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# Feedback on feedback practice: perceptions of students and academics

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While feedback is widely considered central to student learning, students across the higher education sector commonly report dissatisfaction with the feedback they receive. In contrast, academics often feel they provide quality and informative feedback. This article explores and compares the perceptions of students and academics with regard to feedback practice. The paper presents the results of questionnaire surveys conducted with academics and students at the School of the Built Environment, Liverpool John Moores University. It highlights the perceptions of academics and students with regard to preferences for different types of feedback, timeliness of feedback, students' engagement and interest in feedback, quality feedback and satisfaction with current practice. The findings indicate a significant discord between staff and students in relation to certain aspects of feedback practice, namely opinions on students' engagement and interest in feedback, satisfaction with current practice and feedback preference. Similarities in viewpoints were also found in relation to quality feedback.

**Keywords:** academic and student perceptions; feedback; higher education; teaching and learning

#### Introduction

In the higher education context there is an extensive body of research concerning feedback and its significance in student learning. Feedback is an essential component of effective teaching and learning in higher education (Ackerman and Gross, 2010; Carless et al., 2011; Hattie and Timperley, 2007; Hounsell, 2003). Furthermore, research provides persuasive evidence that high quality feedback is the most powerful single influence on student achievement (Hattie, 1987; Brown and Knight, 1994; Hattie and Timperley, 2007), as well as being seen as a fundamental requirement in meeting student expectations (Higgins et al., 2002). Issues surrounding feedback quality provided on assessment in higher education have received increased attention in the United Kingdom since the introduction of the National Student Survey (NSS) in 2005, along with resource constraints impacting on the student experience (Price et al., 2010). It has been stressed that feedback quality within the NSS is consistently perceived to be the least satisfactory aspect of higher education in England (Higher Education Academy (HEA), 2013); students express that they are dissatisfied with the nature and timing of feedback (HEA, 2012; Williams and Kane, 2008). In contrast, academics often believe their students are receiving timely, extensive and informative feedback (Robinson et al., 2013), which

is often echoed by much more positive external examiner reports. Accordingly the reasoning behind this dissatisfaction is often unclear to the tutors providing it (Bohnacker-Bruce, 2013). There appears to be a considerable gap in knowledge and expectations as to what constitutes effective feedback between academics and students; where there is a gap between expectations and practice student dissatisfaction and staff frustration tend to arise (O'Brien and Sparshatt, 2008).

## Theoretical underpinning

Feedback is increasingly recognised as complex concept. For the purpose of this paper, feedback is defined as "all *feedback exchanges* generated within assessment design, occurring within and beyond the immediate learning context, being overt or covert (actively and/or passively sought and/or received), and importantly, drawing from a range of sources" (Evans, 2013, p.71).

There are different conceptions of assessment feedback which should be acknowledged. Conventionally, feedback is conceptualised as an issue of "knowledge of results" or "correction of errors" (Gibbs and Simpson, 2004, p.17) and is therefore seen as an end product which is a consequence of performance (Hattie and Timperley, 2007). The concept of feedback has been developed over the last decade to encompass more than its conventional function of one-way information transmission to the student regarding their work towards a more 'sustainable' student-centred model that supports learning both in the current HE context and in future learning beyond it (Nicol and Macfarlane-Dick, 2006; Hounsell, 2007; Hounsell et al., 2008; Rust et al., 2003; Sadler, 2010). The latter requires a shift from the view that tutors control feedback towards an ongoing dialogic approach that engages students more meaningfully in the assessment and feedback process (Hounsell et al. 2008; Merry et al., 2013; Nicol, 2010, Price et al., 2011) and facilitates the development of student self-regulation (Black and McCormick, 2010; Carless et al., 2011; Nicol and Macfarlane-Dick, 2006; Sadler, 2010). The authors construe feedback as being "represented by a continuum ranging from conventional to sustainable feedback practices" (Carless et al, 2011, p.397).

In line with Sadler (1989) the authors see the purpose of feedback as helping students understand more about the learning goal, their own achievement status in relation to that goal, and enabling them to bridge the gap between their current status and that which is desired. Importantly, feedback should be forward-looking and explicitly address future activity (Gibbs and Simpson, 2004). The authors view feedback as an essential component in student learning which should facilitate learning and development both within the educational setting and beyond it.

## **Characteristics of effective feedback**

The literature presents an array of suggestions as to what effective feedback comprises. Nonetheless, Nelson and Schunn (2009) highlight that a general agreement regarding what type of feedback is most helpful and why is lacking. McCann and Saunders (2009) also suggest that what constitutes appropriate feedback remains vague and poorly defined.

Though there are varied views, some common identifiable characteristics of effective feedback include that which is appropriate (Mory 2004), detailed and specific (HEA 2013; Poulos and Mahony, 2008), perceived to be personal to the student (Ferguson, 2011), encouraging, motivational and constructive (Nicol and

MacFarlane-Dick, 2006), legible (Ferguson, 2011; Price et al., 2010), as well as prompt and timely (Gibbs, 1999; Gibbs and Simpson, 2004; Poulos and Mahony, 2008). Although, where timing is concerned, research suggests that both immediate and delayed feedback can be useful depending on the task (Fluckiger et al., 2010). Yet Butler et al. (2007) argue that delayed feedback is more useful than immediate feedback for student learning and retention of knowledge and skills. Effective feedback should also be of a high quality (Gibbs and Simpson, 2004). Despite the timeliness of feedback being important, it has been proposed that students are happy to wait slightly longer for feedback if it means the quality of it increases (Chang et al., 2012; Ferguson, 2011). In contrast, Gibbs (1999) argues that the quality of feedback is not as important as the frequency, timing and method of giving feedback in helping students learn. Furthermore, it is important that feedback feeds forward, encouraging further learning and helping students identify gaps between their actual and desired performance (Brown and Glover, 2006; De Nisi and Kluger, 2000; HEA, 2013). However, Gibbs and Simpson (2004) emphasise that this may not happen if feedback focuses on addressing past work (rather than future work) or is too context-specific (rather than more generally applicable).

The difficulty is that even if some or all of the measures and conditions for effective feedback are in place, this does not prove that feedback is effective (Price et al., 2010). Even if feedback meets the aforementioned criteria, it is how students make sense of and use it which is important (Careless et al., 2011; Crisp, 2007). For feedback to be effective and have value, students must understand it, engage with it and also act on it (Gibbs and Simpson, 2004; HEA 2013; Price et al., 2010). Students cannot act on that which they do not understand. It is thus imperative that feedback is unambiguous. Students need feedback that uses explicit language, free of jargon, in order for them to clearly understand it (Bailey, 2009). Many students are unable to understand feedback comments and interpret them correctly (Higgins et al., 2001; Norton and Norton, 2001); it is suggested that, in part, this may be because many students lack the pedagogic or assessment literacy to understand and effectively use it (Dowden et al., 2013; Sadler, 2010; Weave, 2006). Students may not even be aware of what constitutes feedback at university in comparison to that which they receive at school. It is recommended that students should to be empowered to recognize feedback as feedback (Poulos and Mahony, 2008) and require training in order to understand and interpret it (Blair and McGinty, 2013; Sadler, 1989).

Much of these issues could be addressed by the use of dialogue around assessment and feedback. Merry et al. (2013) posit that effective feedback must involve ongoing dialogue with students if they are to be able to fully integrate feedback into their learning. A lack of dialogue between lecturer and student can result in the student failing to act on feedback (Crisp, 2007). Numerous authors advocate that dialogic feedback processes are central to developing more sustainable feedback practices which raise student awareness of quality performance and support students in developing their self-assessment capabilities (Carless et al., 2011; Merry et al., 2013; Nicol and Macfarlane-Dick, 2006). Merry et al. (2013) highlight that dialogue around feedback does not replace or make the feedback product redundant; the purpose of dialogue is to develop and enrich the feedback product.

A number of conceptual models for good practice in feedback have been developed (Gibbs and Simpson 2004; Hounsell, 2007; Nicol and Macfarlane-Dick, 2006). However, while summative assessment and feedback remain dominant in

higher education (Boud 2007), these are positioned within formative rather than summative feedback. For example, Nicol and MacFarlane-Dick's (2006, p.205) principles underpinning good feedback include the following:

- 1. helps clarify what good performance is (goals, criteria, expected standards)
- 2. facilitates the development of self-assessment (reflection) in learning
- 3. delivers high quality information to students about their learning
- 4. encourages teacher and peer dialogue around learning
- 5. encourages positive motivational beliefs and self-esteem
- 6. provides opportunities to close the gap between current and desired performance
- 7. provides information to teachers that can be used to help shape teaching.

Here the focus is upon student self-regulation and engagement with feedback, thus supporting more sustainable feedback practice. However, Carless et al. (2011) recognise that the mind-set, expertise and motivation to prioritize the development of such self-regulative activities, consistent with sustainable feedback, are only likely to be held by a minority of lecturers. It is clear that changing both staff and student dispositions towards feedback will be a considerable challenge and involve changing the learning environment.

Finally, students and staff do not necessarily hold a homogenous view of effective feedback practice. These differing viewpoints can distort the potential for learning (Carless, 2006). Furthermore, Hill et al. (2010) posit that the disparity between students' perceptions of the feedback they receive (or wish to) and academics' understanding of it may be the core of students' dissatisfaction. Carless (2006) recommends assessment dialogues between staff and students to reduce disparities.

## **Purpose of article**

Juwah et al. (2004) suggest that students should be given the opportunity to provide feedback on their feedback to aid instructors in reflecting on its delivery. While interest and research regarding feedback is growing in the literature, there is less evidence of empirical research from the student perspective (Bamforth et al., 2013) and there are only a few studies that compare perceptions of feedback from both the staff and student viewpoints (Beaumont and Shannon, 2008; Carless 2006; Di Costa, 2010; Maclellan 2001). Accordingly, this study aims to supplement this gap in the literature. The purpose of the paper is to investigate and contrast academic staff and students' perspectives on several practical aspects of feedback practice in order to identify if there is divergence in views. Examining potential gaps can help identify where emphasis should be placed in order to improve feedback practice.

Price et al. (2011) stress that it is the process of engagement with feedback that needs to be explored, rather than the technicalities of feedback. Moreover, Boud and Molloy (2013) question whether it is the notion of feedback as is commonly used that is the problem, rather than finding better ways of undertaking feedback. The literature is increasingly recognising the need for a reconceptualization of feedback by putting forward a rationale for 'sustainable feedback' that has a sustained influence on student learning (Boud and Moloy, 2013; Carless et al., 2011; Merry et al., 2013). While the authors support the desire to foster more sustainable feedback practices that focus on developing students' self-regulative capabilities, this paper does focus more on the practical technicalities of feedback. It is clear that the

practical aspects of feedback still need to be dealt with adequately in order to be conductive to effective and sustainable feedback. Doan (2013) found that students' reactions to feedback are significantly influenced by the quality of the feedback. In addition, literature indicates that most student complaints focus on the technicalities of feedback (Higgins et al, 2001; Huxham, 2007).

#### Method

The study adopted a quantitative approach in the form of questionnaire surveys conducted with both students and academic staff at the School of the Built Environment, Liverpool John Moores University (LJMU). All research methods have their advantages and disadvantages and therefore the limitations must be noted. Quantitative methods can yield a less detailed narrative and generally provide less elaborate accounts of perceptions than qualitative methods. However, questionnaire surveys were deemed more suitable for this research, at this stage, since they offer a number of advantages that qualitative research methods do not possess (Cargan, 2007). For example, the anonymity of questionnaires allows students and academics to respond with ease and comfort and may consequently provide more accurate reflections of respondents' feelings. Questionnaires also have the ability to gather larger amounts of standardised information in comparison to qualitative approaches.

Complementary questionnaires were created for staff and undergraduate students which primarily consisted of socio-demographic questions and Likert-type scale statements. The questions focused on gathering opinions on and preferences for different types of feedback; timeliness of feedback; student engagement with and interest in feedback; quality feedback and satisfaction with current practice. The survey questions were developed based on existing surveys (Bohnacker-Bruce, 2013) and literature review. While Bohnacker-Bruce's (2013) survey focused on students' perspectives, this study also gathered academics' opinions using complementary questions. The questionnaires were available online via Bristol Online Surveys (BOS). The link was e-mailed to all teaching staff (circa 60) and undergraduate students in the School of the Built Environment (circa 1300) ensuring comprehensive views were captured. 26 staff and 194 undergraduate students participated in the study. The students were represented evenly across the various year groups (Table 1). While many more of the student responses were from males than females, this is representative of the traditionally male dominated Built Environment courses.

Table 1. Survey participant demographics

	Students		Academic staff	
Responses	194 (15% response)		26 (43% response)	
Gender	Male	83%	Male	58%
	Female	17%	Female	42%
Year of study	1 <sup>st</sup> Year	31%		
	2 <sup>nd</sup> Year	35%		
	3 <sup>rd</sup> Year	34%		

The focus of the data analysis was on frequencies and comparison between academic staff and student viewpoints on complementary questions. Further inferential analysis was conducted to identify if differences between the groups responses were statistically significant. Due to the ordinal nature of Likert type data, non-parametric techniques were employed (Roblyer et al., 2010). Mann–Whitney *U* tests were used to compare students and staff responses on all Likert type questions. Some further analysis was also conducted on the student data, namely Mann-Whitney *U* tests to compare males and female responses and the Kruskal Wallis H test to compare responses from different years of study.

## Influence of the discipline area

A limitation to the study is that it focuses on one school within one university. It is therefore important to briefly highlight the nature of the discipline. Primarily, the built environment is a vocational discipline. It is recognised within the sector that, in comparison to more purely academic subjects, built environment courses may face different issues and demands (Lamond et al., 2013). For example, it is mandatory that courses meet professional body standards and accommodate the needs of the profession, such as a high demand for part-time study, vocational training and industry-focused teaching and learning (Lamond et al., 2013). NSS results suggest that the overall satisfaction levels with built environment courses are, on average, lower than that of other subjects (Higher Education Academy, 2012). A study investigating this issue further found that some of the largest gaps in satisfaction (as rated by the NSS) between built environment courses and the "all courses" average were related to feedback aspects (Lamond et al., 2013). The study goes on to suggest that the nature of built environment courses may lead to high expectations, in relation to feedback, as such courses typically have higher elements of coursework. Accordingly, a caveat to the study is that the results - perceptions of feedback - could possibly be influenced by disciplinary practice in teaching and learning.

#### **Results and discussion**

#### Effectiveness of different forms of feedback

Staff and students were asked to indicate how effective they personally found different forms of feedback and the results indicate that staff and students appear to hold fairly similar views (Figure 1), with a statistically significant difference in opinions found in relation to only one form of feedback. A great majority of staff (95%) and students (94%) thought that *individual verbal (face-to-face)* and *individual typed* feedback, staff (92%) and students (91%), were effective (*very effective or quite effective*) forms of feedback. Although, results of a Mann–Whitney *U* test found that a significantly higher proportion of staff (86%) felt that that individual verbal (face-to-face) was *very effective* in comparison to students (63%) (z=-2.076, p<.05). A higher proportion of students (89%) felt that *individual hand-written* feedback was effective in comparison to staff (73%); this type of feedback seemed to present the highest level of disagreement in opinion, but this was not found to be statistically significant. The higher preference by students may be due to the perception that handwritten feedback is more personal and seems to allow for a closer rapport to be established with the marker (Chang *et al.*, 2012; Edeiken-Cooperman and Berenato, 2014).

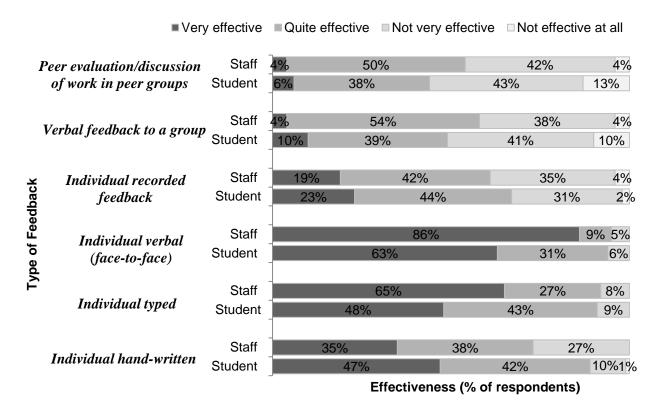


Figure 1. Effectiveness of different forms of feedback

Opinions on the effectiveness of other types of feedback were less decisive. Less staff (61%) and students (67%) felt that individual recorded feedback was effective, though the majority of respondents only felt this form of feedback was quite effective. While many researchers advocate the use of peer assessment (Nicol and MacFarlane-Dick, 2006; Topping, 2010; Vickerman, 2009), the results of this study presented more negative views in terms of the effectiveness of group and peer feedback. 56% students and 46% staff felt that peer evaluation or discussion of work in peer groups was not an effective (not very effective or not effective at all) form of feedback. Moreover, 51% students and 42% staff felt that verbal feedback to the group is not effective. Staff were slightly more optimistic about the effectiveness of peer and group feedback in comparison to students. Peel (2009) suggests that, within the built environment in particular, the use of peer feedback is not widespread and the potential benefits are possibly undervalued. Other research has suggested that peer feedback is perceived as ineffective and unpredictable (Boud, 2000; Chen et al., 2009). However, there are a number of powerful arguments for utilising peer evaluation. For example, peer appraisal and feedback can develop students' understanding of task compliance, quality and criteria, develop students' selfevaluative skills and prepare students to take responsibility for their lifelong learning (Nicol and MacFarlane-Dick, 2006; Orsmond, 2004; Sadler, 2010).

#### Feedback preference

Following on from opinions of effectiveness, respondents were asked to indicate their own preference, if at all, for feedback (staff were asked to indicate what

feedback they preferred to provide, while students indicated what they preferred to receive). All staff and students indicated a preference of some sort (Figure 2). Individual typed and individual verbal (face-to-face) feedback were the preferred types of feedback. The majority of staff (73%) prefer individual typed feedback (in comparison to far fewer (30%) students). In contrast student preference was not as conclusive, though the largest proportion of students (46%) held a preference for individual verbal (face-to-face) feedback. This is in correlation with findings produced by Orsmond et al. (2005) which suggests students may prefer verbal to written feedback. This may be due to students desiring contact with the marker for additional clarification on the feedback provided (Blair and McGinty, 2013; Dowden et al., 2013). This finding also supports the view of Black and McCormick (2010) who propose that a greater focus in HE should be on oral, as opposed to written, feedback. It is interesting to note that a significantly higher percentage of staff (86%), in comparison to students (63%), felt that individual verbal (face-to-face) feedback was a very effective form of feedback (Figure 1), yet a much larger proportion of students, in comparison to staff (11%), indicated a preference for this type of feedback. This could potentially be due to staff workloads and, as suggested by Irons (2007), a desire for paper evidence of the feedback provided for external review Albeit the HEA (2013, 12) stress that effective feedback should not be produced for this purpose, but should be produced "for the student, with the student's learning needs as the central concern".

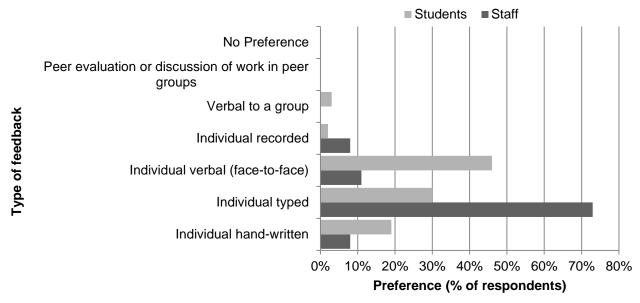


Figure 2. Feedback preference

While not as preferable by either group, students (19%) have a slightly greater preference for feedback in *hand-written* form in comparison to staff (8%). A preference for feedback in *recorded* form was far less prevalent with both staff (8%) and students (2%), despite claims that this type of feedback can provide improvements in accessibility, a higher degree of detail and personalisation, promoting greater engagement (Ribchester et al, 2008). No respondents indicated a preference to receive/provide feedback in the form of *peer evaluation or discussion* 

of work in peer groups and only 3% of students, and no staff, had a preference for verbal feedback to a group.

#### Timeliness of feedback

Timeliness of feedback is an important area to consider in relation to both staff and student perceptions. Research advocates that feedback is only useful to students if it is given in a timely fashion (Weaver, 2006). Moreover, one of the specific NSS statements rated by students in the Assessment and Feedback section is "Feedback on my work has been prompt." The majority of students (95%) and staff (94%) in this study agreed (strongly agree or agree) that it is very important that feedback is returned as soon as possible. Denton et al. (2008) propose that feedback that is received late becomes useless to students, as many students have already moved on. However, this study found less agreement with this suggestion; just over half of the students (52%) and fewer staff (38%) agreeing that feedback that is received too late is useless. Mann-Whitney U test results suggest that there was no significant difference between staff and student opinion on the two aforementioned statements. While it has been identified that feedback should be timely and prompt, what is considered to be so by one may not be to another. The surveys subsequently questioned participants on both 'ideal' and 'acceptable and realist' timeframes for providing or receiving feedback on various types of assessment; staff indicated their preferable timeframes for providing feedback whilst student indicated their preferable times for receiving feedback. It should be noted that LJMU guidelines recommend that academic staff provide feedback to students within 15 working days.

## Ideal timeframe to provide/receive feedback

For most types of assessment (all except presentations) students ideally wanted feedback guicker than staff would like to provide it (Figure 3). The largest proportion of staff and students selected 15 working days (2-3 weeks) as the ideal time frame to provide/receive feedback on group work (42% staff and 42% students) and midmodule written assignments (42% staff and 43% students). While the larger majority of students selected this category, it should be noted that a total of 49% (group work) and 48% (mid-module) of students selected other timeframes that were quicker than this. Half of staff (50%) also selected 15 working days as the ideal time frame to provide feedback on lab work, while a greater number of students (39%) felt that 10 working days as ideal for this type of assessment. Other studies have stressed that two weeks is the maximum amount of time that students are prepared to wait for feedback (Bohnacker-Bruce, 2013; Brown, 2007). Staff and students held quite consistent views in terms of presentations and both groups would ideally like feedback on presentations quicker than for other forms of assessment; a larger majority of both groups, staff (54%) and students (50%), would like to provide/receive feedback within five working days. Staff would ideally like longer to provide feedback on final exams/assignments than other forms of assessment, with 58% indicating a preference for providing feedback within 20 working days. However, most students (44%) would ideally like this form of feedback within 15 working days. Although, there seems to be more acceptance by both groups of a longer time frame to provide/receive feedback on this type of assessment in comparison to other types. Mann-Whitney *U* test results suggest that the differences in staff and student opinion

was statistically significant (*p*<.01) with regard to ideal timeframes for feedback on *lab work*, *final exams* and *mid-module assignments*.

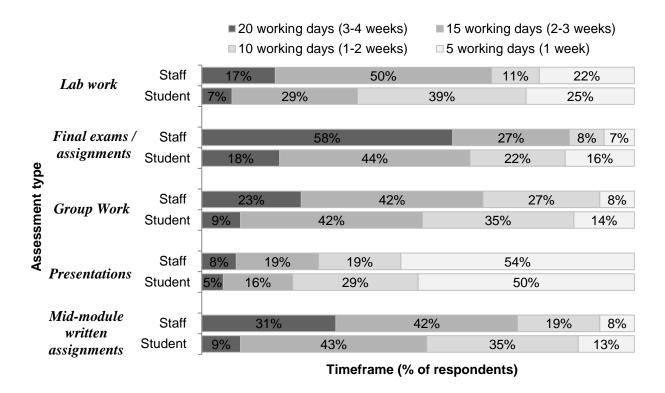


Figure 3. Ideal timeframe for feedback

Acceptable and realistic timeframe to provide/receive feedback

Overall there was a general shift in responses towards longer periods of time to provide/receive feedback on all types of assessment when respondents considered what is acceptable and realistic (Figure 4), in comparison to an ideal timeframe. However, when considering the majority response, there was not a vast change in opinion in relation to feedback on group work; an acceptable and realistic timeframe for feedback was still considered by the majority of both staff and students to be 15 working days. The pattern of staff and student views in terms of feedback on final exams/assignments did not change significantly from the ideal, with the overall preference remaining the same as the ideal data. Staff and students hold very consistent views in terms of feedback on presentations with the majority of respondents (35% staff and 36% students) suggesting that 10 working days is an acceptable and realistic timeframe to provide feedback, showing a similar shift in the pattern of responses from five working days in the *ideal* timeframe data. Staff opinion in terms of feedback on lab work remained similar to the ideal data. However, for students the majority opinion shifted from 10 working days (ideal) to 15 working days, as an acceptable and realistic timeframe for feedback, which shifted in line with staff opinion. Student opinion on mid-module written assignments did not change significantly. However in terms of staff opinion there was a slight shift; there were equal responses (42% in each) for both 20 working days and 15 working days as acceptable and realistic time frame for feedback provision. The results may indicate that LJMU's explicit 15 working day feedback policy has assisted in managing

expectations with regard to timely feedback. Once again, Mann-Whitney U test results suggest that that the differences in staff and student opinion, concerning acceptable and realistic timeframes for feedback, was statistically significant (p<.01) with regard to *lab work*, *final exams* and *mid-module assignments*.

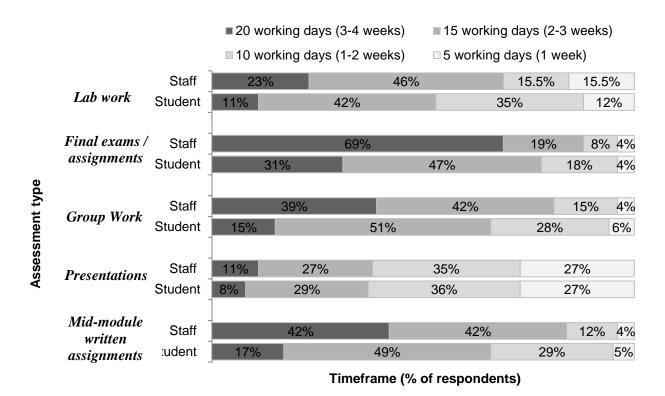


Figure 4. Acceptable and realistic timeframe for feedback

### Engagement with and interest in feedback

Participants were asked to indicate the extent to which they agree with a number of statements regarding what students do with their feedback and their interest in feedback (Figure 5). The wording of the questions was amended so that students answered about what they do with their feedback, while staff answered about what they think students do with feedback. Staff confidence in students' interest in and engagement with feedback was largely negative and the results indicate a striking disparity between staff and student opinion for a number of the Likert-type statements proposed. Results of a Mann-Whitney U test confirm that staff and student opinion differed significantly (p<.05) for all but one of the statements in Figure 5, with the exception being 'a grade without feedback is insufficient even if returned quickly', on which their views were comparative.

While the majority of students (96%) agree (*strongly agree* or *agree*) that they *always access marked assignments*, only 38% of staff shared this view. Although it has been suggested that students do not necessarily read their qualitative feedback comments (Hounsell, 1987), this was challenged by 93% of students in this study who suggested they *always read the qualitative feedback;* unsurprisingly only 35% of staff agreed with this.

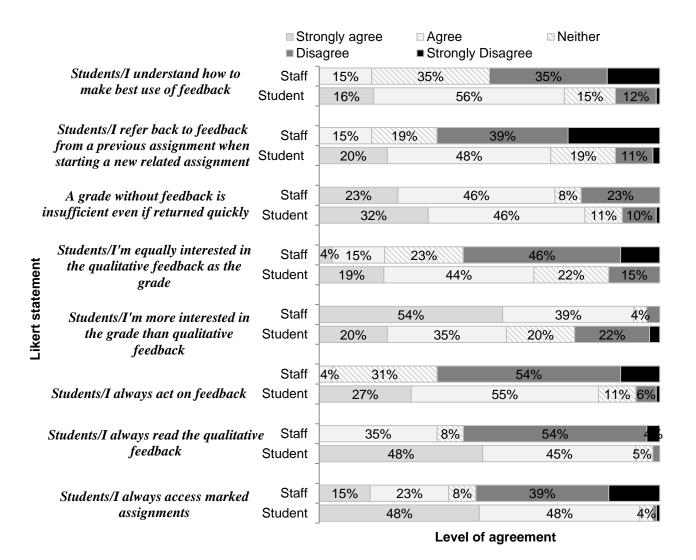


Figure 5. Engagement and interest in feedback

This is not surprising since a commonly expressed concern by staff is that feedback is often not collected by students (Nicol, 2010). While most students suggested they read the qualitative feedback, like many researchers (Crisp, 2007; Weaver, 2006; Higgins et al., 2001) the majority of staff (94%) in this study felt students were more interested in the grade than qualitative feedback. However, only 55% of students agreed with this. Furthermore, challenging the conventional view, 63% of students (but only 19% of staff) agreed that they are equally interested in the qualitative feedback as in the grade. However, this indicates some students provided conflicting answers to the two aforementioned statements concerning interest in grades and qualitative comments. Students (78%) and staff (69%) were more congruent in agreeing that a grade without feedback is insufficient even if returned quickly, further demonstrating the importance of qualitative feedback to a large proportion of students. In correspondence with the findings of Doan (2013), the results in this study do not support the perception that students are only interested in their grades. Although, they do support the view that this is what academic staff tend to believe.

It has been argued that students frequently fail to act upon feedback (Crisp, 2007; Lea and Street, 2000; Higgins *et al.*, 2002) and may not understand how to use it (Gibbs and Simpson 2004). In stark contrast to these arguments, but in similarity to the findings of Doan (2013), the majority of students (93%) in this study suggest that they *always act on feedback* and 72% agreed they *understand how to make best use of their feedback*. However there was a vast divergence in perception, with only 4% and 15% of staff, respectively, holding the same views. However, further investigations are required in order to identify precisely what students mean when they say the 'act' on and 'make best use' of feedback. Similarly, far fewer staff (15%) than students (68%) agreed that students *refer back to feedback from a previous assignment when starting a new related assignment*. These are positive findings in terms of student engagement with and interest in feedback, in comparison to some of the suggestions in the literature. Coinciding with Deeprose and Armitage (2004), this may indicate that staff could be failing to recognise the positive impact their feedback is having upon students.

Further inferential analysis using the Kruskal Wallis H test was conducted to identify if there were any significant differences in student responses, concerning engagement with and interest in feedback, depending on their year of study. However, no significant differences found. This is particularly surprising as you would theorise that as students' progress through HE that, with experience, their perceptions would change as their ability to utilise feedback effectively develops.

## Quality feedback and satisfaction

Staff and students were asked to indicate the extent to which they agree with a number of statements regarding their perception of quality feedback and satisfaction with current feedback practice.

## Quality feedback

Staff and students held quite consistent views concerning what quality feedback should entail (Figure 6); results of Mann-Whitney *U* tests suggest there was only a significant difference between staff and student views in relation to one of the Likert statements posed. Almost all staff and students agreed (*strongly agree* or *agree*) that it is important that feedback gives *detailed direction for future improvement* and is *constructive and encouraging*. All staff and the majority of students (86%) think that *feedback should be linked directly to marking scheme*. While literature suggests that students are reluctant to approach lecturers regarding feedback (Brown, 2007), particularly first year students (Poulos and Mahoney, 2008), a large proportion of staff (85%) and students (87%) felt that it was *important that students have opportunity to discuss feedback with lecturer face-to-face*. The Kruskal Wallis H test was utilised to compare student opinions from different years of study but no significant differences in responses were identified.

There was slightly more discontent around negative and positive feedback. 96% of staff and 85% of students felt that *feedback should be specific about the failings of work.* Research suggests that overly negative feedback can affect student engagement and motivation (Alton-Lee, 2003) and can cause students to feel that instructors do not care about their learning (Price *et al.*, 2010). Although it was recognised by fewer students (57%) than staff (73%) that *feedback that is exclusively negative is damaging.* Academics may attempt to minimize the potentially

damaging effects of negative feedback by providing positive, but sometimes considered confusing, feedback alongside poor grades (Young, 2000). A much higher proportion of students (41%) than staff (16%) agreed that *lecturers should include an appropriate amount of praise, even if work is not a high standard;* this was the only statement in Figure 6 that produced a statistically significant difference when comparing staff and student opinion using the Mann-Whitney U test (z =-2.298, p<.05). Staff may be less inclined to praise poor quality work since research argues that feedback that is overly concerned with softening criticism may reduce its developmental value (Young, 2000). Hyland and Hyland (2001) advise that feedback which includes both positive and negative components will be more effective, though the positive should increase the likelihood of a student accepting the negative.

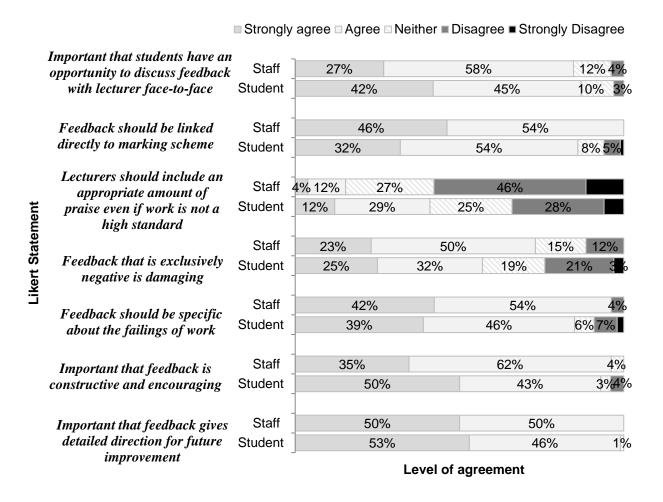


Figure 6. Perceptions concerning quality feedback

### Current feedback practice

After gaining some understanding of staff and student views on what quality feedback *should* entail, the questioning focused on satisfaction with actual feedback practice (Figure 7). Students were asked to evaluate satisfaction with staff practice while staff were asked to evaluate their own practice. Students were generally more negative regarding the feedback they receive in comparison to staff perceptions of the feedback they provide. Mann-Whitney U test results confirm that the differences in staff and student opinion was statistically significant (p<.05) for all but three of

statements in Figure 7 (the three exceptions being: 'feedback is of varying quality depending on the lecturer', 'feedback feeds forward to help improve in future' and 'I find it confusing to give/get positive feedback alongside a poor grade').

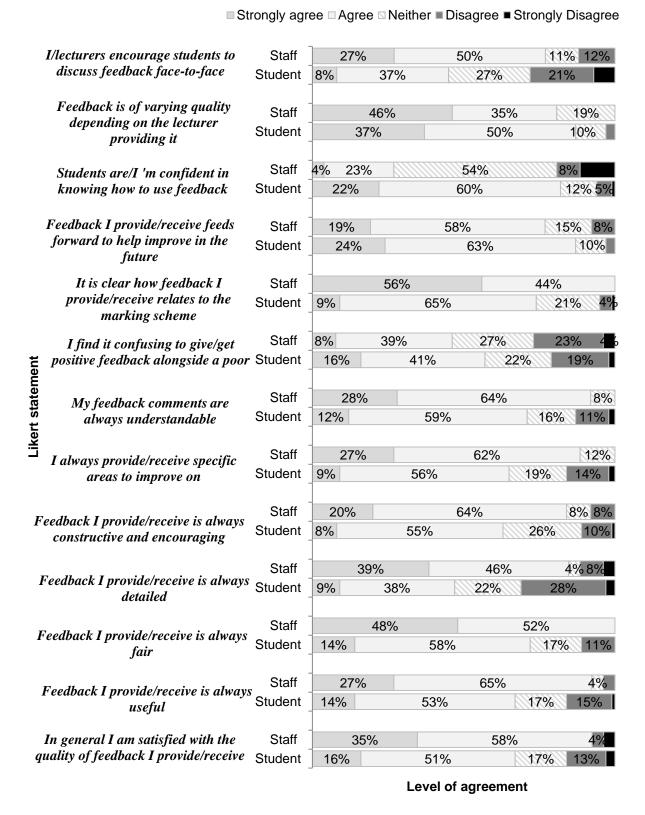


Figure 7. Current feedback practice

93% of staff agreed that, in general they are satisfied with the quality of feedback provided; but fewer students 67% agreed that they are satisfied with the quality of feedback received. However, from a student perspective this is more positive than findings from some other studies, e.g. Hall et al. (2012). While many staff (85%) and students (87%) were in agreement that it is important students have an opportunity to discuss feedback with lecturers face-to-face, less staff (77%) staff suggested they encourage students to do so and far fewer students (45%) agreed that they were encouraged to discuss feedback face-to-face. Given the high preference by students for this type of feedback this is particular area for concern. 92% of staff felt that their feedback comments are always understandable in comparison to 71% of students who agreed with this. Often this mismatch in views is due to the difficulty some students have in understanding the language used by academics (Williams, 2005). Furthermore, students may feel that comments are ambiguous, too general or vague, too cryptic or provided in an unfamiliar disciplinary discourse (Higgins et al., 2001). All staff agreed that it is clear how their feedback relates to the marking scheme; 74% of students shared this view. However, not all students (84%) felt that feedback should be linked directly to marking scheme (Figure 6). One of the largest divergence in perceptions in terms of satisfaction with current practice centred on the detail provided in feedback; while 85% of staff thought feedback they provide is always detailed, only 47% of students agreed with this. One of the specific NSS statements rated by students in the Assessment and Feedback section is "I have received detailed comments on my work", which suggests that this may be a particular area for concern. Although generic feedback is often recommended as a strategy for returning feedback promptly, Bray (2006) explains that students perceive generic feedback as highly impersonal. This may impact on and be linked to student perceptions of detail; staff may believe the feedback they provide is detailed, but if it is generic then it is possible that students may discount this, resulting in mismatched perceptions. While all staff felt feedback they provide is always fair, fewer students (72%) agreed. The aforementioned concepts are linked; clear, detailed feedback is more likely to be perceived as fair (Struyven et al., 2005). Accordingly, if students and staff views on understandable and detailed feedback could be more aligned then this would likely improve perceptions of fairness. Research suggests that opportunities to discuss feedback with tutors may also contribute to perceptions of interpersonal fairness (Whitington et al., 2004).

89% of staff suggested they always provide specific areas to improve on, while 65% of students agreed they received this. Similarly, 84% of staff felt feedback they provide is always constructive and encouraging, but fewer students (63%) agreed. While 92% of staff thought feedback they provide is always useful, only 67% of students held the same view. The results support suggestions by other researchers (Carless, 2006; Maclellan, 2001; Parikh et al., 2001) who posit that lecturers often believe their feedback to be more useful and effective than students do. In contrast to the other Likert statements around satisfaction with current practice, a very positive outcome was that students were more optimistic than staff when it came to the feed forward aspect of their feedback. 87% of students, in comparison to 77% of staff, felt their feedback feeds forward to help improve in the future. As previously highlighted, staff may be failing to recognise the positive impact their feedback is having upon students in terms of how feedback is used and acted upon by students. While it was found (Figure 6) that some students (41%), but fewer staff (16%), felt lecturers should include an appropriate amount of praise even if work is not a high standard, a higher proportion of students (57%) and staff (47%) agreed that they find it confusing to give/get positive feedback alongside a poor grade. This seems to present a particular area of mixed opinions and inconclusive views. Staff and students held similar opinions in terms of consistency of feedback; 81% staff and 87% students felt that feedback is of varying quality depending on the lecturer providing it. Inconsistency of feedback practice among lecturers is also reported in the literature (Beaumont et al., 2011).

Supplementary analysis was conducted on student responses to identify whether students' satisfaction with current feedback practice differed depending on demographic variables; gender and year of study. Mann-Whitney *U* test results suggest that the opinions of males and females did not differ with regard to satisfaction with current practice. Kruskal Wallis H test results also indicate that there were no significant differences found when comparing responses from different years of study.

#### **Conclusions**

Literature highlights the significance of feedback to students' learning and the student, though student dissatisfaction with feedback practice is also evident and a concern in the higher education context. This paper sought to contribute to the literature by presenting and contrasting Built Environment staff (n=26) and students' (n=194) perspectives on feedback practice via a quantitative study. Such studies are essential in order to gain an awareness of the main areas of student dissatisfaction and to identify where a shared understanding between staff and students may be lacking, subsequently contributing to this dissatisfaction.

The findings of study highlight a number of points that can be taken into consideration in order to enhance student learning and the student experience. The study found that the most significant divergence in perception between academics and students centred on students' engagement with and interest in feedback. The literature highlights the problem of student engagement with feedback, yet this was only confirmed in terms of staff views of student practice, which were largely negative. This was at a considerable discord with many students who challenged perceptions that they do not read feedback, are only interested in grades, and do not act on or use feedback. The results from this study do not support the perception that students are only interested in their grades. Rather the findings indicate that most students always access, read and act on feedback and thus, practically, academic staff should not assume that they do not. Burke (2009) does however suggests that students often rely on relatively unsophisticated strategies for using feedback so although they feel they are acting upon it they might not be getting the most out of it. Further qualitative investigations will thus be required to more clearly explore what students mean when they say the act on and use feedback.

A greater degree of harmony was found between staff and students as far as their perceptions of the effectiveness of different forms of feedback and what quality feedback should entail. The majority of staff and students congruently felt that feedback should be timely, constructive, encouraging, provide detailed direction for future improvement (feed-forward), be linked to a marking scheme and be specific about the failings of the work. Opinions concerning the potentially damaging impact of negative feedback were inconclusive. Although, the majority of staff and students did not support the idea of lecturers including a given amount of praise within feedback where work is not a high standard; this was found to be confusing for more than half of the students. Overall, individual verbal, typed and written feedback were

perceived to be the most effective, whereas the effectiveness of group feedback and peer evaluation/discussion presented less conclusive views. An implication of this finding is that the purpose and value of peer feedback may particularly need to be highlighted to both staff and students. There are a plethora of benefits that this type of feedback can provide. If prudently structured, peer feedback can increase opportunities for feedback dialogue, reduce students' reliance on lecturers, help students appreciate concepts of quality, assist in developing autonomous and self-regulated learners and prepare students for lifelong learning (Orsmond, 2004; Sadler, 2010). Such activities may help both students and staff discover what each most value in terms of feedback. Additionally, student ability to take responsibility for their lifelong learning is a particularly useful skill for built environment graduates to develop since they will generally be under a professional obligation to continually enhance their knowledge and skills via continuous professional development.

Individual feedback preference differed between staff and students, despite their agreement on effectiveness. This study confirms that many students desire and prefer individual verbal feedback (Black and McCormick, 2010; Orsmond *et al.*, 2005). This study emphasises that it is important for students to have the opportunity of receiving individual verbal feedback on assessment from academic staff. However, many students in this study did not feel they were actually encouraged to discuss their feedback face-to-face. Although lecturers may face logistical confines with large class sizes, embedding recognised opportunities within the module design for verbal discussion of feedback should be practiced where possible, e.g. within tutorial sessions. Although not all students will desire such an opportunity, it may increase satisfaction with feedback practice for those that do (which equated to 46% in this study). Furthermore, as noted above, increasing the use of peer feedback can encourage discussion around feedback and may take some of the pressure off staff in terms of the provision of verbal feedback.

Student and staff views on timeframes for providing/receiving feedback varied for different types of assessment, demonstrating that a blanket approach may not meet expectations. While students generally wished to receive feedback quicker than staff would like to provide it, 15 working days (two to three weeks) was found to be acceptable and realistic to the greater majority with regard to mid-module assignments, group work and lab work. However, staff wanted longer than students for feedback on exams (within four weeks), while both students and staff wanted feedback on presentations quicker (within two weeks). Other studies find that two weeks is the maximum that students are prepared to wait for feedback (Bohnacker-Bruce, 2013; Brown, 2007). Yet a timeframe of two weeks presents challenges for academics and is typically unmanageable for larger cohorts (Bohnacker-Bruce, 2013). To some extent, the results in this study may indicate that LJMU's explicit 15 working day feedback policy has assisted in managing timeliness expectations for a number of students, with regard to some forms of assessment. Although where possible, if feedback can be provided within two weeks, particularly for presentations, this is likely to increase student satisfaction with feedback.

Gaps between academics and students in relation to satisfaction with current practice were also identified. Overall staff tended to believe their feedback was more useful, fair, understandable, constructive and encouraging and detailed in comparison to what students felt they were receiving. Contrastingly, students were more optimistic than staff when it came to the feed forward aspect of their feedback. 'Detail' was identified as a particular area for concern with the highest level of discontent. Considering one of the NSS statements rated by students in the

Assessment and Feedback section is "I have received detailed comments on my work", this is a particular area which will be investigated further to identify how this dissatisfaction could be improved. This mismatch in particular could be due to differing perceptions of what feedback entails. For example, in considering the level of 'detail' in the feedback they provide, staff may reflect on the various modes of formative feedback they are providing in everyday learning and teaching contexts, in addition to summative assignments. In comparison, students may only be focusing on written comments on summative assignments and thus not recognising all of the feedback they receive. Further investigation via qualitative research will be required to clarify this.

While there was a significant disparity in perception between staff and students concerning certain aspects of feedback, Built Environment students' satisfaction with current practice was not overly negative which a positive outcome for the School, but with clear areas for improvement and further investigation identified. The question remaining is how such disparities in perceptions can be further reduced; do students need to expect less or do staff need to offer more? It is likely to be a less clear cut solution. In summary, to seek to close the identified gaps in perceptions the following suggestions are offered:

- Encourage and create more opportunities for student-staff interactions and dialogue around assessment and feedback (e.g. between staff and students and peer-to-peer). It is felt that the differing perspectives identified in this study are exacerbated by a lack of dialogue;
- The former could be aided by actively engaging students in the assessment process from the beginning of their courses. This could be achieved, for example, by active management of students' expectations, explaining and developing students' understanding of the purposes of assessment and feedback, highlighting various activities that yield feedback (e.g. explaining when, where and how feedback opportunities will be available) and encouraging students to engage with assessment criteria. This may assist in altering some of the perception gaps identified, for example, concerning detail, fairness and usefulness of feedback;
- Include explicit opportunities for verbal clarification of written feedback to ensure comprehensive understanding before students utilise the feedback. Verbal feedback and dialogue around feedback should be formalised within the design of programmes and modules. This may assist in altering the gaps in perception of how understandable, detailed, fair and useful feedback is, as well as meeting student desires for verbal feedback:
- Increase staff and student awareness of the value of different methods of feedback, such as peer feedback which was not valued highly in this study. Explaining the benefits and designing assessments which develop students' aptitude to benefit from peer dialogue may be valuable practice. The benefits self-regulation may also need to be articulated to students. As well as the aforementioned advantages of peer feedback, utilising such methods will assist in creating dialogue between staff and students and contribute to the verbal feedback opportunities that may students in this study desired;
- Perceptions of how students utilise feedback is a more complex issue and further qualitative research will be conducted to explore this. Once an understanding is gained of how students feel they are using feedback, attention can be focused on making sure this is optimal and developing student capability further if required.

The suggestions made above may also assist in highlighting to students the ways in which feedback can be used.

#### References

- Ackerman, D. S., and B. L. Gross. 2010. Instructor feedback: How much do students really want? *Journal of Marketing Education* 32(2): 172-181.
- Alton-Lee, A. 2003. *Quality teaching for diverse students in schooling: Best evidence synthesis.* Wellington, NZ: Ministry of Education.
- Bailey, R. 2009. Undergraduate students' perceptions of the role and utility of written assessment feedback. *Journal of Learning Development in Higher Education* 1:1–14.
- Bamforth, S., G. Perkin, and J. Glass. 2013 *Effective feedback from the student perspective*. York: The Higher Education Academy.
- Beaumont, C., and L. Shannon. 2008. Staff and student perceptions of feedback quality in the context of widening participation. York: The Higher Education Academy.
- Beaumont, C., M. O'Doherty, and L. Shannon. 2011. Reconceptualising assessment feedback: A key to improving student learning. *Studies in Higher Education* 36: 1–17.
- Bohnacker-Bruce, S. 2013. Effective feedback: the student perspective. *Capture* 4 (1): 25 36.
- Boud, D. 2000. Sustainable assessment: Rethinking assessment for the learning society. *Studies in Continuing Education* 22: 151–167.
- Boud, D. and E. Molloy. (eds.) 2012. Feedback in Higher and Professional Education: Understanding it and doing it well. London: Routledge.
- Bray, J. P. 2006. Assessment Feedback Using Comment Banks: A Useful Approach? *In: Bournemouth University 'Releasing Potential' Conference*, 16th May 2006, Bournemouth.
- Black, P., and R. McCormick. 2010. Reflections and new directions. *Assessment & Evaluation in Higher Education* 35: 493–499.
- Blair, A., and S. McGinty. 2013. Feedback-dialogues: exploring the student perspective. *Assessment and Evaluation in Higher Education* 38(4), 466–476.
- Boud, D. 2007. Reframing assessment as if learning were important. In *Rethinking assessment in higher education*, ed. D. Boud and N. Falchikov, 14–25. London: Routledge.
- Brown, E., and C. Glover. 2006. Evaluating written feedback. In *Innovative* assessment in higher education, edited by C. Bryan, and K. Clegg, 81-91. London: Routledge.
- Brown, J. 2007. Feedback: The student perspective. *Research in Post-Compulsory Education* 12 (1): 33–51.
- Brown, S., and P. Knight. 1994. *Assessing Learners in Higher Education*. London: Kogan Page.
- Burke, D. 2009. Strategies for using feedback students bring to higher education. *Assessment and Evaluation in Higher Education* 34, 41–50.
- Butler, A. C., J. D. Karpicke, and H. L. Roediger. 2007. The effect of type and timing of feedback on learning from multiple-choice tests. *Journal of Experimental Psychology: Applied* 13: 273-281.
- Cargan, L. 2007. Doing Social Research. Maryland: Rowman and Littlefield.

- Carless, D. 2006. Differing perceptions in the feedback process. *Studies in Higher Education* 31(2): 219–233.
- Carless, D., D. Salter, M. Yang, and J. Lam. 2011. Developing sustainable feedback practices. *Studies in Higher Education* 36(4): 395-407.
- Chang, N., B. Watson, M. Bakerson, E. Williams, F. McGoron, and B. Spitzer. 2012 Electronic feedback or handwritten feedback: What do undergraduate students prefer and why? *Journal of Scholarship of Teaching with Technology* 1(1): 1-23.
- Chen, N. S., C. W. Wei, K. T. Wu, and L. Uden. 2009. Effects of high level prompts and peer assessment on online learners' reflection levels. *Computers and Education* 52: 283–291.
- Crisp, B.R. 2007. Is it worth the effort? How feedback influences students' subsequent submission of assessable work. *Assessment and Evaluation in Higher Education* 32 (5): 571-581.
- De Nisi, A., and A.N. Kluger. 2000. Feedback effectiveness: can 360-degree appraisals be improved? *Academy of Management Executive* 14: 129–139.
- Deeprose, C., and C. Armitage. 2004. Reports: Giving formative feedback in higher education. *Psychology Learning and Teaching* 4 (1): 43-46.
- Denton, P., J. Madden, M. Roberts, and P. Rowe. 2008. Students' response to traditional and
- computer-assisted formative feedback: A comparative case study. *British Journal of Educational Technology* 39(3): 486-500.
- Di Costa, N. 2010. Feedback on Feedback: Student and academic perceptions, expectations and practices within an undergraduate Pharmacy course. Paper presented at the ATN Assessment Conference, University of Technology, Sydney, November 18-19.
- Doan, L. 2013. Is Feedback a Waste of Time? The Students' Perspective. *Journal of Perspectives in Applied Academic Practice* 1 (2): 3-10.
- Dowden, T., S. Pittaway, H. Yost, and R. McCarthy. 2013. Students' perceptions of written feedback in teacher: education: ideally feedback is a continuing two-way communication that encourages progress. *Assessment and Evaluation in Higher Education* 38 (3): 349–362.
- Edeiken-Cooperman, N. and C. L. Berenato. 2014. Students' Perceptions of Electronic Feedback as an Alternative to Handwritten Feedback: One University's Inquiry. *Journal of Education and Learning* 3(1): 79.
- Evans, C. 2013. Making Sense of Assessment Feedback in Higher Education. *Review of Educational Research* 83(1): 70–120.
- Ferguson, P. 2011. Student perceptions of quality feedback in teacher education. *Assessment and Evaluation in Higher Education* 36(1): 51-62.
- Fluckiger, J., Y. Vigil, Y. Tixier, R. Pasco, and K. Danielson. 2010. Formative feedback: Involving students as partners in assessment to enhance learning. *College Teaching* 58, 136–140.
- Gibbs, G. 1999. Using assessment strategically to change the way students learn. In *Assessment matters in higher education*, edited by S. Brown, and A. Glasner, 41-53. Buckingham, England: Open University Press.
- Gibbs, G., and C. Simpson. 2004. Conditions under which assessment supports students' learning. *Learning and Teaching in Higher Education* 1 (1): 1–31.
- Hall, M., L-A. Hanna, and S. Quinn. 2012. Pharmacy Students' Views of Faculty Feedback on Academic Performance. *American Journal of Pharmaceutical Education* 76 (1): 1-7.

- Hattie, J. A. 1987. Identifying the salient facets of a model of student learning: a synthesis of meta-analyses. *International Journal of Educational Research* 11 (2): 187-212.
- Hattie, J., and H. Timperley. 2007. The power of feedback. *Review of Educational Research* 77 (1): 81-112.
- HEA (The Higher Education Academy). (2012) A Marked Improvement: Transforming assessment in higher education. York: The Higher Education Academy.
- HEA (The Higher Education Academy) (2013) *HEA Feedback toolkit*. York: The Higher Education Academy.
- Higgins, R., P. Hartley, and A. Skelton. 2001. Getting the message across: the problem of communicating assessment feedback. *Teaching in Higher Education* 6 (2): 269-74.
- Higgins, R., P. Hartley, and A. Skelton. 2002. The conscientious consumer: Reconsidering the role of assessment feedback in student learning. *Studies in Higher Education* 27 (1): 53-64.
- Hill, K., G. Manotvani, D. Merrick. 2010. Evidence of a disparity between staff and students perception of feedback. Paper presented at the University of Nottingham's 17<sup>th</sup> Learning and Teaching conference, Nottingham, September.
- Hounsell, D. 1987. Essay writing and the quality of feedback. *In Student learning:* Research in education and cognitive psychology, edited by J.T.E. Richardson, M.W. Eysenck, and D. Warren-Piper, 109–19. Milton Keynes: Open University Press and Society for Research into Higher Education.
- Hounsell, D. 2003. *Student feedback, learning, and development*. Buckingham, UK: SRHE and Open University Press.
- Hounsell, D. 2007. Towards a more sustainable feedback to students. In *Rethinking assessment in higher education*, eds. D. Boud & N. Falchikov. London: Routledge: 101-113.
- Hounsell, D., V. McCune, J. Hounsell, and J. Litjens. 2008. The quality of guidance and feedback to students. *Higher Education Research and Development* 27: 55–67.
- Huxham, M. 2007. Fast and effective feedback: are model answers the answer? Assessment and Evaluation in Higher Education 32: 601–611.
- Hyland, F., and K. Hyland. 2001. "Sugaring the pill: praise and criticism in written feedback." *Journal of Second Language Writing* 10: 185–212.
- Irons, A. 2007. Enhancing Learning through Formative Assessment and Feedback. Series: Key Guides for Effective Teaching in Higher Education. London: Routledge.
- Juwah, C., D. Macfarlane-Dick, D. Matthew, D. Nicol, D. Ross, and B. Smith. 2004. Enhancing student learning through effective formative feedback. York: The Higher Education Academy Generic Centre.
- Lamond, J., D. Proverbs, and T. Wood. (2013) What matters to built environment students. York: Higher Education Academy (HEA) and the Council of Heads of Built Environment (CHOBE).
- Lea, M. R. and B. V. Street. 2000. Student Writing and Staff Feedback: An Academic Literacies Approach. In *Student Writing in Higher Education: New Contexts*, edited by M. R. Lea, and B. Stierer, 32-46. Buckingham: Open University Press.
- Maclellan, E. 2001. Assessment for learning: the differing perceptions of tutors and students. Assessment and Evaluation in Higher Education 26 (4): 307-318.

- McCann, L. and G. Saunders. 2009. *Exploring Student Perceptions of Assessment Feedback. Project Report.* Southampton: The Higher Education Academy Subject Centre for Social Policy and Social Work (SWAP).
- Merry, S., M. Price, D. Carless, and M. Taras. (eds.) 2013. *Reconceptualising Feedback in Higher Education: developing dialogue with students*. London: Routledge.
- Mory, E. 2004. Feedback research revisited. In *Handbook of research on educational communications and technology*, edited by D. Jonassen, 745–783. Mahwah, NJ: Lawrence Erlbaum.
- Nelson, M. M., and C. D. Schunn. 2009. The nature of feedback: How different types of peer feedback affect writing performance. *Instructional Science* 37: 375–401.
- Nicol, D. 2010. From monologue to dialogue: Improving written feedback processes in mass higher education. *Assessment and Evaluation in Higher Education* 35(5): 501–17.
- Nicol, D. J., and D. MacFarlane-Dick. 2006. Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education* 31(2): 199–218.
- Norton, L.S., and J.C.W. Norton. 2001. Essay feedback: how can it help students improve their academic writing? Paper presented at First International Conference of the European Association for the Teaching of Academic Writing across Europe (EATAW), Gronigen, June 18–20.
- O'Brien, R. and L. Sparshatt. 2008. Exploring staff and students' mental maps: creating narratives for successful assessment feedback. Paper presented at the Transforming the student experience: Higher Education Academy Annual Conference 2008, Harrogate, July 1-3.
- Orsmond, P. 2004. Self- and Peer-Assessment Guidance in the Biosciences. Teaching Bioscience Enhancing Learning Series. Leeds: Higher Education Academy Centre for Bioscience.
- Orsmond, P., S. Merry, and K. Reiling. 2005. Biology students' utilization of tutors' formative feedback: a qualitative interview study. *Assessment and Evaluation in Higher Education* 30 (4): 369-386.
- Parikh, A., K. McReelis, and B. Hodges. 2001. Student feedback in problem based learning: a survey of 103 final year students across five Ontario medical schools. *Medical Education* 35: 632-636.
- Peel, D. 2009. Self- and Peer-Assessment for Built Environment Students, CEBE Briefing Guide No.14. Centre for the Built Environment, The Higher Education Academy.
- Poulos, A., and M. J. Mahony. 2008. Effectiveness of feedback: The students' perspective. *Assessment and Evaluation in Higher Education* 33: 143 154.
- Price, M., K. Handley, and J. Millar. 2011. Feedback: focusing attention on engagement, *Studies in Higher Education*, 36(8), 879-896.
- Price, M., K. Handley, J. Millar, and B. O'Donovan. 2010. Feedback: all that effort, but what is the effect? Assessment and Evaluation in Higher Education 35 (3): 277-289.
- Ribchester, C., D. France, and K. Wakefield. 2008. 'It was just like a personal tutorial': Using podcasts to provide assessment feedback. Paper presented at the Higher Education Academy Conference, Harrogate, July.
- Robinson, S., D. Pope, L. Holyoak. 2013. Can we meet their expectations? Experiences and perceptions of feedback in first year undergraduate students. *Assessment and Evaluation in Higher Education* 38 (3): 260–272.

- Roblyer, M.D., M. McDaniel, M. Webb, J. Herman, and J. Witty. 2010 Findings on Facebook in higher education: A comparison of college faculty and student uses and perceptions of social networking sites. *The Internet and Higher Education* 13(3): 134–140.
- Rust, C., M. Price, and B. O'Donovan. 2003. Improving students' learning by developing their understanding of assessment criteria and processes. *Assessment and Evaluation in Higher Education* 28(2): 147-164.
- Sadler, D. R. 1989. Formative assessment and the design of instructional systems. *Instructional Science* 18: 119–144.
- Sadler, D. R. 2010. Beyond feedback: developing student capability in complex appraisal. Assessment and Evaluation in Higher Education 35(5): 535–50.
- Struyven, K., F. Dochy, and S. Janssens. 2005. Students' perceptions about evaluation and assessment in higher education: a review. *Assessment and Evaluation in Higher Education* 30: 331-347.
- Topping, K. J. 2010. Methodological quandaries in studying process and outcomes in peer assessment. *Learning and Instruction* 20: 339–343.
- Vickerman, P. 2009. Student perspectives on formative peer assessment: An attempt to deepen learning? Assessment and Evaluation in Higher Education 34: 221–230.
- Weaver, M. R. 2006. Do students value feedback? Student perceptions of tutors' written responses. Assessment and Evaluation in Higher Education 31: 379–394.
- Whitington, V., A. Glover, and F. Harley. 2004. Preservice early childhood students' perceptions of written feedback on their essays. *Early Child Development and Care* 174: 321–337.
- Williams, J. and D. Kane. 2008. *Exploring the National Student Survey: Assessment and feedback issues.* York: The Higher Education Academy.
- Williams, K. 2005. Lecturer and first year student (mis)understandings of assessment task verbs: 'Mind the Gap. *Teaching in Higher Education* 10 (2): 157-173.
- Young, P. 2000. 'I might as well give up': self-esteem and mature students' feelings about feedback on assignments. *Journal of Further and Higher Education* 24: 409–418.