards preserving anonymity, it is possible that handwriting was identifiable.

Other, less traditional, reflective methods have also been used to gain feedback from students. Sherwood (2020) asked students to write narratives about their university experience, while Sakr and Burghardt (2020) considered the use of drawing as a tool for feedback on their teaching. They gave students an outline of a body on a page on top of which was written: 'You can use colour, pattern, pictures and words and add them to the body however you want to so that it captures **how you feel about your experience on this module**. There is no right or wrong in this activity-just go with whatever you feel.' (Sakr and Burghardt, 2020, p.5, emphasis in original).

Much of the information gathered in these studies did not take the form of feedback traditionally understood. For example, Sherwood noted that students often adapted the conventions of the fairy tale (Sherwood, 2020, p.327). Interaction with such responses usually involved significant interpretation on the part of the teacher/researcher. In one case, Sakr and Burghardt suggested that although the student had made positive written remarks on the drawing, their (the student's) illustration indicated that their experience had been more problematic than they were disclosing (Sakr and Burghardt, 2020, pp.10-11).

Both studies asked students to use techniques which they may have been familiar with from their programmes; the storytelling exercise was carried out in a Childhood Studies programme, while the drawing was undertaken by students completing a module on 'Creativity and the Arts in Education'. Disciplinary expertise may have made participation in the exercises easier for both staff and students than it might have been for those in other disciplines. The studies, however, highlight the value of more 'creative' forms of feedback. By promoting greater reflection on the whole complex experience of learning and teaching they move beyond superficial 'rate-the-teacher' and 'blame the student' responses, neither of which are conducive to enhancing education.

Sakr and Burghardt also noted that their approach was about finding interesting and striking forms of feedback rather than identifying the most typical or common responses. They remind us of the importance of adopting feedback methods that foster responses of a kind that will enhance teaching and learning. More generally Sakr and Burghardt raised an interesting point worth bearing in mind: 'Generating deep pedagogic reflection through student feedback depends on an emphasis on rich feedback rather than feedback that is simply easy to work with' (p.3). Drawing on Eriskon *et al.*, they also noted the importance of seeing feedback 'as an academic task, both for students and teachers, rather than as a mere administrative task' (p.2). Making feedback an integral part of teaching and learning helps to ensure that it will be used to improve that teaching and learning.

Dialogue Days and Student Partnership

Similar motivations have promoted an interest in 'student partnership', both in relation to feedback processes, and more generally. This often involves providing opportunities for face-to-face interactions between students and staff, and setting aside time so that staff and students can together reflect more deeply on university processes. Asghar (2016) discussed the reactions of students and staff to their participation in one such example - the dialogue day. During dialogue days staff and

students take a break from daily teaching and learning activities and participate in joint activities focusing on a particular teaching and learning theme. The days are often led by neutral facilitators and are sometimes held at an off campus venue in order to promote greater and more open discussion between staff and students, than might take place in a classroom environment (Asghar, 2016).

Dialogue days were designed to encourage students to engage more in learning, but they can also be used to generate feedback on teaching and learning, informally at least. By using semi-structured interviews with the student and staff attendees of one institution's dialogue day, Asghar found that participants thought the process challenged the power dynamics of the classroom and helped to break down barriers between staff and students. They also thought the discussions helped to generate ideas about teaching and learning. As with other participatory forms of feedback, some students indicated that they were pleasantly surprised that staff valued their contributions, creating a sense that they were listened to and that taking part in the process was worthwhile (Asghar, 2016, p.438). Staff and students also found the event provided an opportunity to step back from day-to-day activities and reflect on the broader aims of HE (pp.438-439). Students noted that the day gave them more insight into the factors shaping teaching, such as the time taken by staff to prepare teaching activities (p.440). The author argued that providing a space for interaction outside the power dynamics of the classroom helps students to take risks in expressing their opinions (p.442). One difficulty, however with this study is that it was not completely clear if students were talking to the staff who taught them or not, which limits our ability to fully assess its impact.

While a dialogue day might remain a single point in time, efforts to include students in ongoing feedback processes outside of the classroom have also been introduced. Curran and Millard (2016) discussed programmes that employ and train students for involvement in university quality enhancement processes in two UK HE institutions. The authors argued that employing students helped to blur the distinction between staff and students and broke down some barriers between them. Payment was also important to ensure that students who needed to work during their studies would not be excluded from these opportunities. The article highlighted the importance of enabling participation in confidence building activities for students involved in feedback processes. The authors also noted a series of other benefits of these processes such as improving students' broader skills and enhancing future employment prospects. They provided a series of useful recommendations for promoting genuine student partnership which included developing a strong working relationship between academic development departments and the Students' Unions, the need to embed partnership approaches in university policy documents, and the need to find ways of rewarding partnership work (pp.73-74).

Huxham *et al.* (2017) argued that promoting students to positions of authority in feedback processes could be of great value to the professional development of teaching staff. They discussed the 'Students as Colleagues Project' which they described as an exercise in 'radical collegiality' at a 'large modern Scottish university'. The project trained students as observers of teaching who sat in on classes and then discussed their observations with staff after class in the same way as staff peer observers provide feedback to their colleagues within the University. Huxham *et al.* argued that by drawing on their expertise as students, student observers were more

valuable than peer observers, as they were more likely to mention positive aspects of teaching while also reflecting just as often on perceived shortcomings.

Chilvers *et al.* (2019) praised the introduction of elements of ongoing student partnership in an MA in Inclusive Arts Practice. They argued that incorporating student ideas greatly enhanced module development. The partnership activities formed a regular part of the programme and involved a combination of different feedback methods including: the institution's mandatory quantitative survey, discussions about programme content at the start and end of every working day (which staff used to inform changes in teaching), and a field trip involving a variety of activities including cooking and sculpture making (pp.6-7). They noted that as well as providing very rich data which staff could use for module improvement, the 'embedded' feedback methods allowed staff to immediately communicate to students that their feedback was highly valued (p.8).

Chilvers *et al.* indicated that the project had several challenges, including that it required staff to respond quickly to student ideas which could increase workload and anxiety, especially if staff were not supported by colleagues. They also noted that reflection can bring up memories of negative as well as positive experiences and staff need to be able to respond to this sensitively (p.8). They recognised that the content of the MA programme, which is about inclusion in Arts practices, influenced the approaches taken to achieve student partnership in this disciplinary context. They did however include a list of suggestions for trying to make the MA's principles transferable to other disciplines including ensuring that large classes were divided into smaller groups for the activities, and encouraging the development and promotion of discipline specific metaphors for reflection on teaching and learning (pp.9-10).

As well as articles about specific projects, there is a wide literature on the principles underpinning the concept of student partnership. Much of this is positive, and sees student partnership as a way of challenging trends towards the marketisation of HE in the UK and elsewhere. Not all assessments of partnership and similar initiatives are so optimistic however. Gourlay (2015) for example talked about 'the tyranny of participation' arguing that active and collaborative learning, working together with staff, and other typical student engagement activities, fail to perceive the value to some students of individual silent engagement with and analysis of texts. She considered the marginalisation of the latter particularly problematic given that the analysis of and the production of text, still dominates the academic curriculum (pp.404-405). The article indicated that focusing on observable forms of participation, obscures the other ways in which many students engage with HE institutions (p.410).

Similarly, Canning (2017) argued that current processes for 'hearing the student voice' focus on things that are observable and detectable through HE systems and processes, but these can only reveal part of the story of students' experiences. Canning applied several different theoretical lenses to understand efforts to gather feedback. He did this, not to argue in favour of one theory more than the others but to indicate how many ways the student voice might be understood. He argued that the concepts involved need much greater theoretical exploration. In particular he noted that the nature of power relations associated with efforts to hear the student voice have not been sufficiently analysed or taken into account in work that champions the idea.

5. Inclusion and Diversity

The issues raised in discussions of student partnership connect closely with the desire to encourage inclusion, representation, and diversity. Concerns about student partnership practices also help to shed light on potential tensions between processes designed to foster deep participation and those that encourage the broadest possible involvement. There is even a suggestion that some of the qualitative methods developed to ensure face-to-face discussion with staff, may alienate shy or less confident students, or students from backgrounds that are already underrepresented in these processes. Mercer-Mapstone *et al.* (2019a) argued that processes introduced to encourage diverse voices often have the opposite effect in practice. They accept that some staff-student partnerships helpfully support students from underrepresented groups but noted that 'Despite its benefits, there are several inclusion issues in partnership spaces. Evidence shows that the students most likely to engage in partnership are the elite - those from privileged social locations and identities who have the prior confidence or networks to self-select to be selected for involvement'. They also argued that power inequalities between staff and students more generally might be strengthened rather than weakened by these processes (p.3).

Analysing existing student partnership schemes, they noted that some scheme designs had not given any consideration to promoting diversity (p.6) and that the students involved in many partnership schemes were the 'usual suspects' - students who already took part in many university activities. The authors discussed various changes that might make partnership processes more inclusive such as 'Having a range of ambassadors and role (real) models within schemes and across institutions', connecting with existing projects that support diversity, ensuring projects are flexible to allow participation for those with many external responsibilities, ensuring some form of payment, and targeted recruitment.

They indicated that issues of confidence can prevent students from marginalised groups putting themselves forward, as can the desire to avoid exhausting emotional labour by having to repeatedly educate others about one's experiences of marginalisation. They highlighted the need to consider the complex factors that must be addressed to help improve inclusion and that this includes acknowledgement of existing deficiencies (pp.15-16) (see also Mercer-Mapstone, 2019b).

Similarly, Gibbs *et al.* (2019) argued that current models of 'good practice' for encouraging inclusion in small group teaching, privilege verbal participation in class with little research on whether this fosters inclusion in practice, or is even based on a solid definition of what inclusivity should involve (p.2). They noted that this failure to interrogate the concept and related practices, risks inclusion becoming a 'tick-box' exercise which promotes little actual change. They argued that if inclusion is simply seen as verbal participation then this may exclude 'neurodiverse and disabled students, students for whom English is not a first-language, and those who are less familiar with the Socratic Method' (p.2). They also argued that for more marginalised students, non-participation may be a form of resistance against the power dynamics of the classroom and the university (pp.4-5).

Gibbs *et al.* also analysed the methods they adopted to try to foster inclusion in their own classes. For example, they used *Padlet*, an automatic response tool allowing students to anonymously write electronic 'notes' visible to the rest of the class. They allowed students to use *Padlet* for the first fifteen minutes and found it appeared to be frequently used by students who rarely contributed to verbal discussions. They noted however, that some students did not take the exercise seriously (pp.9-10). Though they were not specifically focused on gathering feedback from students, Gibbs *et al.* raise questions about reliance on face-to-face qualitative feedback methods and suggest that making some space for anonymous contributions is necessary. More broadly they indicate that simply saying that you would like to hear from all students can only achieve so much if the broader environment does not encourage inclusive participation.

One suggestion that has been made to aid less confidence students, is to provide them with training on the principles of feedback. It is argued that this training helps students to appreciate that they have the expertise to constructively respond to requests for their views. Providing training for students is in fact seen as a potential solution to many problems associated with feedback. Hou *et al.* (2017) argued one of the ways of changing feedback from a judgemental disciplinary process to a supportive one, is to train students to provide more constructive and professional feedback (p.345). Providing training for students has also been seen as a necessary step in closing the feedback loop - that is, if students know the kinds of feedback that are likely to produce changes, those changes can be implemented and if they are successfully implemented this leads students and staff to become more enthusiastic about feedback rather than disillusioned with it. Staff and students are therefore more likely to continue engaging in feedback processes.

Despite this enthusiasm for training and guidance, there has been little critical analysis of the potential content and aims of such training - would training to improve student confidence take a similar approach to guidance on constructive feedback for example? Such analysis should also engage with broader critiques of the professionalisation of student representation which some have seen as a way of co-opting students within HE bureaucracy and stifling student resistance, rather than promoting meaningful partnership (see for example the discussion in Raaper, 2020).

6. Timing, Ongoing Dialogue, and Closing the Feedback Loop

A variety of other suggestions for closing the feedback loop have also been made, including Fosnacht *et al.*'s emphasis on avoiding survey fatigue and ensuring that only relevant questions are asked (see Section 3). Timing is also a key factor. It is suggested that moving efforts to seek feedback from the end of the semester to an earlier time, provides a chance to respond to student concerns and make requested changes or explain why such changes are possible. A survey at the end of semester may seem like an administrative exercise; holding it earlier in the semester signals to students that feedback is an integral part of the teaching and learning process and that it will be used to produce change. Sozer *et al.* indicated that even large scale qualitative forms of feedback, such as facilitating a large number of focus groups may be possible mid-semester, if planned and supported appropriately (Sozer *et al.*, 2019).

Methods that encourage an ongoing feedback-based dialogue are therefore also likely to be helpful. As the literature on encouraging more dialogic forms of feedback to students on their assignments emphasises, such interaction can encourage self-reflection and the development of new ideas (Y1Feedback 2016). Similarly, fostering ongoing communication about feedback from students, may also help teaching staff to reflect and develop ideas about how student concerns can be best responded to. Online forms of feedback and other feedback technologies may also aid these processes by speeding up collection and analysis of data (see Section 7).

7. Technology, Online Environments, and Remote Teaching

In recent years, a growing number of increasingly sophisticated technologies to aid the gathering of feedback have become available. These include electronic versions of standard surveys, and instant response technologies such as *Padlet* mentioned above, and TurningPoint, Mentimeter, and other applications that allow in-class polling. Many of these can be used for both remote and face-to-face teaching.

The convenience and speed of electronic and online methods are considered their major advantages. Risquez *et al.* (2015), in a longitudinal study of feedback surveys at an Irish HE institution, noted that some staff commented favourably when their institution switched from paper to online surveys, as the quicker processing time allowed them to make requested changes in the same semester as feedback was collected (p.124). Moskal *et al.* (2016) discussed how the introduction of an online ordering process for course evaluations at a HE institution in New Zealand, improved staff views about the evaluation process and encouraged more of them to order evaluation forms.

Online evaluation instruments, however, tend to have lower response rates than paper surveys taken in class. Some of this difference is due to the effect of carrying out feedback exercises in a classroom environment, as online evaluations are often shared by email or via a weblink for students to complete in their own time. Standish *et al.* (2018) assessed responses to online teaching evaluations delivered in two ways: (i) through a mobile app or (ii) in a classroom environment. They found that the mobile app only produced a modest increase in response rates compared with the previous online version of the survey, but allowing students to use classroom time to fill in the online survey had a significantly bigger impact (students could also fill out the survey outside of class if they wished). The authors indicated that the in-class method led to substantial increases in participation from groups that previously had lower than average response rates. They noted, however, that while the gap between response rates for Low GPA and High GPA students narrowed, response rates for the former remained significantly lower. This is a particular concern if the evaluation is intended to improve teaching and course design, as it is vitally important to hear from students who found course material difficult (pp.819-820). Standish *et al.* argued that it was the greater convenience of filling out the survey in class that increased participation, and they also noted an increased response to the survey's open-ended questions (p.820). In addition, as indicated by other authors, setting aside class time for the surveys also emphasised that evaluation is an integral part of the module, and this may also have encouraged both a higher response rate and more in-depth feedback.

Standish *et al.* emphasised the need for good IT support to ensure students can conveniently complete a survey at their first attempt. They recommended making keyboard equipped devices available, rather than asking students to use their mobile devices, they also emphasised the importance of a reliable internet connection and a system that can cope with large numbers of simultaneous submissions (p.820). They also noted that attention needs to be given to the ways in which different anonymous submissions are distinguished from each other; they identified these with timestamps to the one hundredth of a second, but noted that this led to some duplicate labels because there were so many submissions happening around the same time (p.822).

The importance of the classroom environment is also seen in a study by Treischl and Wolbring (2017). The authors called their research 'field experiments' as they were able to compare and contrast several different arrangements for survey taking: in-class paper surveys and different kinds of electronic surveys taken in class and out of class. They tested the different approaches in virtually identical parallel classes for the same course in the same semester, with the same teaching staff. They noted that electronic surveys tended to give slightly lower evaluation scores than paper-based surveys. They also indicated that paper-based surveys taken in class achieved the highest response rate of all the methods used. Yet, as noted, they cautioned against seeing paper surveys as the 'gold standard'. Instead they emphasised that email surveys for which time for completion is set aside in class can result in reasonably high response rates and have the advantage of providing an opportunity for those not in class on the day of the survey to respond. A code word was provided to students who were present in class and they entered this on completing the survey. This method allows in-class and out-of-class responses to be distinguished and to potentially reveal differences in how both groups have evaluated teaching.

As this discussion reveals, much of the literature focuses on the use of technology to deliver standard quantitative surveys. Recently attention has also been given to how text analysis and similar software might help to code and analyse responses to open-ended survey questions and other text-based qualitative data. McDonald *et al.* (2020) used Quantext Text Analysis to analyse students' answers to questions about why students do not respond to surveys. They compared the software categorisation of the data with human analysis of the data and found strong similarities between them. While they emphasised that such software should not (and in this case was not designed to) replace thoughtful human analysis, they also argued that software may be used to speed up certain parts of the analysis of qualitative data, assisting the process of closing the feedback loop. Their conclusions are broadly in line with Santhanam *et al.*'s (2018) examination of text analysis software for analysing qualitative survey answers.

Gathering Feedback on Online Teaching

Our current circumstances require our reflection, not only on how feedback can be gathered in an online environment but how feedback on online teaching (even if temporary) can best be collected, and if there are any specific issues that must be considered when doing this. These subjects are receiving increasing attention in the HE literature, often with a focus on why online courses tend to get lower evaluation scores than classroom-based teaching. We must however, be aware that most of the peer reviewed literature on this relates to modules and programmes that were

purposely designed as online courses, rather than a temporary reliance on online methods.

Studies of feedback on online teaching generally emphasise that existing feedback methods must be adapted before they can be used for online courses. Some authors argue that a lack of face-to-face interaction, and unclear student expectations about the role of the lecturer/instructor in online courses, means that feedback should be sought more frequently from students, and a greater number of questions should be asked. These studies indicate that there may be a greater need to explain and clarify the questions used in surveys of online learners. Gómez-Rey *et al.* (2018) discussed one of the most comprehensive attempts to modify survey instruments to make them suitable for online courses, though their research highlights themes seen elsewhere in the literature (e.g. Ravenscroft *et al.*, 2017; Bangert, 2006). They argued that specific questions on technical matters, such as questions about the support given to students when they experienced technical problems, should be included in surveys of online courses, as this helps to clarify issues around the role of instructor/tutor/lecturer. Allowing students some space to discuss technical problems, may also encourage them to distinguish between difficulties with technology and other concerns, as well as provide opportunities to identify correlations between technical problems and low evaluation scores.

Gómez-Rey *et al.* also highlighted the necessity of giving space to issues related to students' broader lives, such as caring responsibilities, and how these might impact on their ability to learn at home. Their work suggests that students might be asked about whether course organisation and design took into account the difficulties caused by reliance on online learning for those with caring responsibilities, or perhaps more constructively, asking what could be done to better support students with caring responsibilities when they learn in a remote environment (p.1274).

A key issue to bear in mind if one is adapting an existing feedback instrument to seek feedback on online teaching, is to make sure that all of the questions asked are relevant to learning in an online environment. This will not only prevent the analysis of irrelevant information, but doing otherwise could suggest to students that their opinions are not valued (Ravenscroft *et al.*, 2017, p.357, pp.359-361). After all if an institution claims to want to hear about students' experiences, yet when it seeks their views, it asks questions that do not relate to those experiences, the questions are likely to seem to be part of a box-ticking exercise rather than a genuine attempt to hear their opinions. This, of course, not only threatens the integrity of the study in question but as Fosnacht *et al.* have argued, may fuel disillusionment about feedback processes more generally. Indeed, avoiding this is important for all forms of feedback. When considering student experiences over time, it is also important to monitor long-term trends in relation to online and remote learning as some studies have suggested that attitudes to online learning may be affected by the extent to which students have previous experience of online courses (e.g. Tratnik *et al.*, 2019; Li *et al.*, 2017).

Gómez-Rey *et al.*, employed a quantitative Likert scale analysis, but similar topics could be explored using more open-ended questions. Ravenscroft *et al.* used a similar range of questions which allowed open-ended comment on the following topics: instructor-specific, interaction-specific, course-specific (including space for reflection on technical issues), and TA-specific (pp.358-362). As noted above, qualitative data

is more likely to provide suggestions for improvement than quantitative data, and this information is particularly welcome in our current circumstances.

As with classroom-based teaching, qualitative feedback on online teaching can be gained in a variety of ways. Cochran *et al.* (2016), for example, used focus groups to try to gather richer feedback on online teaching and learning than they thought would be possible through a questionnaire (p.150). The focus groups they used included a series of tasks in which students were asked to individually write down answers to questions on index cards. These answers were then plotted on a flip chart in relation to students' priorities and this chart was used as an aid to the open discussion parts of the focus group (in some ways quite similar to the nominal group process) (p.153). Cochran *et al.*'s findings may prove useful for guiding potential further studies of online courses. They highlighted themes frequently raised in discussions of students' views of online learning such as:

- the value students place on the convenience and flexibility of online learning.
- that working from home works well for self-described introverted students who feel they can concentrate more easily than in a campus classroom.
- there is a desire for a high degree of consistency between courses, and problems result if there is inconsistency in how the Learning Management System is used.

Cochran *et al.*'s focus groups, however, also highlighted problems that the authors had not considered prior to the study. They recorded that some students harshly criticised online discussion boards, something which the authors noted, runs counter to frequently given advice about fostering interaction in online courses (p.158). By highlighting this, the article emphasised the need to introduce greater complexity and nuance in the practices of communication in online courses, especially given that many students still emphasised that they greatly valued communication from the instructor. The authors also noted with surprise that each of the three focus group discussions that they analysed, all complained about 'busy work' - work that was not believed to add any value to their studies. Some of this related to discussion board posts and suggests that simply trying to mimic the perceived positives of classroom-based environments, such as discussion among students, might not be valuable. It also revealed the necessity of explaining the relevance of tasks deemed essential by the module co-ordinator (p.160).

Cochran *et al.* indicated the value of using focus groups to seek feedback on online learning, especially when carried out before the end of the semester when improvements can still be implemented. They also highlighted some of the issues that might be explored when seeking feedback on online learning, and that we need to provide some space to allow students to raise topics that teaching staff might not have considered, something particularly important in our current circumstances. Interestingly Cochran *et al.* used a classroom-based focus group for their study. If current circumstances make it necessary to seek feedback through online means then we must consider that those who have had trouble accessing online classes, may not be able to participate in an online focus group.

Learning analytics

One response to the difficulties of gathering feedback on online courses has been to analyse students' online user data to gather information on their experiences. For example, counting how many times students clicked on a course video (Meseguer-Martinez *et al.*, 2017, Crowther, 2019). Authors who draw on these methods argue that they can shed light on student engagement and are a useful complement to, but not a replacement for, other forms of feedback. These methods do however need to be used with caution as it is especially important to ensure that students clearly consent to how their data will be used.

8. Discipline Specific Considerations

The following list has been compiled based on the issues raised in the general Higher Education literature discussed above, supplemented with several discipline specific resources.¹

Feedback questions should be relevant to the programmes that students study; providing students with generic surveys that contain questions about class or assessment types that are not used in their programmes, is likely to promote survey fatigue.

There is a need for greater reflection on how the methods used for assessment and communication in a particular discipline affect feedback gathered. Is using reflective essays for feedback, for example, equally valuable in all disciplines? Discipline specific expertise could also be drawn on to aid feedback, such as encouraging staff and students to use discipline inspired metaphors to describe their experiences of teaching and learning (and their experiences of feedback processes). (Chilvers *et al.*, 2019, pp.9-10).

Different kinds of class environment can be associated with different kinds of anxieties such as those related to practical work, performance, or communication and discussion. The specific ways in which these different kinds of anxieties affect student confidence may need to be considered to promote inclusive feedback environments in different class types.

Different kinds of class environments have different staff-student ratios and teaching arrangements (e.g. many demonstrators teaching simultaneously in a large Chemistry laboratory, one-to-one interaction in Music practice, small group discussion in some Applied Social Studies tutorials). Ways should be found to divide classes into small groups when gathering qualitative feedback from large classes (Chilvers *et al.*, 2019, pp.9-10).

Care must be taken when making broad comparisons in evaluation results across disciplines and between modules. Some subjects, such as first year core modules in Chemistry, tend to consistently receive relatively low 'teaching evaluation ratings'

¹The educational resources of the Royal Society of Chemistry, <https://edu.rsc.org/?adredir=1>, *Journal of Chemical Education*, *Journal of Music, Education and Technology*, *Music Education Research Journal of Social Science Education*, *Social Work Education*.

despite providing the necessary knowledge and skills for advanced modules which are more favourably received. As Pienta noted, this is particularly problematic with quantitative surveys where students have less time or space to reflect on the ways in which the course affected their learning outcomes (Pienta, 2017, pp. 131-132). A focus on using feedback for enhancement might make this process appear less judgemental and produce more useful outcomes.

The adjustments made to accommodate remote learning, and the impact of this on learning outcomes, differ significantly for the different disciplines involved in this project. Apart from disrupting practical and practice-based aspects of modules, remote teaching may also impact on the learning of specific concepts. Virtual laboratories in Chemistry, for example have been found to achieve similar learning outcomes to physical laboratories for some experiments but not others (Hensen et al., 2020). When seeking feedback on online learning, it may therefore be useful to ask questions about the particular disciplinary specific learning outcomes that are most likely to have been impacted by the change.

9. Student Perceptions of Feedback Processes and Closing the Feedback Loop

As seen in the discussion above, several authors have argued that in order to improve student engagement with feedback processes, we need to know more about how students view requests for feedback. There have however, been very few detailed studies of student perceptions of feedback. The practical challenges of seeking information on such perceptions must be acknowledged. Adding more requests for feedback may create a vicious cycle of survey fatigue and may further reduce the sample of students that we hear from. It is, however, surprising that most of the information that we have on students' attitudes towards feedback comes from studies where student perceptions were not the main focus. Even McDonald *et al.*'s analysis of why students do not respond to requests for feedback, was primarily a 'proof of concept' study for text analysis software; gathering students' views on feedback was not the main objective. McDonald's results however indicated that time pressures and a belief that feedback would not result in improvements were the main reasons given for non-participation in feedback processes. Varga-Atkins *et al.* carried out surveys about their Nominal Focus Group technique partly because they could find little in the literature on participant views of group feedback methods. Seeking information about student perceptions of qualitative feedback methods seems particularly important, given that these methods have been critiqued to a much lesser extent than quantitative surveys.

One of the few studies to focus on student perceptions of partnership activities, Isaeva *et al.* (2020), conducted semi-structured interviews with students who had been involved in QA processes. The students emphasised the importance of ongoing dialogue and their concerns about poor communication from staff. They noted that they rarely received a response to the ideas they put forward and were frustrated by being asked to fill out the same questionnaire over and over again when they were supposed to be evaluating a variety of different subjects. The authors noted however that students were willing to give their opinions when they felt that they had the expertise to do so and that their views would be listened to (Isaeva *et al.*, 2020, pp.86-93).

Conclusions

This review has only explored a fraction of the literature available on student feedback and related themes. Its main findings are listed in the Executive Summary but it is worth noting that despite the wide range of methods that have been used to seek feedback from students, a number of themes emerge repeatedly in the literature. Many authors emphasise the value of using a portfolio of feedback methods in order to produce viewpoints on a variety of aspects of teaching and learning. Ensuring that feedback processes are designed to encourage course enhancement and development is also frequently recommended. The importance of making feedback part of an ongoing process of dialogue between students and staff is also repeatedly discussed, as is the need to hear more about how students perceive requests for feedback, and the necessity of closing the feedback loop. The wider discussions about statistical evaluations of feedback surveys and about inclusion, highlight the need to be aware of the biases that can affect feedback processes as well as the necessity of identifying and combating factors that exclude some students' voices. The literature emphasises that student feedback must be seen as a central part of a university's academic activities, not an optional extra, and the gathering and use of student feedback should be embedded in processes designed to improve teaching and learning.

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Appendix

Journals Searched.

General HE:

Assessment & Evaluation in Higher Education.

Innovations in Education and Teaching International.

Journal of Learning Development in Higher Education.

Higher Education.

Higher Education Quarterly.

Quality in Higher Education.

Research in Higher Education.

Review of Higher Education.

Student Success.

Studies in Higher Education.

Teaching in Higher Education.

Discipline Specific Resources:

Journal of Chemical Education.

Journal of Music, Technology and Education.

Journal of Social Science Education.

Music Education Research.

Royal Society of Chemistry, <https://edu.rsc.org/?adredir=1> accessed 14 June 2020.

Social Work Education.

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